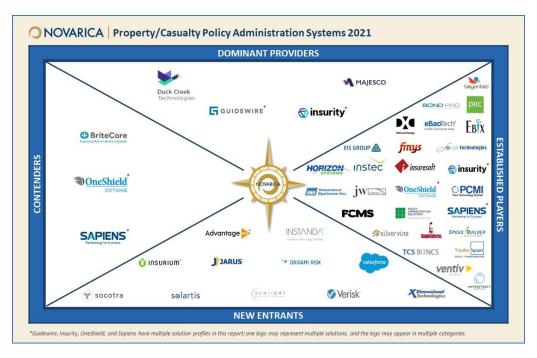
# PROPERTY/CASUALTY POLICY ADMINISTRATION SYSTEMS

MAY 2021



#### **SUMMARY**

This report provides an overview of the available policy administration systems and suites for US property/casualty insurers. The report contains profiles of 48 solutions that summarize the vendor organization, technology, differentiators, client base, lines of business supported, deployment options, implementation, upgrades/enhancements, and key functionality.

Vendors included: AdvantageGO, Beyontec, Bond-Pro, BriteCore, Decision Research Corporation, Duck Creek, DXC, eBaoTech, Ebix, EIS, Finys, Focus Technologies, Guidewire, Horizon Systems, INSTANDA, Instec (an Insurity Company), Insurance Systems Inc., Insuresoft, Insurity, Insurium, Jarus Technologies, JW Software, Majesco, OneShield, Origami Risk, PCMI, PCMS, Policy Administration Solutions, Salesforce, Sapiens, Silvervine, SimpleSolve, Socotra, Solartis, SpeedBuilder Systems, Sunlight Solutions, Tata Consultancy Services, Tinubu Square, Ventiv, Verisk, WaterStreet Company, and XDimensional Technologies.

#### **Primary Report Contacts**





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## INTRODUCTION About This Report

This report is designed to provide an overview of the current solution provider marketplace for policy administration system (PAS) solutions for property/casualty (P/C) insurers. It is designed to assist insurers in drawing up their short lists of potential providers based on vendor market position and offering details.

The solution provider profiles included within Novarica Market Navigator™ reports do not provide subjective analyses of each vendor's solution. The reports are based on direct responses to an RFI distributed by Novarica, technical discussions with each vendor to verify the RFI responses, and subsequent follow-ups with the vendors to validate and confirm responses.

The RFI covers details of organization, technology stack, client base, and key functionality. Profiles also include a summary of key differentiators, lines of business supported, deployment options, implementation approaches, and how upgrades and enhancements are handled. Where available, screenshots of the products were provided by the vendor.

These reports do not render judgment; the specific situation and needs of insurers will determine the fit between potential providers and insurers. Novarica provides these types of advisory consultations to more than 150 insurer clients through its retained advisory services.

#### **NOVARICA MARKET NAVIGATOR GRAPHIC**

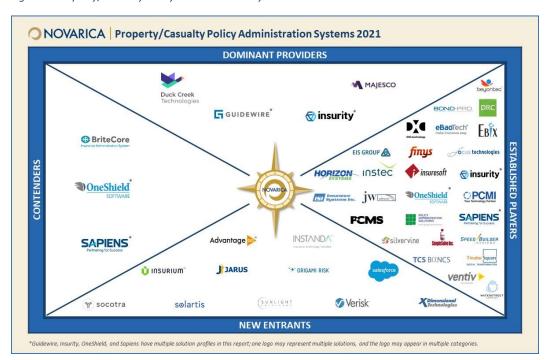
The Novarica Market Navigator Graphic provides an at-a-glance overview of major providers in a specific segment. It is intended to help insurers quickly understand who is active in the space and their approximately relative market positions. Each provider is shown in one of the following four categories:

- Dominant Providers have strong market positions and momentum. Their solutions in the segment are well-known.
- **Contenders** have substantial customer experience and momentum.
- **Established Players** have generally been in the market longer and have substantial customer experience.
- New Entrants are emerging providers in this segment. This category includes new companies
  and established companies with newer solutions. They typically have limited existing
  customer bases.

Note that the categories refer specifically to this solution area. A company may be a Dominant Provider in one segment, but a New Entrant in another based on the maturity of the solution and depth of market experience. Positioning on the graphic within each segment is alphabetical.

Also note that a provider's category does not imply a subjective judgment on solution quality, delivery, or fitness for any specific company's needs. Companies should carefully evaluate individual solutions relative to their specific needs, as well as consider the company's delivery capabilities and organizational bandwidth in addition to recent customer experience.

Figure 1: Property/Casualty Policy Administration Systems 2021



#### MARKET OVERVIEW

Novarica's studies of P/C insurer CIOs, conversations with insurers and vendors, and third-party research indicate that new core system replacement rates are still widespread in the industry. However, they have fallen off from their peak in the early 2010s in specific market segments. Many midsize insurers have already selected and begun new system implementations, but this is balanced by more small insurers considering a replacement. These smaller companies bring even more demand for cloud-based options and low-cost implementations.

The P/C policy administration market continues to flourish for those vendors with in-demand systems and reflects several trends:

- The need to improve product development speed and enhance product capability to pursue new opportunities (e.g., excess/surplus lines, workers' comp), or accommodate market demands (e.g., micro-rating, direct-to-consumer), especially as insurers engage in M&A.
- The need to improve product development flexibility to enter profitable new niches as the commercial market continues to harden, the economy continues to improve, and the personal auto market looks to enter other areas in preparation for external disruption.
- A desire to reduce the sizeable costs of maintaining legacy systems running on aging
  platforms. While the industry average is around 60%, many insurers report that more than
  75% of their IT budgets go toward "keeping the lights on" in these environments, leaving
  little capacity for new product innovation or improving the capabilities of existing products.
- A desire to find cost-effective ways to support the operation and management of core systems. In some cases, this may require insurers to move away from systems that necessitate customization for enhanced functionality and toward systems that use configuration tools to achieve such enhancements. The objective in all instances is to reduce the long-term total cost of ownership.
- Increased data accessibility demands as BI and data analytics become a significant part of insurers' strategic objectives. Core system data must be available for analysis, whether within the system or via export and transformation, to set rates/pricing, reduce fraudulent claims, and generate other predictive models.
- The ability to integrate with third-party applications seamlessly as part of the underwriting workflow, including analytics for underwriting risk scoring/fraud detection, becomes more critical as insurers move toward more digital processing of submissions and approvals.
- The industry's gradual acceptance of cloud and SaaS for core systems has evolved into a
  preference for cloud options. Almost all vendors now provide a SaaS subscription model with
  true cloud deployment, and the vast majority of new deals are cloud deals.

One factor that often leads to system replacements is digital engagement. This can be driven by a desire to attract and retain top producers, as well as to provide policyholders and claimants with a satisfying digital experience. Newer generations of producers and policyholders have higher expectations for technology and usability and won't tolerate the ineffeciencies and poor user experience that legacy solutions offer.

Another factor for some insurers is the ability to offer policies (or at least quotes) to consumers directly, including the ability to provide sales and service via mobile devices.

Modern PAS solutions often come packaged with portal capabilities optimized for the needs of producers and customers or with rich APIs (application programmer interfaces) that allow custom experiences to be built and tightly integrated with the policy back end.

Direct sellers—and other industries—have set a high bar for customer expectations of online self-service for quotes, policy changes, claims management, mobile self-service, and more. These expectations have led to a cost-of-doing-business push for customer-facing technology in personal lines, i.e., better customer and agent experience via usability improvements and 24/7 accessibility.

On the commercial side, the rise of online self-service across many consumer industries has raised users' expectations, forcing insurers to provide certain online capabilities, even for lines of business that seemed safe from such requirements just a few years ago. Inflexible legacy PAS can prevent insurers from taking advantage of new opportunities to meet customer and agent expectations.

Attracting and retaining IT staff and front-/back-office employees are also important. Today's job seekers lack the skills and desire to work on systems that are over 30 years old.

## **M&A** and Restructuring Activity

One market trend to be aware of when selecting a PAS is M&A activity. M&A activity has significantly declined from its peak several years ago, but acquisitions are still common. They can be beneficial or detrimental to insurers depending on the circumstances. There have been three types of merger activity of note to insurers.

The first is that larger vendors have historically acquired additional core systems for their portfolios (e.g., Guidewire acquiring ISCS; Insurity acquiring CodeObjects; Majesco acquiring Cover-All; Sapiens acquiring Maximum Processing, StoneRiver, and Adaptik). Vendors added acquired products to portfolios as new product lines, integrated them into core offerings, or simply retired. Although acquisitions of this type have declined in the last few years, there were several noteworthy deals of this type in 2020.

- Insurity bought CodeObjects, which offers a virtual assistant and a P/C core systems suite (November 2020).
- Insurity bought Epic-Premier Insurance Solutions to solidify its offerings for MGA clients (June 2020).
- **Insurity** bought **Virtual MGA**, which specializes in wholesale brokers, MGAs, and syndicates in the Lloyd's of London and US excess and surplus markets (July 2020).
- **Insurity** bought **Instec**, a provider of PAS solutions to P/C carriers and MGAs (April 2021).
- Sapiens bought medical professional liability core systems specialist Delphi Technology for up to \$19.5M in cash (July 2020).
- MGA Systems merged with NetRate. The combined company will trade as MGA Systems, offering a product suite consisting of NetRate's ISO-based rating application and MGA Systems' Insurance Management Systems policy administration solution (August 2020).
- Trade credit and surety software solution provider Tinubu Square bought eSURETY (March 2020).

The second M&A and restructuring trend is the expansion of what the industry considers part of the core suite—most notably, acquisitions to round out offerings (e.g., Duck Creek acquiring Outline Systems, Guidewire acquiring Cyence, Insurity acquiring SpacialKey). Most insurers know that even vendors with broad sets of components in their portfolios don't always offer a truly integrated suite. However, the promise of working with a single vendor with a stable financial backing is still a benefit to many. There was at least one noteworthy acquisition like this in 2020.

Sapiens acquired TIA Technology A/S, a Danish vendor of digital software solutions (November 2020).

A final type of M&A deal is a change in ownership related to venture capital or private equity. These deals may be related to portfolio aggegation and balancing but also have implications regarding future investment levels.

- Thoma Bravo acquired Majesco for \$16.00 in cash per share or \$729M and took the company private (September 2020).
- Salesforce acquired Vlocity, a provider of industry-specific cloud and mobile software including a PAS solution (February 2020).

## SaaS and Cloud Adoption Trends

Clearly cloud is no longer emerging, yet it continues to be the biggest engine of change in the core systems market.

Almost all vendors now offer a cloud option, with a few vendors offering *only* a cloud solution. Most market activity is now centered around cloud; Novarica expects this shift toward cloud to accelerate over the coming years. Several vendors have initiatives encouraging their on-premises customers to migrate to cloud offerings. Financial incentives have become increasingly attractive, often bringing the total cost of ownership of cloud solutions under that of on-premises solutions.

Some vendors now have dedicated cloud versions of their software that offer cloud-native technology and services not available in their non-cloud versions. Enhancements include better performance, improved scalability via serverless computing and cloud databases, environment automation, fault-tolerance, as well as tighter integration with cloud-only services for data, analytics, and AI. These cloud-optimized versions encourage new customers to choose cloud and incentivize existing customers to migrate or miss out on new features.

#### **Cloud Maturity**

However, levels of cloud maturity still vary widely across the vendor market. Some vendors are very experienced in cloud deployment and management; others treat cloud as they did their private data centers, offering insurers limited benefit over hosted options. Since the responsibility of the vendor broadens as part of cloud deployment, insurers must be comfortable that their vendor has the same level of expertise with cloud as they have with their software and database technology.

Many vendors claim to support multiple cloud options; most frequently these are AWS and MS Azure. While this may seem like a benefit to insurers, it should be viewed with caution. It may suggest that the vendor is not taking full advantage of the capabilities of any single platform and views cloud simply as an alternative to a data center. The vendor may be managing aspects of the installation itself, rather than relying on capabilities inherent to the cloud platform. Similarly, cloud-native capabilities are almost always proprietary to the cloud vendors, and vendors typically choose to avoid those if they are multi-cloud.

Secondly, cloud platforms have major differences in terms of tooling and the expertise needed for provisioning, monitoring, tuning, and securing. Cloud automation is a critical differentiator in whether a vendor is able to deliver the advantages of cloud deployment. Just as it is hard for midsized carriers to be multi-cloud, so it is with PAS vendors. PAS vendors would be better served by building and maintaining expertise on a single cloud platform rather than spreading themselves too thin across multiple platforms.

#### **Multi-Tenancy**

Another emerging trend is cloud multi-tenancy. A multi-tenant system is one where a shared application and infrastructure supports several clients. Clients may also share databases in some cases. Insurers have become more comfortable with multi-tenancy by working with vendors like Salesforce and Workday, and new core systems have emerged that are built from the ground up to be multi-tenant.

Two factors will make multi-tenant core systems more common in the future. First, this approach supports a single codebase for all customers, allowing for more efficient use of cloud hardware requirements and better scalability. A single codebase also simplifies the support and upgrade process and allows for more frequent deployments of improvements (discussed further in the next section).

Second, investors place considerable pressure on public technology companies (across all industries) to adopt a multi-tenant approach because the business model maximizes recurring revenue streams and allows more scalable, profitable growth. Vendors can maximize investment in software and minimize investment in services, which positively impacts valuation multiples.

Novarica expects that most vendors will continue to support single-tenant deployment in the short term. However, multi-tenancy in core systems will become the norm over time. Several emerging vendors focus on multi-tenant deployments, and existing vendors are rearchitecting their systems to extract features from the core and deploy as shared services which are multi-tenant. Over time, multi-tenant services will increase in number, and the single-tenant core will become smaller and smaller. Eventually, customers will find themselves running on fully multi-tenant installations.

## **From Upgrades to Updates**

A perennial headache for insurers and vendors is the core system upgrade. Expensive, time-consuming, and often viewed as not strategic, the annual or biannual software upgrade is frequently #1 on the list of insurers' gripes with their core administration platform.

Vendors have a lot to gain by keeping insurers on current versions of their software. It allows their customers to see the benefit from new product features and removes the need to patch (and test) old versions when bugs are found. Insurers have a lot to gain also, but the pain and cost associated with upgrades act as counterweights against doing what most know is in their best interest.

The longer upgrades are deferred, the more painful they become, leaving insurers trapped on old and unsupported versions of software. As the cost and risk of an upgrade approaches that of a new implementation, insurers are likely to return to the market, seeking an alternative solution. It is a lose-lose situation.

Upgrades are not something that customers of solutions like Salesforce and SharePoint Online typically worry about, and the shift toward SaaS and cloud offers insurers and PAS vendors an "out" from this unhappy situation.

Cloud SaaS contracts are increasingly strict regarding upgrades. Vendors seeking efficiency from cloud automation/DevOps are no longer content to let upgrades slip out. To remain supported on their cloud platform, insurers must agree to remain on a recent version of the software (often latest-1). This means upgrading at least every couple of years at a minimum.

#### **More Frequent Releases**

Mandating regular upgrades is only part of the solution, however. Vendors are also pushing releases on a more frequent cadence supported by DevOps, continuous integration, and automated testing. Several vendors now push new updates on a weekly basis and have abandoned the traditional "big bang" upgrade entirely.

Frequent, low-risk releases is a model that has been proven in software development. However, just as with cloud, vendors' levels of maturity here vary across the industry. Frequent updates require excellent product management, development, QA, and operations discipline that cannot be developed overnight. This method requires that core solutions be modular enough to allow isolating risk of change to particular services which can be tested in relatively short time frames. Architectural changes like these take time to make. Finally, it requires investment in significant levels of test automation, which can take months or years to develop.

Frequent releases also require active, ongoing customer participation. Rather than staffing upgrade projects every couple of years, insurers must be organized to test features on a regular cadence.

Customer trust for frequent updates must be earned, and establishing that trust requires a demonstrated track record of successful update releases over time. As insurers become more comfortable that the vendor has its shop in order, they will voluntarily take more frequent releases.

PAS vendors will continue to move in this direction, and insurers should welcome a trend that promises an end to the pain of the traditional upgrade cycle. However, insurers should be cautious. Evaluate all vendors carefully to ensure that they have the software and operational maturity to safely deliver at pace while maintaining quality, and beware of vendors running before they can walk.

#### **Growth in Low-Code**

Low-code and no-code ("low-/no-code") is a development paradigm that focuses on minimizing the coding necessary to deliver customized software. By reducing the expertise needed to build applications, low-code can allow development to be performed by those lacking a traditional software background. Low-/no-code can be found across a wide range of platforms, including CRM, mobile development platforms, ETL, rules and workflow, and robotic process automation (RPA).

The application of low-code techniques to policy administration software has a history dating back at least 20 years. Prior to 2000, PAS implementation involved significant, table-based configuration and, for complex enhancements, code was often required. At a certain level of complexity, table-based configuration becomes unwieldy and prone to errors. Code tends to add complexity, especially during the upgrade process.

Vendors that emerged in the early 2000s were built on rules and product engines that allowed the user interface, rules, workflows, and even the data model to be customized without the need for coding. Table-based configuration was still used, but complex enhancements were configured in the rules engine. Vendors at the time claimed that their systems could be configured by business users, but most carriers found that this did not work out in practice. Rules-based customization still resembles software development, although the syntax is often less cryptic.

Modern policy systems continue to advance in terms of their low-code capabilities. Business drivers remain the same—allowing less technical users to configure the system and avoiding custom code. The shift toward cloud deployment has increased vendor urgency, since providing service-level assurances for cloud environments is difficult if clients are allowed to deploy their own custom code enhancements—it is easy to bring an entire cluster to its knees with an errant line of badly written code.

The shift toward low-code is evident in several ways. Incumbent vendors continue to introduce low-code capabilities into their solutions. Guidewire Product Designer is a good example of this. Newer entrants to the market are also raising the bar in terms of low-code tooling, in some cases moving closer to delivering on the promise of business users managing their own backlog of product customization.

Finally, there are now a number of vendors that have started from a low-code platform or a digital submission platform and have built some policy administration capabilities on top of it. Examples of such solutions include Jarus Technology, Salesforce Vlocity, ClarionDoor, and Unqork.

## **Emergence of the Digital Platform**

The delivery of digital capabilities related to PAS is evolving. Historically, the primary mechanisms that insurers used to engage with external stakeholders were the agent and policyholder portals. Early portals were often homegrown and integrated with policy systems using database extracts or rudimentary APIs.

Recognizing a market need, vendors began to offer portal capabilities as a part of their core suites. Solutions either involved exposing the PAS interface directly to agents and using security to limit the experience or the creation of out-of-the-box portals dedicated to agents and/or policyholders. While the latter solution was a significant improvement over the former, insurers often still chose to continue on the custom portal path. Usually, this was because they believed that a custom portal was a competitive differentiator or because they had multiple PAS solutions in play and wanted to offer a unified portal experience, something that was often impossible with a vended portal, which was limited to interacting with the vendors' back-end system only.

A recent development is the emergence of the "digital platform" as a replacement or alternative to the canned portal. Digital platforms are low-code solutions that aim to address the shortcomings of both canned and custom portals. The use of low-code technology allows insurers to fully customize the user experience for competitive advantage, as well as to integrate with alternate back-end systems to provide a unified experience regardless of which back-end system houses the policy.

While not as flexible as fully custom portals, digital platforms allow for more rapid delivery of capabilities because of the low-code tooling, pre-built content, content management, social media integration, chat, and chatbots. Pre-built integrations with commonly used services for underwriting, claims, and payment processing also act as an accelerator to value.

The use of these digital platforms is not limited to delivery of portal capabilities. Vendors are increasingly positioning these as stand-alone platforms for more general digital needs. Similarly, the horizontal low-code vendors are increasingly competing in this space by offering insurance-specific content and accelerators to insert themselves into the insurance value chain.

#### **KEY COMPONENTS**

A PAS should integrate downstream and back-office systems to provide effective support for the management of contracts and financial results. It should also offer interface points for all stakeholders (e.g., home office employees, sales partners, premium paying customers) to participate in the policy life cycle. The PAS is the foundation for all other processing; it is central to the practical and controlled management of a book of business for an insurer. A PAS may support single or multiple lines of business, as well as single or multiple distribution channels.

The PAS itself may offer a suite of capabilities or may interface with a variety of solutions providing other capabilities that unrelated vendors deliver. For example, if the PAS does not include robust modules to handle contact and document management, it should easily integrate with other applications that provide the requisite functionality. Tools providing easy access and navigation to the traditional functions of sales organizations and home office associates are standard elements for PAS solutions.

To be considered a minimum viable product (MVP) policy administration system for the purposes of this report, a solution must meet the following conditions:

- Be actively marketed as a product in North America. The product must be supported by the
  vendor with an active product roadmap of regular releases, which must be made available to
  existing clients via upgrades even after local configurations are in production. Vendors are
  expected to provide documentation, ongoing support, and issue resolution for the policy
  functionality (2-5 below).
- 2. Support the management of insurance product definitions. The policy system must provide the ability to define P/C insurance products, including data and processing requirements (rating, underwriting, coverages, forms, etc.). Product definitions must support versioning by effective date and jurisdiction (state) at a minimum.
- 3. Support persistent storage and retrieval of the policy information. The system must be capable of serving as the system of record for policy information by persisting it to a bitemporal (effective date and created date) repository. The system must support search and retrieval of policies based on a range of criteria, including policy identifier, policyholder name, and effective date. Policy information should be viewable "as of" a point in time.
- 4. Support comprehensive policy life-cycle transaction processing. These include all policy life-cycle transactions (quoting, new business issuance, renewal, midterm change, cancellation, and reinstatement). The system must generate the necessary financial transactions (onsets and offsets) to support downstream processes and analytics as well as store full transaction history to allow the policy to be viewed at a point in time for audit purposes.
- 5. Provide a user interface. MVP policy solutions must provide a basic user interface to allow users to operate the system. The minimum requirement is that the interface supports data entry for insurance products and for execution of all policy search and retrieval operations along with policy life-cycle transactions.

What the industry considers to be a complete PAS has expanded to include much of what insurers used to license or build as ancillary functions. Few vendors in this report license a standalone policy administration component, though whether the additional components are integral to the suite or stand-alone offerings that they sell and integrate separately varies by vendor.

Novarica publishes separate Market Navigator reports to focus on the details of these individual components, while this report covers the entire suite that falls under the PAS umbrella.

Key PAS features and components surveyed by Novarica include the following:

#### **Core Policy Administration**

This function handles all core aspects of policy management: account clearance, new business, policy change, renewals, non-renewal, cancellations, cancel/rewrite, reinstate, and premium audit. Core policy admin often handles customer or account management as well as automated rule application and workflow management.

#### **Rating Functions**

Rating engines are rule- and table-based components that assess submission risk variables and coverage selections to determine policy premiums. Most policy administration offerings contain some level of rating engine, though the level of complexity varies. Alternatively, PAS can typically integrate with stand-alone rating engines; some vendors have pre-existing integrations available.

#### **Underwriter Workbench Functions**

Solutions typically provide some form of underwriter workbench that may allow for the management of work objects and integrated workflow that provides transparency into work items and any need(s) for additional information.

#### **Document Functions**

Many PAS solutions include the ability to generate documents using custom templates that administrators manage and that merge with policy or customer data at run-time. Organizations handle document generation in an ad hoc capacity for specific customer communications or a batch fashion for mass printing of statements. Solutions without such features will integrate into third-party document generation/customer communication management (CCM) tools or provide interfaces to do so.

#### **Agent Portal Functions**

An agent portal provides agent self-service capabilities and should integrate with PAS and often with third-party data services and enterprise document management solutions. A robust agent portal allows agents to get quotes, submit new business, track status, manage changes, communicate/collaborate with underwriters, and view reports about commissions and transaction histories.

Some vendors offer agent-facing capabilities through independent modules they developed for agent users; others expose core system screens to their agents and limit access with role-based security. Several vendors now offer low-code digital platforms instead of traditional portals allowing insurers to differentiate with their digital experiences and offer unified portals that service multiple back-end systems.

#### **Consumer Portal Functions**

Some vendors include consumer/policyholder portals as part of a core system suite, though they are not as common as agent portal functions. Consumer portals are typically the same platform as those for agent portals, making use of role-based views to present limited navigation and restrict the use of many of the transactional functions. The most common features of a consumer portal are electronic bill payment/presentment (EBPP) digital ID cards and the ability to download policy terms. As with agent portals, several vendors offer low-code digital platforms instead of traditional customer portals.

#### **Reinsurance Functions**

Reinsurance functions allow insurers to manage internal retention limits on particular types or sizes of risks and then allocate specified risks appropriately between the primary insurer and others for which appropriate reinsurance treaties are in place.

#### **Business Intelligence Functions**

Insurers are increasing investments into BI and data analytics toolsets; a subset of this functionality is making its way into PAS solutions, either embedded or included as a modular or stand-alone component. Vendors without this functionality built-in still need to support an integration approach for moving data to a warehouse or other third-party analytics tool; many insurers choose to use their BI environments instead of internal vendor offerings.

#### **Billing Functions**

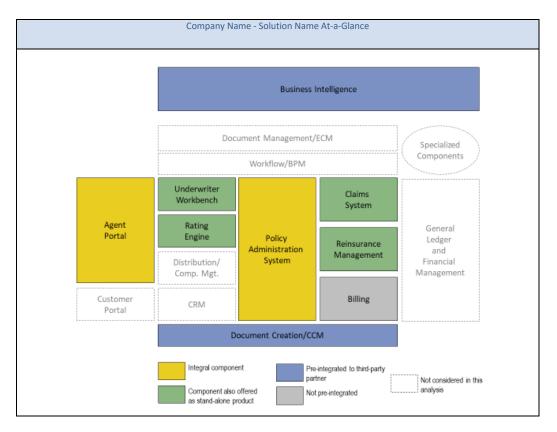
Billing platforms allow insurers to calculate, prepare, and present billing information to policy- or contract-holders, ensuring that the correct payment options and time frames are available to them. They also offer a touchpoint between insurers and policyholders, potentially representing a significant communication channel for retention and other customer management activities.

#### **Claims Functions**

Claims platforms allow organizations to manage various payment types during the insurance contract life cycle. These platforms ensure that insurers meet contract provisions and provide critical information that insurers can use to manage fraud detection and the loss profiles of a book of business. It can also be essential for managing compliance-related issues (e.g., unclaimed property regulations).

#### At-a-Glance

This version of our Novarica Core Systems Map provides a color-coded view for each solution. The coloration indicates whether the vendors include the functions as components integral to the system, integral components that they also offer stand-alone products, components preintegrated to a third-party partner, or components that are not pre-integrated to the solution.



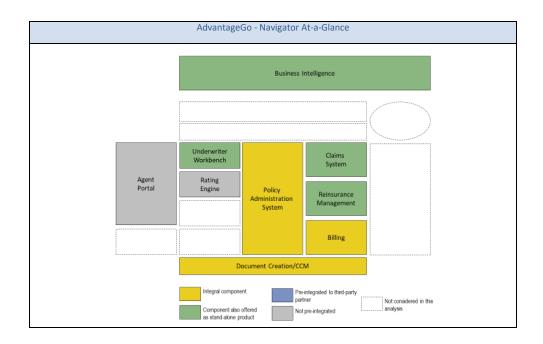
The specific features this report analyzes fall under the PAS umbrella, including core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components. Other components that may be part of solution suites (e.g., document management, CRM) have been dotted in outline on the core systems map and are not considered in this analysis. Please note that several vendors in this report also offer components in these areas as part of their suites.

Please read the full profiles for more details about any of the solutions, which include additional information and explanation on functionality.

## **EXECUTIVE SUMMARIES**

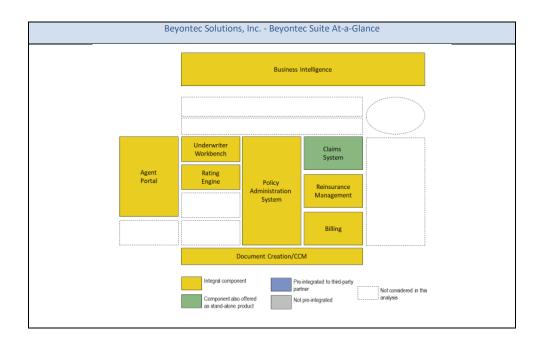
## **AdvantageGo - Navigator**

- AdvantageGo has been creating commercial P/C and specialty market insurance software for more than 25 years. The company asserts that it mixes its core solutions with its InsureTech experience to help insurers and reinsurers around the world with traditional and digital solutions as well as with Agile and microservices. AdvantageGo is part of Coforge (NSE: COFORGE), a global IT solutions organization focused on helping businesses design innovative digital operating models. AdvantageGo is headquartered in London, UK; it has 420 direct employees with access to the 1,800 people on the Coforge insurance sector team. The company's annual revenue is between \$500M-\$1B.
- Navigator is a suite of solutions that includes core policy features, underwriter workbench, document creation, reinsurance, business intelligence, billing, and claims components.
- There are currently two live US/Canadian insurer clients using the suite to support commercial lines.
- Publicly announced clients include Canopius, UnipolRe, and Coverys.
- The solution has a browser-based interface for users. It is written in .NET (C#/VB.NET).
- Configuration for insurance products and document authoring is via tools for BAs and non-IT staff. Configuration for screens, workflows, and rules is via tools for IT analysts.
   Configuration for integration to third-party service calls is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's resources or a partner. AdvantageGo
  deploys Navigator on-prem, hosted at a private data center, and hosted on MS Azure. The
  company offers a SaaS delivery model that includes hosting, license, maintenance and
  support, ongoing access to the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is 90 days or less and that the average implementation cost is \$1M-\$2M.



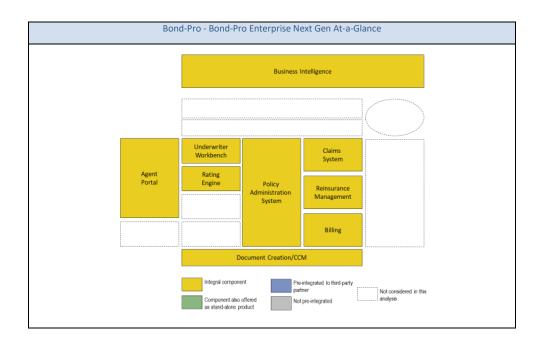
## **Beyontec Solutions, Inc. - Beyontec Suite**

- Beyontec Solutions, Inc. is a privately held company headquartered in Irving, TX. The company employs 340 people and reports annual revenue in the range of \$10M-\$20M.
- Beyontec Suite is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, billing, claims, and business intelligence components.
- It currently has 14 live US/Canadian insurer clients using the suite, most of which are smaller companies (under \$1B) using the solution to support personal lines with some commercial.
- Publicly announced clients include Georgia Underwriting Authority, New Mexico Property Insurance Program, Oregon FAIR Plan, Michigan Basic Property Insurance Association, and Clements Worldwide.
- The solution is browser-based for all user interface functions. It is written mainly in Java with some PL/SQL.
- Configuration for insurance products and document authoring is via tools for BAs and non-IT staff. Workflow and rules are configurable via tools for IT analysts. Configuration for screens and integration to third-party service calls is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's own resources. Beyontec offers the
  solution on-prem and hosted on Liquid Web. The company offers a SaaS delivery model that
  includes hosting, license, maintenance and support, ongoing access to the latest version, and
  implementation of the upgrades.
- The company reports that the average time to initial go-live is 180 days or less and that the average implementation cost is \$500K-\$1M.



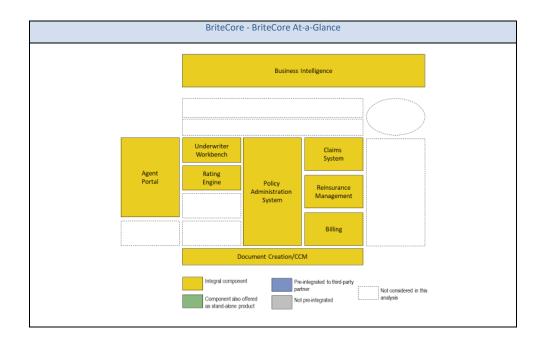
## **Bond-Pro - Enterprise Next Gen**

- Bond-Pro is a private surety technology software and services company headquartered in Tampa, FL. It employs 80 people. As a privately held company, its annual revenue is undisclosed.
- Bond-Pro Enterprise Next Gen is a suite of solutions that includes core surety policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has 25 live US/Canadian insurer clients using the suite, most of which are larger companies (over \$1B) using the solution to support surety.
- Publicly announced clients include Chubb, Tokio Marine, IAT, Swiss Re, and Markel.
- The solution is browser-based for all user interface functions. It is written in .NET (C#) and Angular.
- Configuration for insurance products, screens, workflows, rules, and document authoring is via "no-code" tools for BAs and non-IT staff. Integration to third-party service calls is configured via code.
- Implementation is available through the company's own resources or a partner. Bond-Pro offers on-premise, hosted at a private data center, and hosted on MS Azure deployment options. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is 12 months or less; it notes that the average implementation cost varies depending on the size of the surety book and other factors.



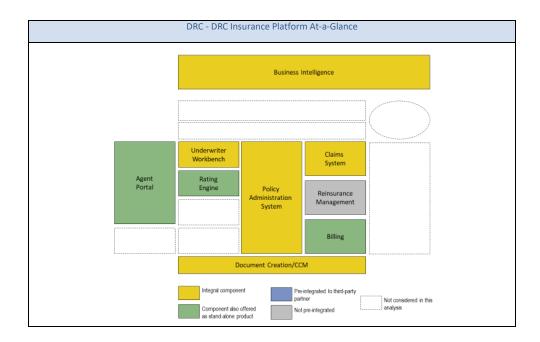
#### **BriteCore - BriteCore**

- BriteCore was founded in 2009 when six mutual insurance companies partnered to build modern insurance solutions. Today, the company serves more than 70 insurance carriers, MGAs, and InsureTechs.
- BriteCore has headquarters in Springfield, MO and employs 190 people. The company's annual revenue is in the range of \$10M-\$20M.
- BriteCore is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has 53 live US/Canadian insurer clients using the suite, most of which are smaller companies (under \$1B) using the solution to support personal and commercial lines.
- Publicly announced clients include Loudon Mutual Insurance Company, Municipal Mutual Insurance Company (WV), Cameron Mutual Insurance Company, Jetty Inc., and Farmers Mutual of Tennesse.
- The solution is browser-based for all user interface functions. It is written in Python with some JavaScript.
- Configuration for insurance products, screens, and rules is via tools for BAs and non-IT staff.
   Document authoring is configurable via tools for IT analysts. Configuration for workflow and integration to third-party service calls is via code.
- Implementation is available through the company's own resources or a partner. The solution
  is hosted on AWS. The company offers a SaaS delivery model that includes hosting, license,
  maintenance and support, ongoing access to the latest version, and implementation of the
  upgrades.
- The company reports that the average time to initial go-live is 180 days or less and that the average implementation cost is \$500K-\$1M.



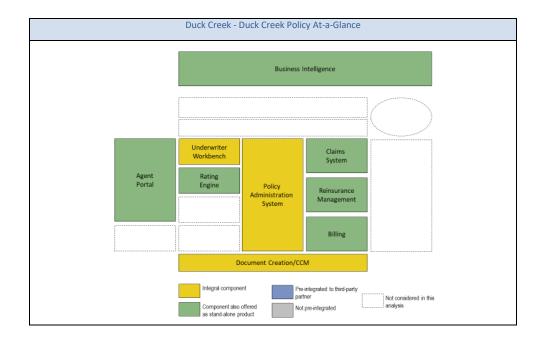
## **Decision Research Corporation - DRC Insurance Platform**

- Decision Research Corporation (DRC) has provided software solutions to the P/C insurance industry for 50 years, from large carriers to small startups to MGAs in the US and globally. DRC's SaaS and on-site solutions managed a total written premium in excess of \$7B. The company reports that its web-based administration system expedites implementation, lowers costs, and simplifies maintenance across insurance products. DRC has headquarters in Honolulu, HI and employs 130 people.
- DRC Insurance Platform is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, billing, and claims components.
- It currently has 11 live US/Canadian insurer clients using the suite, most of which are midsize companies. Most clients are using the solution to support personal lines with some commercial and specialty lines.
- Publicly announced clients include Beazley US, Tokio Marine HCC, K2-Aegis, MS Amlin, and Mutual of Eumclaw.
- The solution is browser-based for all user-interface functions. It is written in .NET (C#/VB.NET) with some GoLang.
- Insurance products, screens, and rules are configured via tools for BAs and non-IT staff.
   Document authoring is configured via tools for IT analysts. Workflows and integration to third-party service calls are configured via developer tools.
- Implementation is available through the company's resources. DRC deploys the solution on MS Azure. The company offers a SaaS delivery model that includes hosting, license, support, ongoing access to the latest version, and implementation of upgrades.
- The company reports that the average time to initial go-live is 12 months or less and that the average implementation cost is \$500K-\$1M.



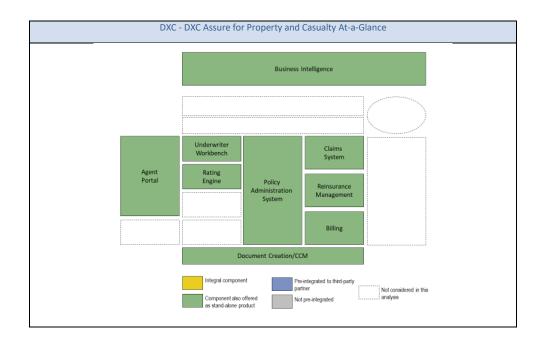
## **Duck Creek Technologies LLC - Duck Creek Policy**

- Duck Creek Technologies (NASDAQ: DCT) provides P/C insurance software and services for insurers of all sizes worldwide, with 12 offices in five countries. The company offers a full suite of solutions on which insurers can run their business.
- Duck Creek has headquarters in Boston, MA and employs 1,400 people. Its annual revenue is in the range of \$100M-\$250M.
- Duck Creek Policy is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components. The company notes it also includes distribution management.
- It currently has 60 live US/Canadian insurer clients using Duck Creek Policy, most of which
  are smaller companies (under \$1B) using the solution to support a mix of personal and
  commercial lines.
- Publicly announced clients include American National, AIG, Builders Mutual, Munich Re, and Manitoba Public Insurance.
- The solution is browser-based for all user interface functions. It is written in .NET (C#/VB.NET) with some SQL and ManuScript, plus a small amount of JavaScript.
- Configuration for insurance products, screens, workflows, rules, and document authoring is
  via tools intended for BAs and non-IT staff. Configuration for integration to third-party
  service calls is via tools targeted for IT analysts.
- Implementation is available through the company's own resources or a partner. Duck Creek
  deploys the solution hosted on MS Azure. The company offers a SaaS delivery model that
  includes hosting, license, maintenance and support, ongoing access to the latest version, and
  implementation of the upgrades.
- The company reports that the average time to initial go-live is nine months or less and that the average implementation cost is \$2M-\$5M.



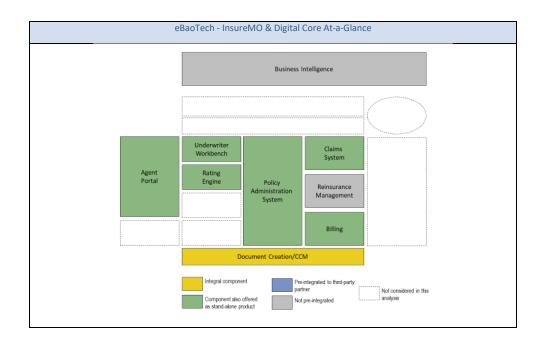
## **DXC - DXC Assure for Property and Casualty**

- DXC (NYSE: DXC) is an independent, end-to-end IT services company. It helps clients with digital transformation, expanding capabilities, and innovation efforts.
- DXC has headquarters in Tysons, VA and employs 138,000 people. The company reports an annual revenue of over \$21B.
- DXC Assure for Property and Casualty (includes DXC Assure Policy, Billing, Claims, and Reinsurance) is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has 13 US insurer clients, a mix of larger (over \$1B) and smaller (under \$1B) companies, using DXC Assure Policy to support personal and commercial lines.
- Publicly announced clients include Safety Insurance, Ohio Mutual, Pharmacists Mutual,
   Cincinnati Insurance Company, and FBL.
- The solution is browser-based for all user interface functions. It is written in Java with some .NET (C#/VB.NET).
- Configuration for insurance products, screens, and workflows is via tools for BAs and non-IT staff. Configuration for rules and document authoring is via tools for IT analysts. Integration to third-party service calls is available out of the box for most vendors using APIs.
- Implementation is available through the company's own resources. DXC deploys the solution on-prem, hosted at a private data center, and hosted on AWS.
- The company offers a SaaS delivery model that includes hosting, license, maintenance and support, perpetual access to the latest version, and the implementation of the upgrades.
- The company reports that the average time to initial go-live is 12 months or less and that the average cost is \$500K-\$1M.



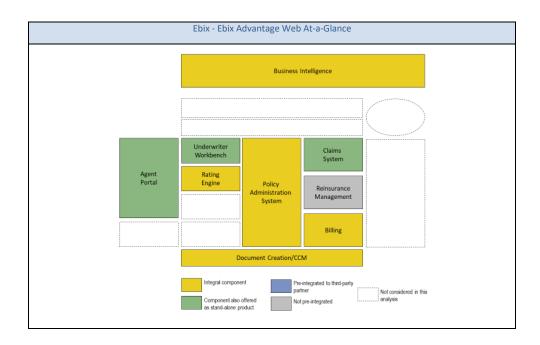
## eBaoTech - InsureMO & Digital Core

- eBaoTech is a privately held company with international headquarters in Singapore. It employs 1,700 people and has an annual revenue in the range of \$50M-\$100M.
- InsureMO & Digital Core is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, billing, and claims components.
- It currently has three live US insurer clients using the suite, which are a mix of larger (over \$1B) and smaller (under \$1B) companies using the solution to support commercial lines with some personal.
- eBaoTech did not disclose any clients for the suite.
- The solution is browser-based for all user interface functions. It is written in Java, JavaScript, and a small amount of a proprietary database language.
- Configuration for insurance products, screens, workflows, rules, and document authoring is
  via simple tools targeted for BAs or non-IT staff. Integration to third-party service calls is
  configured using developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's own resources or an implementation
  partner. eBaoTech notes that the solution is cloud-agnostic, with current US
  implementations on AWS and MS Azure. The company offers a SaaS delivery model that
  includes hosting, license, maintenance and support, ongoing access to the latest version, and
  the implementation of upgrades.
- The company reports that the average time to initial go-live is 180 days or less and that the average implementation cost is \$500K-\$1M.



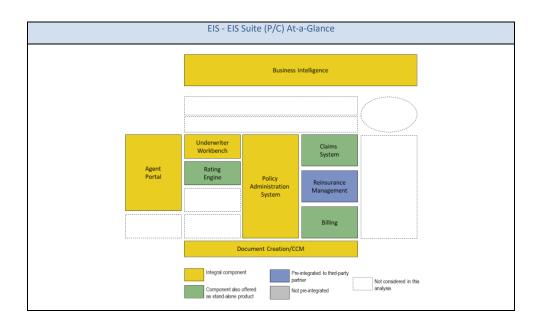
## **Ebix - Ebix Advantage Web**

- Ebix is a public company (NASDAQ: EBIX) with a market cap of over \$1B.
- Ebix has headquarters in Atlanta, GA and employs 9,000 people. The company's annual revenue is in the range of \$500M-\$1B.
- Ebix Advantage Web is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, billing, and claims components.
- It currently has 17 live US/Canadian insurer clients using the suite, most of which are smaller companies (under \$1B) using the solution to support commercial lines with some personal.
- Publicly announced clients include FUMI, WMIC, Wright Risk, ISMIE, and MEDMARC.
- The solution is browser-based for all user interface functions. It is written in .NET (C#/VB.NET).
- Configuration for insurance products, workflows, rules, integration to third-party service
  calls, and document authoring is via developer tools, XML manipulation, or a scripting
  language. Configuration for screens is via code.
- Implementation is available through a partner. Ebix deploys the solution on-prem, hosted at
  a private data center, and hosted on AWS. The company offers a SaaS delivery model that
  includes hosting, license, maintenance and support, ongoing access to the latest version, and
  the implementation of upgrades.
- The company reports that the average time to initial go-live is 180 days or less and that the average implementation cost is \$500K-\$1M.



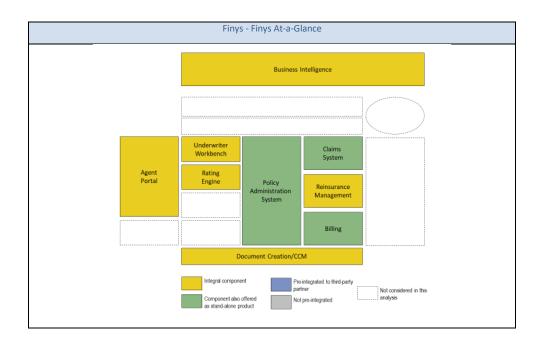
## EIS - EIS Suite (P/C)

- EIS is a privately owned company that builds adaptable core insurance systems for insurers
  of all sizes. It has headquarters in San Francisco, CA and employs 1,000 people. The company
  declined to disclose annual revenue.
- EIS Suite (P/C) is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, billing, and claims components.
- It currently has nine live US/Canadian insurer clients using the suite for P/C lines, most of which are larger (over \$1B) companies using the solution to support personal lines with some commercial.
- Publicly announced clients include CSAA, AIG, Industrial Alliance (Canada), Tower Group (New Zealand), and Desjardins General Insurance Group (Canada).
- The solution is browser-based for all user interface functions. It is written in Java.
- Configuration for insurance products, screens, workflows, rules, and document authoring is
  via tools for BAs and non-IT staff. Configuration for integration to third-party service calls is
  via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's own resources or a partner. EIS deploys
  EIS Suite on-prem, hosted at a private data center, and hosted on AWS or MS Azure. The
  company offers a SaaS delivery model that includes hosting, license, maintenance and
  support, ongoing access to the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is nine months or less and that the average implementation cost is \$1M-\$2M.



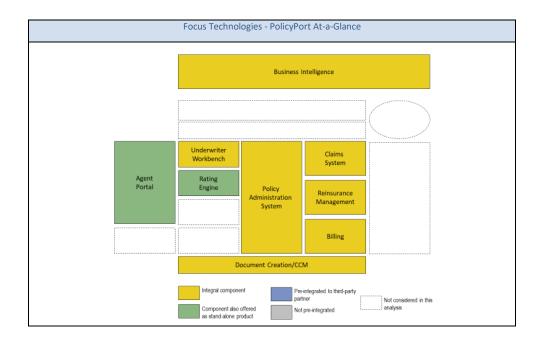
## **Finys - Finys**

- Finys is a privately held company with headquarters in Troy, MI that employs 85 people. The company's annual revenue is between \$10M-\$20M.
- Finys is a suite of solutions that includes core policy, rating, underwriter workbench, document creation, agent portal, reinsurance, BI, billing, and claims components.
- It currently has 31 live US/Canadian insurer clients using the suite, most of which are smaller companies (under \$1B) and some of which are larger companies (over \$1B) using the solution to support personal and commercial lines.
- Publicly announced clients include Virginia Farm Bureau, Conifer Insurance Group, Farmers Mutual Fire Insurance Company of Salem County, Wayne Insurance Group, and Kentucky FAIR Plan.
- The solution is browser-based for all user interface functions. It is written in .NET (C#/VB.NET).
- Configuration for insurance products, screens, workflows, rules, and document authoring is
  via tools for BAs and non-IT staff. Integration to third-party service calls is configurable via
  tools for IT analysts.
- Implementation is available through the company's resources, collaboration with customers, or with the assistance of certified system integration partners. Finys deploys the solution on-prem, hosted at a private data center, and hosted on MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is 180 days or less and that the average cost for the middle 50% of the client base is \$2M-\$5M.



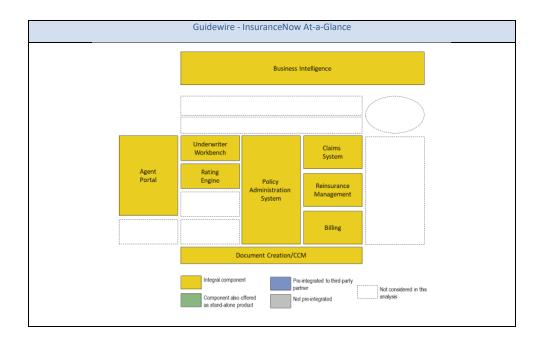
## **Focus Technologies - PolicyPort**

- Focus Technologies is a privately held subsidiary of Team Focus Insurance Group. It is headquartered in Sunrise, FL and employs 300 people. The company declined to disclose annual revenue.
- PolicyPort is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has eight US/Canadian insurer clients, all of which are smaller companies (under \$1B), and most of which use the solution to support personal lines with some commercial.
- Publicly announced clients include Southern Oak Insurance Company, Spinnaker Insurance Company, Western World Insurance Company, Capacity Insurance Company, and ShoreOne Insurance.
- The solution is browser-based for all user interface functions. It is written primarily in Java, with some HTML5, AngularJS, and NodeJS.
- Configuration for insurance products, screens, workflow, rules, and document authoring is via tools for BAs and non-IT staff. Configuration for integration to third-party service calls is via tools for IT analysts.
- Implementation is available through the company's own resources. The solution is deployed
  on AWS, except for the BI component, which is hosted on MS Azure. The company offers a
  SaaS delivery model that includes hosting, license, maintenance and support, ongoing access
  to the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is 90 days or less. The company declined to disclose the average implementation cost.



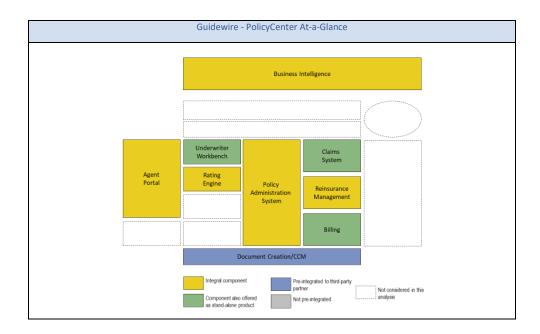
#### **Guidewire Software - InsuranceNow**

- Guidewire Software (NYSE: GWRE) is a publicly held corporation with headquarters in San Mateo, CA. The company also has domestic offices in Birmingham, AL; San Jose, CA; Bedford, MA; Edina, MN; Exton, PA; and Columbia, SC. It also has international offices in Sao Paulo, Hong Kong, Kuala Lumpur, Copenhagen, Dublin, Milan, Madrid, London, Paris, Munich, Sydney, Tokyo, Toronto, Moscow, Krakow, and Chennai.
- Guidewire employs 2,690 people and has annual revenue in the range of \$500M-\$1B.
- InsuranceNow is a suite that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims.
- It currently has 35 live US/Canadian insurer clients using the suite, most of which are smaller companies (under \$1B) using the solution to support a mix of personal and commercial lines.
- Publicly announced clients include NCJUIA-NCIUA, The Philadelphia Contributionship,
   Nationwide Private Client, The Andover Companies, and Union Mutual of Vermont.
- The solution is browser-based for all user interface functions. It is written in Java.
- Configuration for insurance products, workflows, rules, and document authoring is via tools
  for BAs and non-IT staff. Configuration for screens and integration to third-party service calls
  is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's resources. Guidewire deploys
  InsuranceNow on AWS. The company offers a SaaS delivery model that includes hosting,
  license, maintenance and support, ongoing access to the latest version, and the
  implementation of upgrades.
- The company reports that the average time initial to go-live is 180 days or less and that the average implementation cost is \$1M-\$2M.



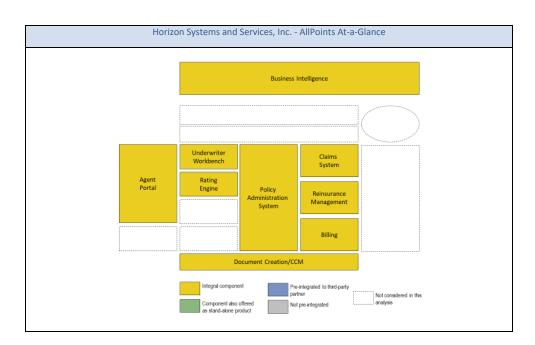
## **Guidewire Software - PolicyCenter**

- Guidewire Software (NYSE: GWRE) is a publicly held corporation with headquarters in San Mateo, CA. The company also has domestic offices in Birmingham, AL; San Jose, CA; Bedford, MA; Edina, MN; Exton, PA; and Columbia, SC. It also has international offices in Sao Paulo, Hong Kong, Kuala Lumpur, Copenhagen, Dublin, Milan, Madrid, London, Paris, Munich, Sydney, Tokyo, Toronto, Moscow, Krakow, and Chennai.
- Guidewire employs 2,690 people and has annual revenue in the range of \$500M-\$1B.
- PolicyCenter is part of Guidewire InsuranceSuite, which includes core policy, rating, underwriter workbench, agent portal, reinsurance, business intelligence, billing, and claims.
- It currently has 92 live US/Canadian insurer clients, a mix of larger (over \$1B) and smaller (under \$1B) companies using the solution to support personal and commercial lines.
- Publicly announced clients include Nationwide, American Family, CNA, QBE, and Sentry.
- The solution is browser-based for all user interface functions. It is written in Java.
- Configuration for insurance products and rules is via tools for BAs and non-IT staff.
   Configuration for workflow and document authoring is via tools for IT analysts. Screens are configurable via developer tools, XML manipulation, or a scripting language. Integration to third-party service calls is configurable via code.
- Implementation is available through the company's resources or a partner. Guidewire
  deploys the solution on AWS. The company offers a SaaS delivery model that includes
  hosting, license, maintenance and support, ongoing access to the latest version, and
  implementation of the upgrades.
- The company reports that the average time to initial go-live is 18 months or less and that the average implementation cost is over \$5M.



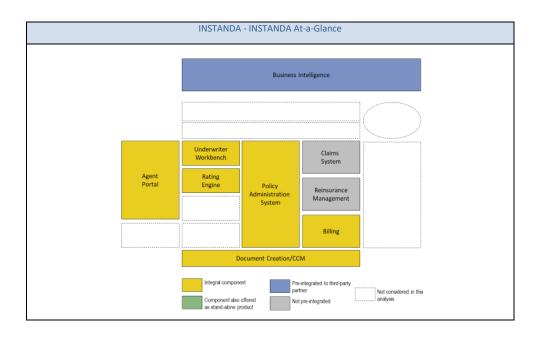
## Horizon Systems and Services, Inc. - AllPoints

- Horizon Systems and Services, Inc. is a privately owned IT company with a large number of stockholders. It offers property and casualty insurance services. Horizon has headquarters in Sheboygan, WI and employs 23 people. The company reports an annual revenue under \$5M.
- AllPoints is a suite of solutions that includes core policy, rating, underwriter workbench, agent portal, document creation, reinsurance, business intelligence, billing, and claims.
- It currently has 15 live US/Canadian insurer clients. The company notes there are also two US/Canadian insurer clients in implementation. All clients are smaller (under \$1B) companies using the solution to support personal and commercial lines.
- Publicly announced clients include Germantown Mutual.
- The solution is a Windows client for admin functions and browser-based for user interface functions. It is written in .NET (C#/VB.NET) and some JavaScript.
- Configuration for insurance products, workflows, rules, and document authoring is via simple tools targeted for BAs and non-IT staff. Configuration for screens and integration to third-party service calls is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's resources or a partner. Horizon deploys
  the solution on-prem, hosted at a private data center, and hosted on MS Azure. Horizon
  offers a SaaS delivery model that includes hosting, license, maintenance and support,
  ongoing access to the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is 180 days or less and that the average implementation cost is \$500K-\$1M.



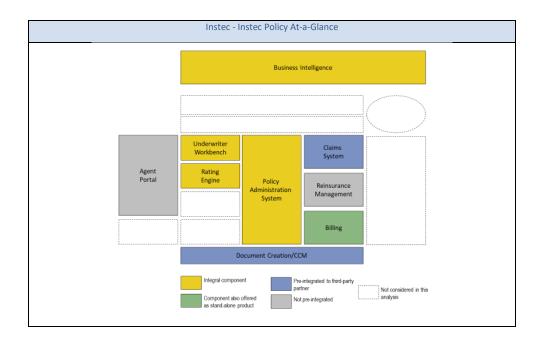
#### **INSTANDA - INSTANDA**

- INSTANDA is a privately held company that offers a configurable policy administration system with integrated web portals. It has headquarters in London, UK and employs 113 people. INSTANDA declined to disclose annual revenue.
- INSTANDA is a suite of solutions that offers core policy, rating, underwriter workbench, agent portal, document creation, and billing components.
- It currently has five live US/Canadian insurer clients, a mix of larger (over \$1B) and smaller (under \$1B) companies using the solution to support personal and commercial lines.
- Publicly announced clients include Markel, SGI, National General (Syndeste), AXA XL, and Great American Insurance Group.
- Live lines of business include some of the personal and commercial lines queried by Novarica, with clients in implementation for several more.
- The solution is browser-based for all user interface functions. It is written in .NET (C#/VB.NET).
- Configuration for insurance products, screens, workflow, rules, integration to third-party service calls, and document authoring is via simple tools for BAs and non-IT staff.
- Implementation is available through the company's resources or a partner. INSTANDA hosts
  the solution on MS Azure. The company offers a SaaS delivery model that includes hosting,
  license, maintenance and support, ongoing access to the latest version, and the
  implementation of upgrades.
- The company reports that the average time to initial go-live is 90 days or less and that the average implementation cost is \$100K-\$500K.



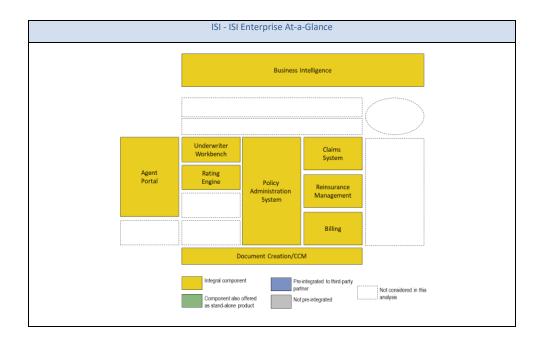
## **Instec - Instec Policy**

- Instec is now 100% owned by Insurity. It is headquartered in Naperville, IL and employs 155 people. The company's annual revenue is in the range of \$20M-\$50M.
- Instec Policy is a suite of solutions that includes core policy features, rating, underwriting workbench, business intelligence, and billing components.
- It currently has 19 live US/Canadian insurer clients using the suite, most of which are smaller companies (under \$1B) using the solution to support commercial lines with some personal.
- Publicly announced clients include Markel Corporation, Meadowbrook Insurance Company,
   Pennsylvania and Indiana Lumbermens, Argo Group, and Church Mutual Insurance Co.
- The solution is a Microsoft WPF Rich Internet Application. It is written primarily in .NET (C#/VB.NET), with some Instec domain-specific language and a small amount of C++.
- Configuration for insurance products, screens, workflows, rules, and document authoring is
  via simple tools targeted for BAs and non-IT staff. Configuration for integration to third-party
  service calls is not available; changes are done by the vendor.
- Implementation is available through the company's resources. Instec deploys the solution
  on-prem and hosted on MS Azure. The company offers a SaaS delivery model that includes
  hosting, license, maintenance and support, ongoing access to the latest version, and the
  implementation of the upgrades.
- The company reports that the average time to initial go-live is 90 days or less and that the
  average implementation cost (excluding maintenance and conversion after deployment) is
  \$100K-\$500K.



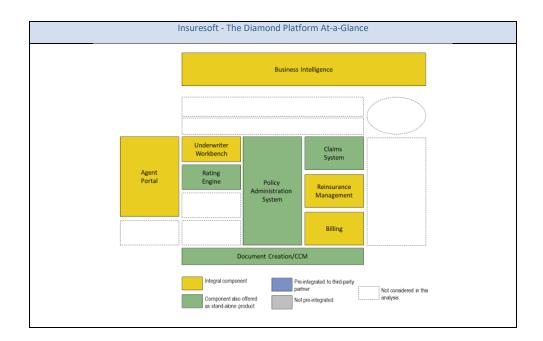
## **Insurance Systems Inc. - ISI Enterprise**

- Insurance Systems Inc. is privately owned and operated by its active partners.
- ISI has headquarters in Toronto, Canada, and employs 60 people. The company's annual revenue is in the range of \$10M-\$20M.
- ISI Enterprise is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, billing, and claims components.
- It currently has 12 live US/Canadian insurer clients using the suite, all of which are smaller companies (under \$1B) using the solution to support commercial lines; some are also using it to support personal lines.
- Publicly announced clients include Lawyers Mutual Liability Insurance Company of North Carolina, Trisura Guarantee Insurance Company, Ecclesiastical Insurance Organization, Integris Group, and Lawyers Mutual Insurance Company.
- The solution is browser-based for all user interface functions. It is written in XML and some .NET (C#/VB.NET).
- Configuration for insurance products, screens, workflows, and document authoring is via tools for BAs and non-IT staff. Configuration for rules and integration to third-party service calls is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's own resources. ISI deploys the solution on-prem and hosted on AWS. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is 12 months or less and that the average implementation cost is \$1M-\$2M.



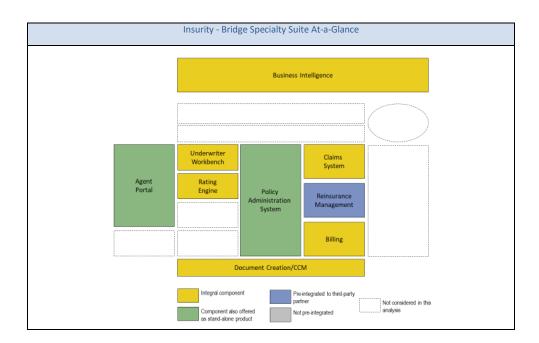
#### Insuresoft - The Diamond Platform

- Insuresoft was acquired by the Volaris Group, a division of Constellation Software (TSX: CSU), in November 2019. The company has headquarters in Tuscaloosa, AL and employs 135 people. The company's annual revenue is in the range of \$20M-\$50M.
- The Diamond Platform is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has 38 live US/Canadian insurer clients using the suite, most of which are smaller companies (under \$1B) using the solution to support personal lines with some commercial.
- Publicly announced clients include California Earthquake Authority, Aon (National Flood Services), Buckeye Insurance Group, Indiana Farmers Mutual Insurance, and Lighthouse Property Insurance Company.
- The solution is browser-based for all user interface functions. It is written in .NET (C#/VB.NET).
- Configuration for rules is via tools for BAs and non-IT staff. Configuration for insurance
  products and document authoring is via tools for IT analysts. Screens, workflow, and
  integration to third-party service calls are configurable via developer tools, XML
  manipulation, or a scripting language.
- Implementation is available through the company's resources or a partner. Insuresoft
  deploys the solution on-prem, hosted at a private data center, and hosted on MS Azure. The
  company offers a SaaS delivery model that includes hosting, license, maintenance and
  support, ongoing access to the latest version, and the implementation of upgrades.
- The company reports that the average time to initial go-live is 180 days or less and that the average implementation cost is \$1M-\$2M.



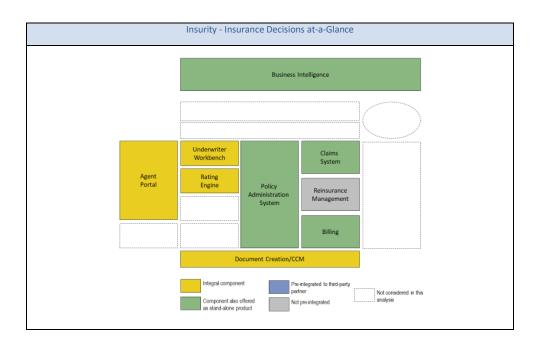
## **Insurity - Bridge Specialty Suite**

- Insurity is a private company that provides cloud-based solutions and data analytics for large global insurers, brokers, and MGAs. The company reports that it is trusted by 15 of the top 25 P/C insurance carriers in the US and that it empowers clients to focus on their core businesses, optimize their operations, and deliver superior customer experiences.
- Insurity declined to disclose employee headcount or revenue information.
- Bridge Specialty Suite (Bridge) includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components. The company notes that the suite also includes built-in dashboard and data visualization technology as well as a digital platform.
- It currently has 20 live US/Canadian insurer clients using the suite, most of which are smaller (under \$1B) companies. Most clients use the solution to support specialty lines with some commercial and personal.
- Publicly announced clients include AIG, Chubb, Everest, HCC, and Sirius.
- The solution is browser-based for all user interface functions. It is written primarily in .NET (C#/VB.NET) with some Java.
- Configuration for insurance products, screens, workflows, rules, integration to third-party service calls, and document authoring is via tools for BAs and non-IT staff.
- Implementation is available through the company's resources or a partner. Insurity deploys
  Bridge hosted at a private data center or hosted on MS Azure. The company offers a SaaS
  delivery model that includes hosting, license, maintenance and support, ongoing access to
  the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is 180 days or less. Insurity did not disclose implementation costs.



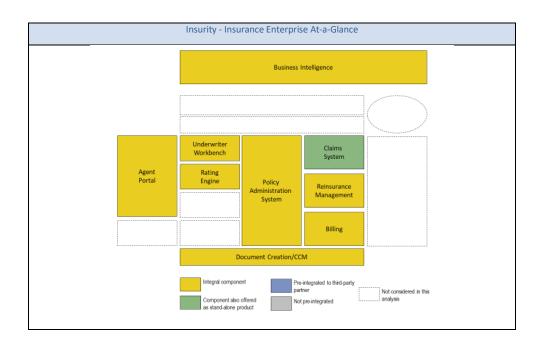
### **Insurity - Insurance Decisions Suite**

- Insurity is a private company that provides cloud-based solutions and data analytics for large global insurers, brokers, and MGAs. The company reports that it is trusted by 15 of the top 25 P/C insurance carriers in the US and that it empowers clients to focus on their core businesses, optimize their operations, and deliver superior customer experiences.
- Insurity declined to disclose employee headcount or revenue information.
- Insurance Decisions is a suite of solutions that includes core policy features, rating, underwriting features, document creation, agent portal (role-based views), business intelligence, billing, and claims components.
- It currently has over 70 live US/Canadian insurer clients using the suite, most of which are
  insurers with between \$250M and \$1B in written premium using the solution to support
  commercial lines with some personal.
- Publicly announced clients include Zurich, Allstate, Travelers, Hanover, and Arch.
- The solution is browser-based for all user interface functions. It is written primarily in .NET (C#/VB.NET).
- Configuration for insurance products, screens, workflows, rules, integration to third-party service calls, and document authoring is via tools for IT analysts.
- Insurity has an internal implementation staff that typically works with an SI partner or a
  client's internal team. Insurity deploys the suite on-prem, hosted at a private data center,
  and hosted on MS Azure. The company offers a SaaS delivery model that includes hosting,
  license, maintenance and support, ongoing access to the latest version, and implementation
  of the upgrades.
- The company reports that the average time to initial go-live is 12 months or less. Insurity declined to disclose average implementation costs.



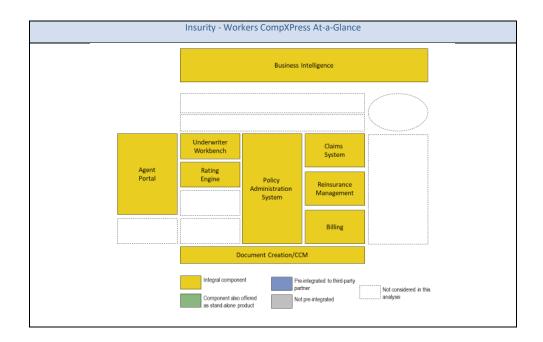
## **Insurity - Insurance Enterprise**

- Insurity is a private company that provides cloud-based solutions and data analytics for large
  global insurers, brokers, and MGAs. The company reports that it is trusted by 15 of the top
  25 P/C insurance carriers in the US and that it empowers clients to focus on their core
  businesses, optimize their operations, and deliver superior customer experiences.
- Insurity declined to disclose employee headcount or revenue information.
- The suite includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, reinsurance, billing, and claims.
- It currently has six live insurer clients using the suite in the US, most of which are smaller insurers (under \$1B) using the solution to support personal lines.
- Insurity did not disclose any clients for this solution.
- The solution is browser-based for all user interface functions. It is written in Java.
- Configuration for insurance products, workflows, rules, and document authoring is via tools
  for BAs and non-IT staff. Configuration for screens and integration to third-party service calls
  is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through Insurity's own resources. Insurity deploys the solution
  hosted on AWS. The company offers a SaaS delivery model that includes hosting, license,
  maintenance and support, ongoing access to the latest version, and implementation of the
  upgrades.
- The company reports that the average time to initial go-live is 180 days or less. Insurity declined to disclose average implementation costs.



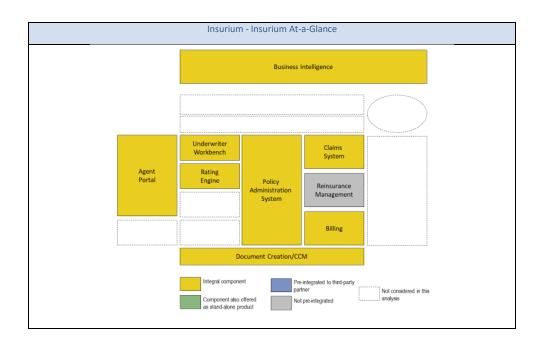
## **Insurity - Workers CompXPress**

- Insurity is a private company that provides cloud-based solutions and data analytics for large global insurers, brokers, and MGAs. The company reports that it is trusted by 15 of the top 25 P/C insurance carriers in the US and that it empowers clients to focus on their core businesses, optimize their operations, and deliver superior customer experiences.
- Insurity declined to disclose employee headcount or revenue information.
- The suite includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, reinsurance, billing, and claims.
- It currently has 15 live insurer clients using the suite in the US, all of which are smaller insurers (under \$1B) using the solution to support workers' comp.
- Publicly announced clients include Midwest Builders' Casualty, James River (Falls Lake and Stonewood Insurance), Risk Administration Services, The Builders' Group, and AlaCOMP Self-Insurance Fund.
- The solution is browser-based for all user interface functions. It is written in .NET (C#/VB.NET) with some JavaScript, Boostrap, and Angular.
- Configuration for insurance products, rules, integration to third-party service calls, and
  document authoring is via tools for BAs and non-IT staff. Workflow is configurable via tools
  for IT analysts. Screen configuration is available via developer tools, XML manipulation, or a
  scripting language.
- Implementation is available through Insurity's resources or a partner. Insurity deploys the solution on-prem, hosted at a private data center, and hosted on AWS or MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is 180 days or less. Insurity
  declined to disclose average implementation costs.



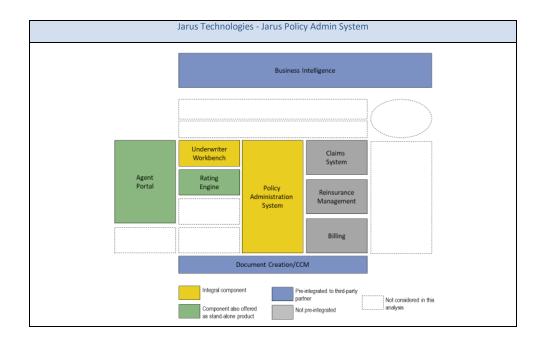
#### Insurium - Insurium

- Insurium is a private company that provides commercial insurance companies with a cloud-based platform offering a 360-degree view of the insurance process life cycle.
- It is headquartered in Denver, CO and employs 50 people. The company declined to disclose its annual revenue.
- The Insurium suite of solutions includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, billing, and claims components as well as an insured portal. Insurium notes that claims is currently only available for workers' comp.
- It currently has 16 live insurer clients using the suite in the US and Canada, all of which are smaller insurers (under \$1B) using the solution to support commercial lines.
- Publicly announced clients include Diamond Insurance, MTMIC, Synergy Comp, Cimmaron Insurance, and Utah Business Insurance Company.
- The solution is browser-based for all user interface functions. It is written in .NET (C#/VB.NET) and JavaScript with some proprietary database languages.
- Configuration for workflows, rules, and document authoring is via simple tools targeted for IT analysts or BAs. Configuration for insurance products, screens, and integration to thirdparty service calls is not available; changes are done by the vendor.
- Implementation is available through the company's own resources. Insurium deploys the solution hosted on MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, and ongoing access to the latest version.
- The company reports that the average time to initial go-live is 180 days or less and that the average implementation cost is \$100K-\$500K.



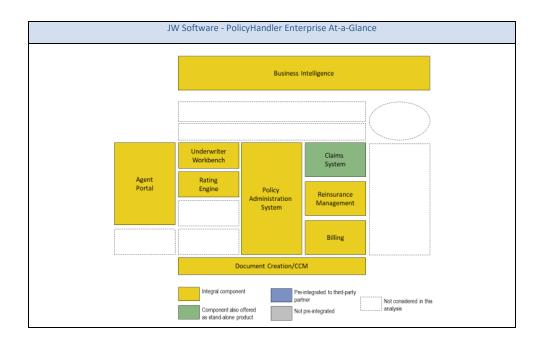
### **Jarus Technologies - Jarus Policy Admin System**

- Jarus Technologies offers digital experience platforms and policy administration systems. It
  has provided portals, mobile apps, and core system transformation services for more than
  25 insurers. The company reports that its policy admin system enables carriers to build
  custom systems that are flexible, scalable, and Agile. The company is headquartered in
  Pittsburgh, PA and employs 170 people. Jarus does not publish revenue numbers.
- Jarus Policy Admin System is a suite of solutions that includes core policy features, rating, underwriter workbench, and agent portal components. It also includes a rules engine.
- It currently has four live US/Canadian insurer clients using the suite, most of which are smaller (under \$1B) companies using the solution to support commercial lines.
- Publicly announced clients include Goodville Mutual Casualty Company, North Star Mutual Insurance Company, ALPS Lawyers Professional Liability, and AIPSO.
- The solution is browser-based for all user interface functions. It is written in .NET Core (C#)
  with some JavaScript for the presentation layer. Jarus notes that there is a Java version of
  Jarus Rating Engine and Rules Engine used by some carriers.
- Configuration for insurance products, screens, workflows, and rules is via simple tools
  targeted for BAs and non-IT staff. Configuration for integration to third-party service calls is
  via simple tools targeted for IT analysts. Configuration for document authoring is via
  developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's own resources or a partner. Jarus
  deploys the solution on-prem or hosted on MS Azure. The company offers a SaaS delivery
  model that includes license, maintenance and support, ongoing access to the latest version,
  and the implementation of upgrades.
- The company reports that the average time to initial go-live is 12 months or less and that the average implementation cost is \$1M-\$2M.



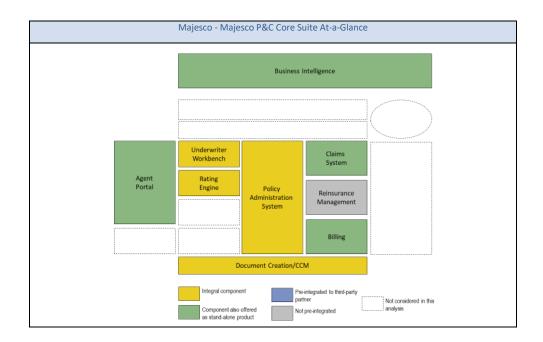
## JW Software - PolicyHandler Enterprise

- JW Software is a privately held company with headquarters in St. Louis, MO. The company has 39 employees and reports annual revenue of \$5M-\$10M.
- PolicyHandler Enterprise (PHE) is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, reinsurance, billing, and claims components.
- It currently has four live US/Canadian insurer clients using the suite, all of which are smaller (under \$1B) companies using the solution to support workers' comp.
- Publicly announced clients include Normandy Insurance Company, Kentucky AGC/SIF, The Lawson Group, and First Benefits Insurance Mutual.
- The solution is browser-based for all user interface functions. It is written in.NET (C#/VB.NET), JavaScript, and a proprietary database (PL/SQL, T-SQL, etc.).
- Configuration for insurance products, screens, and integration to third-party service calls is
  via code. Configuration for workflow, rules, and document authoring is available via simple
  tools for BAs and non-IT staff.
- Implementation is available through the company's own resources. JW Software deploys the solution on-prem or hosted at a private data center. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades.
- The company reports that the average time to initial go-live is 12 months or less and that the average implementation cost is \$500K-\$1M.



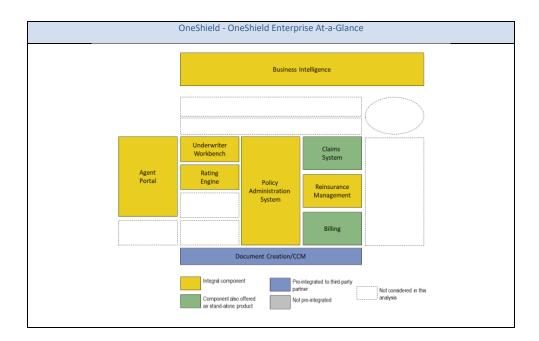
### Majesco - Majesco P&C Core Suite

- Majesco is a provider of cloud insurance software solutions for more than 200 insurance carriers globally. The company's software solutions include core insurance areas and a robust ecosystem of partners. Majesco asserts that its digital solutions are cloud-native, including a digital engagement and microservices PaaS for the entire insurance business.
- Majesco has headquarters in Morristown, NJ and employs 2,195 people. As a privately held company Majesco does not share revenue information.
- Majesco P&C Core Suite is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, billing, and claims components.
- It currently has 45 live US/Canadian insurer clients using the suite, most of which are smaller (under \$1B) companies and some of which are larger (over \$1B) companies using the solution to support commercial lines with a few personal lines.
- Publicly announced clients include QBE, Munich Re, Swiss Re, Ategrity, and Heritage Insurance.
- The solution is browser-based for all user interface functions. It is written in Java.
- Configuration for insurance products, screens, workflows, rules, and document authoring is
  via tools for BAs and non-IT staff. Integration to third-party service calls is configured via
  developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's own resources or a partner. Majesco
  deploys the suite on-prem, hosted at a private data center, and on MS Azure. The company
  offers a SaaS delivery model that includes hosting, license, maintenance and support,
  ongoing access to the latest version, and implementation of the upgrades.
- Majesco reports that the average time to initial go-live is 180 days or less (or 12 weeks or less in out-of-the-box scenarios) and that the average implementation cost is \$1M-\$2M.



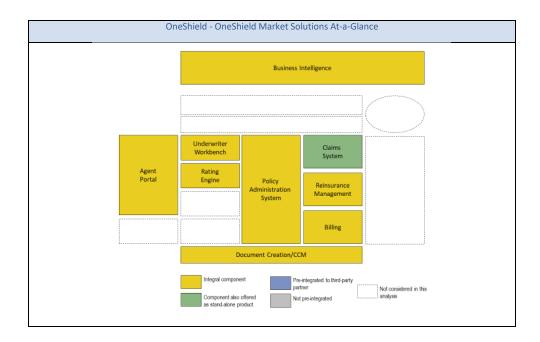
## OneShield, Inc. - OneShield Enterprise

- OneShield is a privately held company headquartered in Marlborough, MA that employs 264 people. As a private company, OneShield does not disclose its financials, but the company notes that it operates profitably. OneShield provides more than 50 cloud-based solutions for insurers of all sizes across P/C and specialty insurance markets. It offers stand-alone, subscription, and -as-a-Service products. In addition to its corporate headquarters, OneShield has offices in India.
- OneShield Enterprise is a suite of solutions that includes core policy features, rating, underwriter workbench, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has 31 live US/Canadian insurer clients using the suite, most of which are smaller companies (under \$1B) using the solution to support personal and commercial lines.
- Publicly announced clients include Hiscox Insurance, ICAT, Erie Insurance, Allied World Insurance, and Utica First.
- The solution is browser-based for all user interface functions. It is written in Java.
- Configuration for insurance products, screens, workflows, rules, and integration to thirdparty service calls is via tools for BAs and non-IT staff. Configuration for document authoring is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's resources or a partner. OneShield
  deploys the solution on-prem, hosted at a private data center, and hosted on AWS. The
  company offers a delivery model that includes hosting, license, maintenance and support,
  ongoing access to the latest version, and implementation support of the upgrades.
- The company reports that the average time to initial go-live is 180 days or less and that the average implementation cost is \$2M-\$5M.



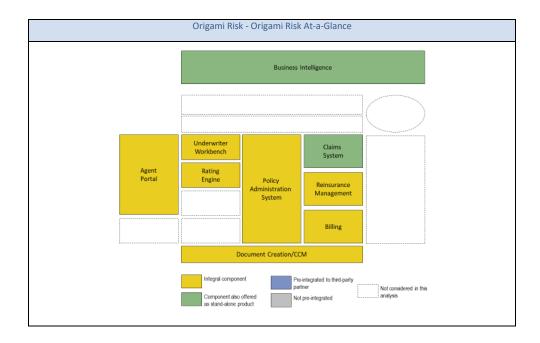
### OneShield, Inc. - OneShield Market Solutions

- OneShield is a privately held company headquartered in Marlborough, MA that employs 264 people. As a private company, OneShield does not disclose its financials, but the company notes that it operates profitably. OneShield provides more than 50 cloud-based solutions for insurers of all sizes across P/C and specialty insurance markets. It offers stand-alone, subscription, and -as-a-Service products. In addition to its corporate headquarters, OneShield has offices in India.
- OneShield Market Solutions is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has four live US/Canadian insurer clients using the suite, all of which are smaller companies (under \$1B) using the solution to support commercial lines.
- Publicly announced clients include Workers' Compensation Trust, Accident Insurance
   Company, West Congress Insurance Services, Keswick, and Omaha National Underwriters.
- The solution is browser-based for all user interface functions. It is written in .NET (C#/VB.NET).
- Configuration for insurance products and screens is available via tools for BAs and non-IT staff. Configuration for workflow, rules, integration to third-party service calls, and document authoring is not available; changes are made by the vendor.
- Implementation is available through the company's resources. OneShield deploys the
  solution hosted at a private data center, on MS Azure, or on Ntirety. The company offers a
  SaaS delivery model that includes hosting, license, maintenance and support, ongoing access
  to the latest version, implementation, and ongoing managed service hours.
- The company reports that the average time to initial go-live is 90 days or less and that the average cost is \$100K-\$500K.



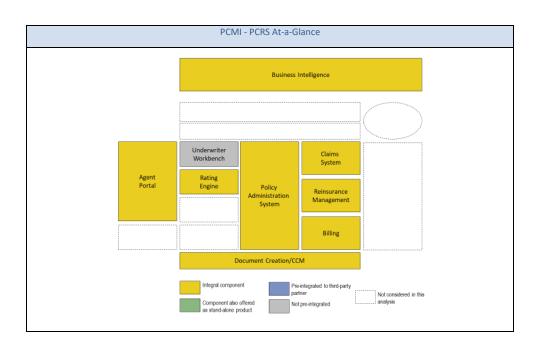
## Origami Risk - Origami Risk

- Origami Risk provides integrated SaaS solutions from a multi-tenant platform for the risk and
  insurance industry. Founded in 2009, Origami Risk offers a full suite of risk management and
  insurance core system solutions from a single, secure, cloud-based platform. It delivers
  software and support to over 675 companies around the globe.
- Origami Risk has headquarters in Chicago, IL and employs 336 people. The company declined to disclose annual revenue.
- Origami Risk is a suite of solutions that include core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has eight live US/Canadian insurer clients using the suite. All clients are smaller (under \$1B) insurers using the solution to support commercial lines with some personal.
- Publicly announced clients include Arthur J. Gallagher & Co., Gallagher Bassett, Texas
   Association of School Boards, Service Lloyds Insurance Company, and Cincinnati Financial.
- The solution is browser-based for all user interface functions. It is written primarily in .NET (C#/VB.NET).
- Configuration for rules and document authoring is via UI-based configuration tools for BAs
  and non-IT staff. Insurance products and workflows are configurable via tools for IT analysts.
  Configuration for screens and integration to third-party service calls is via developer tools,
  XML manipulation, or a scripting language.
- Implementation is available through the company's resources or a partner. Origami Risk
  deploys the solution on AWS. The company offers a SaaS delivery model that includes
  hosting, license, support and maintenance, ongoing access to the latest version, and the
  implementation of upgrades.
- The company reports that the average time to go-live is 180 days or less. The company declined to disclose average implementation costs.



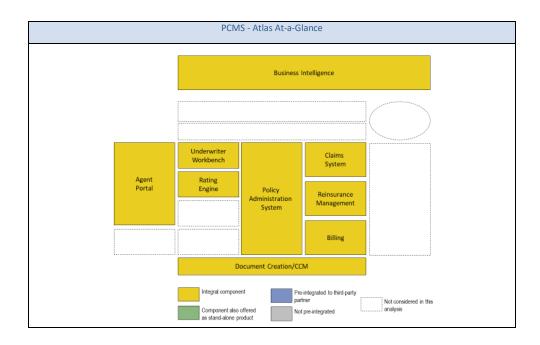
## PCMI, Inc. - Policy Claims & Reporting Solution

- PCMI, Inc is a technology solution provider for the warranty and service contract industry. It
  is headquartered in Park Ridge, IL and has 150 employees. The company's annual revenue is
  between \$10M-\$20M.
- Policy Claims & Reporting Solution is a suite that include core policy features, rating, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has 48 live US insurer clients using the suite, most of which are smaller to midsized companies (under \$1B). All clients are using the solution to support specialty lines.
- Publicly announced clients include AmTrust, EFG Companies, and Extend Warranty.
- Policy Claims & Reporting Solution (PCRS) is browser-based for all functions. It is written in .NET (C#/VB.NET).
- Configuration for insurance products, screens, workflows, rules, and document authoring is
  via simple tools targeted for BAs and non-IT staff. Integration to third-party service calls is
  configured via code.
- Implementation is available through the company's own resources. PCMI hosts the solution
  at a private data center and on MS Azure. A SaaS delivery model is available that includes
  hosting, license, maintenance and support, ongoing access to the latest version, and the
  implementation of upgrades.
- The company reports that the average time to initial go-live is nine months or less and that the average implementation cost is under \$100K.



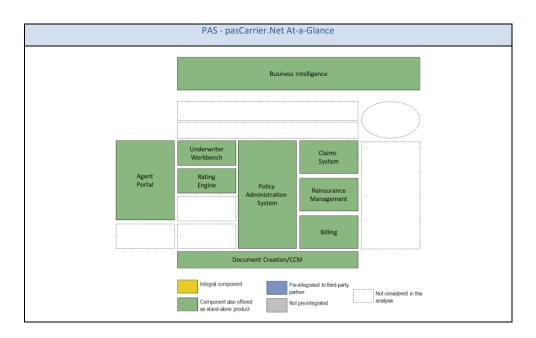
#### **PCMS - Atlas**

- PCMS is a privately held company with headquarters in Dallas, TX. It employs 15 people and has an annual revenue in the range of \$5M-\$10M.
- Atlas is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims.
- It currently has 12 live US/Canadian insurer clients using the suite, all of which are smaller companies (under \$1B) using the solution to support a mix of personal and commercial lines.
- Publicly announced clients include Triangle Insurance, Palomar Specialty Insurance
   Company, United Home Insurance Company, Farmers Insurance Company of Flemington,
   and Amalgamated Casualty Insurance.
- The solution is browser-based for all user interface functions. It is written in .NET (C#, VB.NET).
- Configuration for insurance products, screens, workflows, rules, integration to third-party service calls, and document authoring is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's resources. PCMS deploys on a private data center. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades.
- The company reports that the average time to initial go-live is nine months or less and that the average implementation cost is \$100K-\$500K.



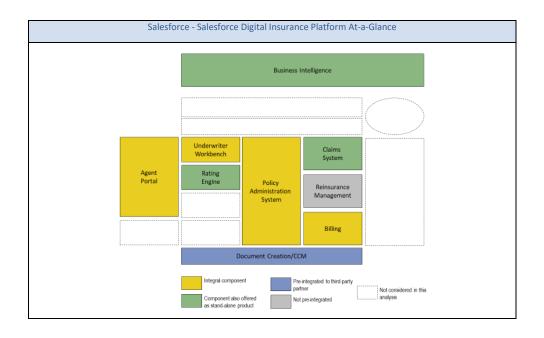
## **Policy Administration Solutions - pasCarrier.Net**

- Policy Administration Solutions (PAS) is privately owned by Peter Pantelides, president and CEO. The company has headquarters in Westchester, NY and employs 53 people. Its annual revenue is in the range of \$5M-\$10M.
- pasCarrier.Net is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent and customer portals, reinsurance, business intelligence, billing, and claims components.
- It currently has 19 live US/Canadian insurer clients using the suite, most of which are smaller companies (under \$1B) using the solution to support a mix of personal and commercial lines.
- Publicly announced clients include Public Service Mutual; Hudson Insurance; Progressive, CY;
   Paramount Insurance; and AXA XL.
- The solution is browser-based for all user interface functions. It is written primarily in .NET/VB.NET with some Java.
- Configuration for insurance products, workflows, rules, and document authoring is via tools
  intended for BAs and non-IT staff. Configuration for screens and integration to third-party
  service calls is not available; changes are done by the vendor.
- Implementation is available through the company's own resources. The company deploys
  pasCarrier.Net on-prem and hosted at a private/managed data center. The company offers a
  SaaS delivery model that includes hosting, license, maintenance and support, ongoing access
  to the latest version, and the implementation of upgrades.
- The company reports that the average time to go-live is 180 days or less and that the average implementation cost is \$100K-\$500K.



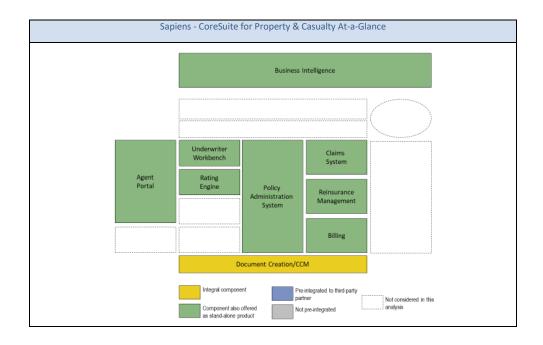
# **Salesforce - Salesforce Digital Insurance Platform**

- Salesforce (NYSE: CRM) is a global provider of customer relationship management software
  founded in 1999. The company reports that it enables companies of every size and industry
  to take advantage of technologies including cloud, mobile, social, IoT, AI, voice, and
  blockchain to create a 360-degree view of their customers. The company has headquarters
  in San Francisco, CA and employs 50,000 people. Its annual revenue is over \$10B.
- Salesforce Digital Insurance Platform is an integrated suite of solutions that includes core
  policy features, rating, underwriter workbench, an agent portal, business intelligence, billing,
  and claims components.
- Salesforce does not disclose client information.
- Publicly announced clients include Ascot US, Liberty Mutual, MetLife, Movinx (by Swiss Re and Daimler Insurance Services), and New York Life Seguros Monterey.
- The solution is browser-based for all user interface functions. It is written in Salesforce Apex with some JavaScript for the UX Lightning web component layer.
- Configuration for insurance products, workflow, and rules is via simple tools targeted for BAs
  and non-IT staff. Configuration for screens, integration to third-party service calls, and
  document authoring is via simple tools targeted for IT analysts.
- Implementation is available through the company's own resources or a partner. The solution
  is deployed on Salesforce's own cloud. The company offers a SaaS delivery model that
  includes hosting, license, maintenance and support, ongoing access to the latest version, and
  the implementation of upgrades.
- The company reports that the average time to go-live varies according to complexity; it may range from one to two months for a simple pilot to nine months for a complex project.
   Salesforce does not disclose financials such as implementation cost.



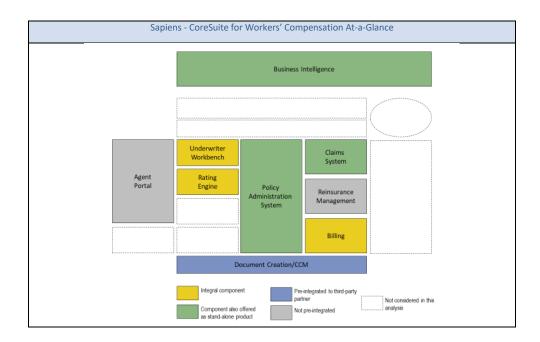
## Sapiens - CoreSuite for Property & Casualty

- Sapiens International Corporation (NASDAQ and TASE: SPNS) is a global provider of software solutions for the insurance industry with a 30-year track record of delivering to more than 600 organizations. The company offers software platforms, solutions, and services, including a full digital suite for the P/C, life/pension/annuities, and reinsurance markets.
- Sapiens has global headquarters in Holon, Israel and US headquarters in Raleigh, NC. It employs 4,000 people and has an annual revenue in the range of \$250M-\$500M.
- CoreSuite for Property & Casualty is a suite of solutions that currently includes core policy features, rating, underwriter workbench, agent portal, billing, claims, reinsurance, and business intelligence components.
- It currently has ten live US/Canadian insurer clients using the suite, most of which are larger companies (over \$1B) using the solution to support personal and commercial lines.
- Publicly announced clients include Travelers, Starr, Arch, Country Financial, and Canal Insurance
- The solution is browser-based for all user interface functions. It is written in Java.
- Configuration for insurance products, screens, workflows, rules, and document authoring is
  via tools for BAs and non-IT staff. Configuration for integration to third-party service calls is
  via tools for IT analysts.
- Implementation is available through the company's own resources or a partner. Sapiens
  deploys the suite on-prem and hosted on AWS. The company offers a SaaS delivery model
  that includes hosting, license, maintenance and support, ongoing access to the latest
  version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is nine months or less and that the average implementation cost is \$1M-\$2M.



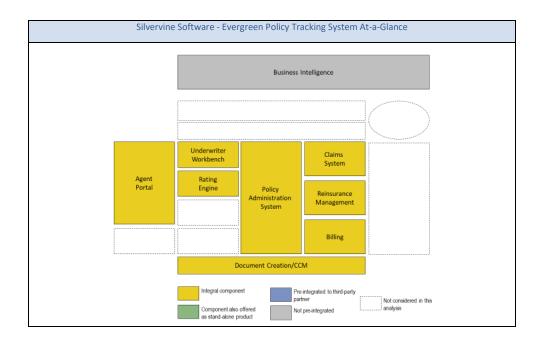
# Sapiens - CoreSuite for Workers' Compensation

- Sapiens International Corporation (NASDAQ and TASE: SPNS) is a global provider of software solutions for the insurance industry with a 30-year track record of delivering to more than 600 organizations. The company offers software plaforms, solutions, and services, including a full digital suite for the P/C, life/pension/annuities, and reinsurance markets.
- Sapiens has global headquarters in Holon, Israel and US headquarters in Raleigh, NC. It employs 4,000 people and has an annual revenue in the range of \$250M-\$500M.
- Sapiens CoreSuite for Workers' Compensation is a suite of solutions that currently includes core policy features, rating, underwriter workbench, billing, claims, and business intelligence components.
- It currently has 16 live US/Canadian insurer clients using the suite, most of which are smaller (under \$1B) companies using the solution to support workers' compensation.
- Publicly announced clients include Encova Insurance, W.R. Berkley, Wyoming Workers' Safety and Compensation Division, Ohio Bureau of Workers' Compensation, and Midwest Insurance.
- The solution is browser-based for all user interface functions. It is written in Java.
- Configuration for insurance products, workflows, rules, and document authoring is via tools
  intended for BAs and non-IT staff. Configuration for screens and integration to third-party
  service calls is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's resources or a partner. Sapiens deploys
  the solution on-prem, hosted at a private data center, and hosted on MS Azure. The
  company offers a SaaS delivery model that includes hosting, license, maintenance and
  support, ongoing access to the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is nine months or less and that the average implementation cost is \$2M-\$5M.



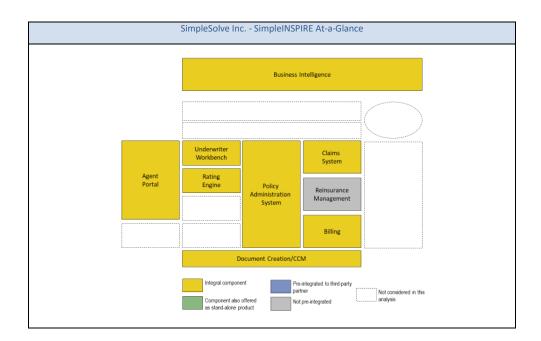
# Silvervine Software - Evergreen Policy Tracking System

- Silvervine Software was acquired in 2013 by Constellation Software. Constellation allows
   Silvervine to operate as an independent entity.
- Silvervine has headquarters in Warner Robins, GA and has 86 employees. The company's annual revenue is just under \$20M.
- Evergreen Policy Tracking System (Evergreen) includes core policy, rating, underwriter workbench, document creation, agent portal, reinsurance, billing, and claims components.
- It currently has 12 live US/Canadian insurer clients using the suite, all of which are smaller companies (under \$1B) using the solution to support personal and commercial lines.
- Publicly announced clients include FedNat, People's Trust, Traders, and Home Owners of America
- The solution is browser-based for all user interface functions. It is written in .NET (C#/VB.NET), Java, ColdFusion, Scala, SQL, CSS, HTML, and JavaScript.
- Configuration for workflow is via simple tools for IT analysts. Configuration for insurance products, screens, rules, document authoring, and integration to third-party service calls is not available; changes are done by the vendor.
- Implementation is available through the company's own resources. Silvervine deploys the solution hosted at a private data center.
- A SaaS delivery model is available that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades.
- The company reports that the average time to initial go-live is 180 days or less and that the average implementation cost is \$100K-\$500K.



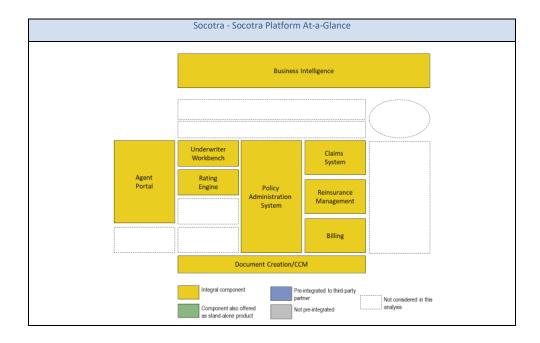
## SimpleSolve Inc. - SimpleINSPIRE

- SimpleSolve is a subchapter of a C Corporation, incorporated in 2000. The company's
  headquarters are in Pennington, NJ. SimpleSolve employs 65 people (including employees at
  a fully owned offshore development center in India) and reports an annual revenue of under
  \$5M. SimpleSolve notes that it is debt free.
- SimpleINSPIRE is a suite that includes core policy features, rating, underwriter workbench, agent portal, document creation, billing, claims, and business intelligence components.
- It currently has seven live US insurer clients using the suite, all of which are smaller to midsized companies (under \$1B) using the solution to support personal and commercial lines.
- Publicly announced clients include GEICO Marine Insurance Co., Specialty Risk of America, Baltimore Equitable Insurance, Colorado School Districts Self Insurance Pool, and California Mutual Insurance Co.
- SimpleINSPIRE is a web-based, scalable solution written in Angular, Elastic Search, .NET Core, Redis Cache, and .NET (C#/VB.NET). It is a windows client for admin functions. The company asserts that the solution includes intelligent and interactive BOTs, elastic search, and cognitive services.
- Configuration for screens, workflow, rules, integration to third-party service calls, and document authoring is via developer tools, XML manipulation, or a scripting language.
   Configuration for insurance products is via code.
- Implementation is available through the company's own resources. SimpleSolve deploys the
  solution on-prem and hosted on a private or public cloud (MS Azure, AWS, or other). A SaaS
  delivery model is available that includes hosting, license, maintenance and support, ongoing
  access to the latest version, and the implementation of upgrades.
- The company reports that the average time to initial go-live is 180 days or less and that the average implementation cost is \$100K-\$500K.



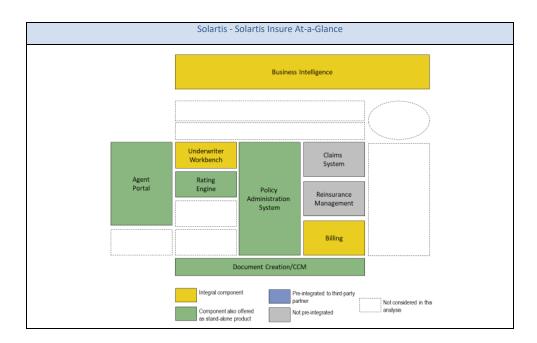
#### Socotra - Socotra Platform

- Socotra is a modern, enterprise-grade core system that the company asserts enables global insurers to accelerate product development, reduce maintenance costs, and improve customer experiences.
- Socotra is a privately held company with headquarters in San Francisco, CA that employs 52 people. The company declined to disclose annual revenue.
- Socotra Platform includes core policy, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has four live US/Canadian insurer clients using the suite, most of which are larger companies (over \$1B) using the solution to support personal lines with some commercial.
- Publicly announced clients include Nationwide, AXA, Mutual of Omaha, IAG, and MS Amlin.
- The solution is browser-based for all user-interface functions. The company declined to
  disclose the programming languages that comprise the solution since it is a platform with
  open APIs. The company reports that, as the Socotra Platform is cloud-based, clients can use
  their choice of technologies to interact with the platform.
- Configuration for insurance products, rules, and document authoring is via tools for BAs and non-IT staff. Workflow and integration to third-party service calls are configurable via developer tools, XML manipulation, or a scripting language. Screen configuration is via code.
- Implementation is available through the company's resources or a partner. Socotra deploys
  the solution hosted on AWS. The company offers a SaaS delivery model that includes
  hosting, license, maintenance and support, ongoing access to the latest version, and
  implementation of the upgrades.
- The company reports that the average time to initial go-live is 90 days or less and that the average implementation cost is \$500K-\$1M.



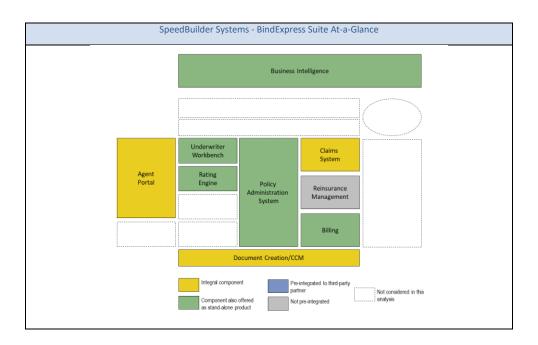
#### **Solartis - Solartis Insure**

- Solartis is a privately owned organization. The company reports that it operates profitably and has grown 10% per year for the past five years. It has headquarters in Manhattan Beach, CA and employs 800 people. The company's annual revenue is in the range of \$10M-\$20M.
- Solartis Insure is a cloud-based platform based on a microservices framework that includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, and billing APIs.
- It currently has seven live US/Canadian insurer clients using the suite, most of which are smaller companies (under \$1B) using the solution to support commercial lines with some personal.
- Publicly announced clients include Liberty Mutual, Starr Companies, National Independent Truckers Insurance Company, W.R. Berkley, and CHIC (Commercial HireCar Insurance Company).
- The solution is browser-based for all user interface functions. It is written in Java and Python.
- Configuration for insurance product functions and document authoring is via tools for BAs and non-IT staff. Configuration for screens, workflows, and rules is via tools for IT analysts.
   Configuration for integration to third-party service calls is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's resources. Solartis deploys the solution
  hosted on Oracle Cloud and at a private data center. The company offers a SaaS delivery
  model that includes hosting, license, maintenance and support, ongoing access to the latest
  version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is 90 days or less and that the average implementation cost is \$100K-\$500K.



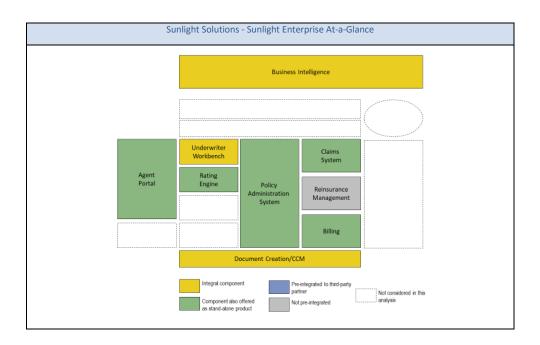
## SpeedBuilder Systems, Inc. - BindExpress Suite

- SpeedBuilder Systems, Inc. is a private and employee-owned company headquartered in Columbia, SC that employs 25 people. The company's annual revenue is under \$5M.
- BindExpress Suite is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, billing, and claims components.
- It currently has five live US/Canadian insurer clients using the suite, all of which are smaller companies (under \$1B) using the solution to support both personal and commercial lines.
- Publicly announced clients include Wolverine Mutual Insurance Company, Fremont
  Insurance Company, Centauri Specialty Insurance, American Access Casualty, and Retailers
  Mutual Insurance.
- The solution is browser-based for all user interface functions. It is written in Java.
- Configuration for insurance products and rules is via tools for BAs and non-IT staff.
   Configuration for screens, workflow, and document authoring is via developer tools, XML manipulation, or a scripting language. Configuration for integration to third-party service calls is via code.
- Implementation is available through SpeedBuilder's resources or an SI partner. The company deploys BindExpress Suite on-prem, hosted at a private data center, and hosted on MS Azure and Immedion. A SaaS delivery model is available that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades.
- The company reports that the average time to initial go-live is 90 days or less and that the average implementation cost is \$500K-\$1M.



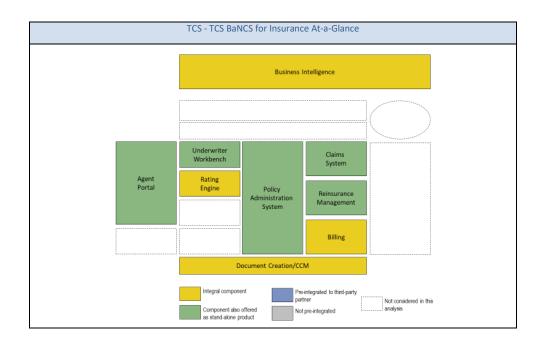
## **Sunlight Solutions, LLC. - Sunlight Enterprise**

- Sunlight Solutions, LLC, is a privately held company with headquarters in Minneapolis, MN. The company employs 50 people and reports annual revenue in the range of \$5M-\$10M.
- Sunlight Enterprise is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, billing, and claims components.
- It currently has seven live US/Canadian insurer clients using the suite, which are a mix of larger (over \$1B) and smaller (under \$1B) companies using the solution to support commercial lines and some personal lines.
- Publicly announced clients include CM Vantage and CM Select (both wholly owned by Church Mutual), American Family Mutual Insurance Co., Maif Assurance, and Applied Specialty.
- The solution is browser-based for all user interface functions. It is written primarily in .NET (C#/VB.NET) and a small amount of Java.
- Configuration for insurance products, screens, workflows, rules, integration to third-party service calls, and document authoring is via tools for BAs and non-IT staff.
- Implementation is available through a partner. Sunlight deploys the solution on-prem,
  hosted at a private data center, and hosted on MS Azure. The company offers a SaaS delivery
  model that includes hosting, license, maintenance and support, ongoing access to the latest
  version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is 90 days or less and that the average implementation cost is \$100K-\$500K.



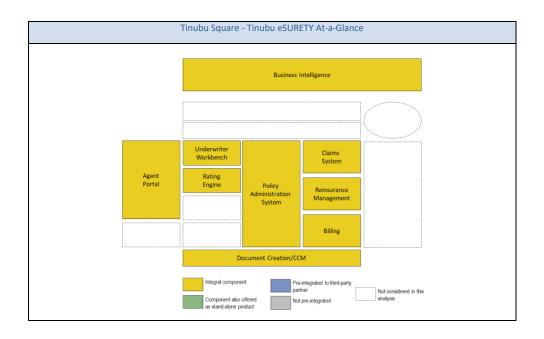
# Tata Consultancy Services - TCS BaNCS for Insurance (P/C)

- Tata Consultancy Services (TCS) is a public limited company traded on the National Stock Exchange (NSE: TCS) and the Bombay Stock Exchange (BSE: 532540) in India. TCS has headquarters in Mumbai, India and employs 488,649 people. The company's annual revenue is over \$10B.
- TCS BaNCS for Insurance (P/C) is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has three live US/Canadian insurer clients using the suite for P/C lines. These
  clients are mostly larger companies (over \$1B) using the solution to support personal lines
  with some commercial.
- Publicly announced clients include Nedbank Insurance, Bajaj Allianz General Insurance, and KBZ General Insurance.
- The solution is browser-based for all user interface functions. It is written primarily in Java with some PL/SQL.
- Configuration for insurance products, screens, workflow, rules, integration to third-party service calls, and document authoring is via tools for BAs and non-IT staff.
- Implementation is available through the company's own resources. TCS deploys the solution on-prem, hosted at a private data center, and hosted on AWS or another public cloud.
- The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades. TCS BaNCS Cloud is a SaaS offering of TCS BaNCS; it offers SaaS on the latest version, priced on an annual usage basis.
- The company reports that the average time to initial go-live is 180 days or less. TCS not disclose information related to costs.



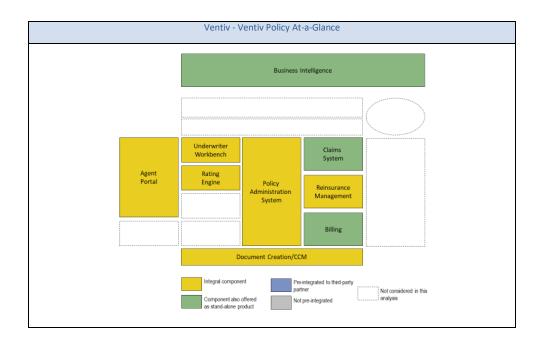
### **Tinubu Square - Tinubu eSURETY**

- Tinubu Square is a private SaaS platform vendor for credit and surety insurers worldwide. It
  has headquarters in Paris, France, with US headquarters in Orlando, FL; it employs 178
  people. Serving over 20 countries, Tinubu Square notes that its SaaS cloud platform
  accelerates business growth through its Tinubu CIS short term, medium term, and political
  risk for credit insurance and Tinubu eSURETY and Tinubu SurePath Digital for surety. Its
  annual recurring revenue is €15M-€20M.
- In March 2020, Tinubu Square Group acquired eSURETY, and in December 2020 it acquired SuretyWave, including SurePath Digital, a surety bond processing system. The company notes that these strategic acquisitions are part of a multi-year plan to offer an end-to-end solution to agents, brokers, and carrier partners alike.
- The Tinubu eSURETY suite includes core policy, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has 27 live US/Canadian insurer clients using the suite, most of which are larger companies (over \$1B) using the solution to support surety and fidelity lines.
- Publicly announced clients include US Fire Insurance, Great American, FCCI Group, Hudson Insurance Group, and Cincinnati Insurance Companies.
- The solution is browser-based for all user interface functions. It is written primarily in C#, plus a small amount of JavaScript.
- Configuration for insurance products, screens, workflows, rules, integration to third-party service calls, and document authoring functions is via tools for BAs and non-IT staff.
- Implementation is available through Tinubu's resources. It deploys the solution on MS Azure. A SaaS delivery model is available that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live varies and that the average implementation cost is \$500K-\$1M.



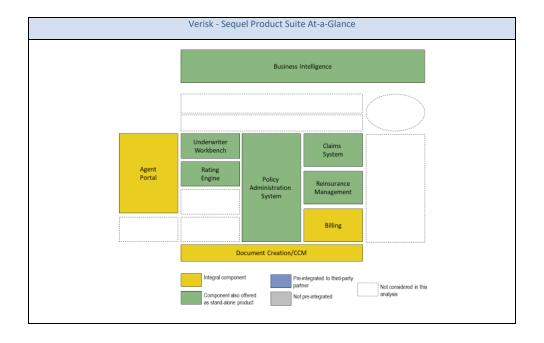
## **Ventiv Technology Inc. - Ventiv Policy**

- Ventiv Technology Inc. asserts that its people, software, and solutions empower
  organizations to achieve optimal results through its risk, insurance, and claims programs.
   Ventiv reports that it partners with over 625 clients and 390,000 users in more than 40
  countries. The private company is headquartered in Atlanta, GA and employs 450 people.
- Ventiv Policy is part of a larger admin suite that includes Ventiv Policy, Ventiv Claims, and Ventiv Billing. Ventiv Policy is a solution that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, and business intelligence components.
- It currently has 25 North American insurer clients live on the suite, all of which are smaller and midsize companies (under \$1B) using the solution to support commercial lines.
- Publicly announced clients include Vermont League of Municipalities and Towns, Municipal Association of South Carolina, Indiana University Health Risk Retention Group, Maine Municipal Association, and Massachusetts Interlocal Insurance Association.
- The solution is browser-based for all user interface functions. It is written primarily in .NET (C#/VB.NET), with some TQL/Microsoft SQL and HTML5.
- Configuration for document authoring is done via developer tools, XML manipulation, or a scripting language. Insurance products, screens, workflows, rules, and integration to thirdparty service calls are configured via code.
- Implementation is available through the company's own resources or a partner. The company deploys Ventiv Policy on-prem or hosted at a private data center. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of upgrades.
- The company reports that the average time to initial go-live for the policy product is 270 days or less and that its average implementation cost is \$200K-\$500K.



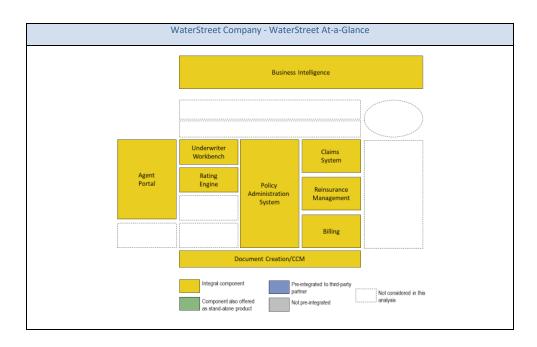
### **Verisk - Sequel Product Suite**

- Sequel, a Verisk business, offers a suite of products including modular solutions for the
  complete insurance life cycle. Verisk (NASDAQ: VRSK) is a data analytics provider serving
  customers in insurance, energy and specialized markets, and financial services. Verisk
  collects and analyzes billions of records, drawing on unique data assets and deep domain
  expertise to provide innovative products integrated into customer workflows. Verisk is
  headquartered in Jersey City, NJ and operates in 30 countries. It employs 8,000 people.
- Sequel Product Suite is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- The company declined to disclose client count information.
- The solution has a Windows client for admin and a browser interface for users. It is written primarily in .NET (C#/VB.NET), with some JavaScript.
- Configuration for insurance products, screens, workflows, and document authoring is via tools for BAs and non-IT staff. Configuration for rules and integration to third-party service calls is via Sequel Message Bus and a suite of APIs.
- Implementation is available through Sequel services or a partner. The company deploys Sequel Product Suite on-prem, hosted at a private data center, or hosted on AWS. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of upgrades.
- The company reports that the average time to initial go-live is 90 days or less. Verisk declined to disclose the average cost of implementation.



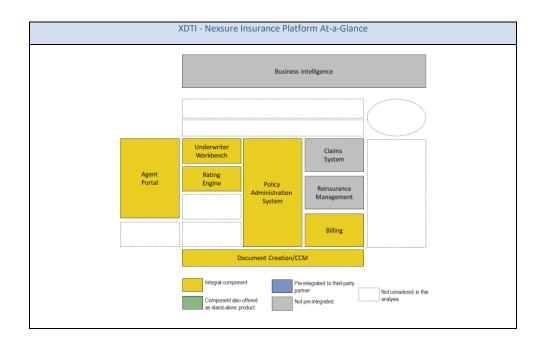
### WaterStreet Company - WaterStreet

- WaterStreet Company is headquartered in Kalispell, MT and employs 95 people.
   WaterStreet reports that its P/C policy administration suite is a fully managed, high-availability cloud solution that is scalable and secure while offering an end-to-end policy life cycle for P/C insurers and MGAs. The company's annual revenue is in the range of \$10M-\$20M.
- WaterStreet is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has eight North American insurer clients live on the suite, all of which are smaller and midsize companies (under \$1B) using the solution to support personal lines.
- The solution has a browser interface for users. It is written in JavaScript, .NET (C#, VB.NET), and a proprietary database language.
- Configuration for insurance products, screens, workflows, rules, integration to third-party service calls via configuration, and document authoring is not available; changes are performed by the vendor's delivery teams.
- Implementation is available through the company's own resources. The company deploys
  cloud instances via MS Azure. The company offers a SaaS delivery model that includes
  hosting, subscription, maintenance and support, ongoing access to the latest version, and
  implementation of upgrades.
- The company reports that the average time to initial go-live is 90 days or less and that the average cost of implementation is \$100K-\$500K.



# **XDimensional Technologies - Nexsure Insurance Platform**

- XDimensional Technologies, Inc. (XDTI), founded in 2000, is a privately held company that
  develops and markets insurance management, processing, and distribution solutions that
  connect agents, brokers, wholesalers, MGAs/MGUs, program administrators, carriers, and
  policyholders. Delivered through the Nexsure Insurance Management Platform, XDTI reports
  that solutions are scalable, secure, and cloud-based. XDTI is headquartered in Brea, CA and
  employs 51 people. Its annual revenue is in the range of \$10M-\$20M.
- Nexsure Insurance Platform (Nexsure) is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, and billing components.
- It currently has four North American insurer clients live on the suite, all of which are smaller and midsize companies (under \$1B) using the solution to support commercial lines with some personal.
- The solution is browser-based for all user interface functions. It is written in a mix of JavaScript, .NET (C#/VB.NET), and SQL language.
- Configuration for insurance products, screens, workflows, rules, integration to third-party service calls, and document authoring is not available; changes are done by the vendor.
- Implementation is available through an implementation partner. The company deploys the
  suite hosted at a private data center. The company offers a SaaS delivery model that
  includes hosting, license, maintenance and support, ongoing access to the latest version, and
  implementation of upgrades.
- The company reports that the average time to initial go-live is 90 days or less. The average cost of implementation is \$100K-\$500K.

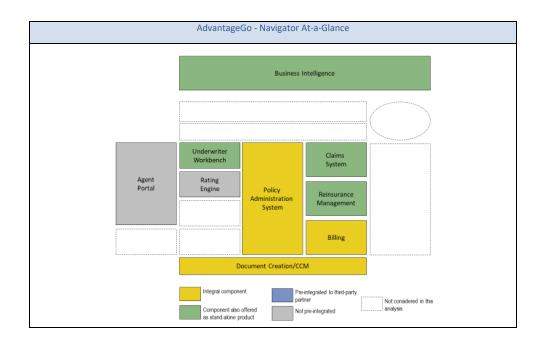


# **FULL SOLUTION PROFILES**

# **AdvantageGo - Navigator**

#### **Executive Summary**

- AdvantageGo has been creating commercial P/C and specialty market insurance software for more than 25 years. The company asserts that it mixes its core solutions with its InsureTech experience to help insurers and reinsurers around the world with traditional and digital solutions as well as with Agile and microservices. AdvantageGo is part of Coforge (NSE: COFORGE), a global IT solutions organization focused on helping businesses design innovative digital operating models. AdvantageGo is headquartered in London, UK; it has 420 direct employees with access to the 1,800 people on the Coforge insurance sector team. The company's annual revenue is between \$500M-\$1B.
- Navigator is a suite of solutions that includes core policy features, underwriter workbench, document creation, reinsurance, business intelligence, billing, and claims components.
- There are currently two live US/Canadian insurer clients using the suite to support commercial lines.
- Publicly announced clients include Canopius, UnipolRe, and Coverys.
- The solution has a browser-based interface for users. It is written in .NET (C#/VB.NET).
- Configuration for insurance products and document authoring is via tools for BAs and non-IT staff. Configuration for screens, workflows, and rules is via tools for IT analysts.
   Configuration for integration to third-party service calls is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's resources or a partner. AdvantageGo
  deploys Navigator on-prem, hosted at a private data center, and hosted on MS Azure. The
  company offers a SaaS delivery model that includes hosting, license, maintenance and
  support, ongoing access to the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is 90 days or less and that the average implementation cost is \$1M-\$2M.



#### **Lines of Business Supported**

Personal auto:	Not currently supported
Homeowners:	Not currently supported
Personal umbrella:	Not currently supported
Dwelling fire:	Not currently supported
Boatowners:	Not currently supported
Personal package:	Not currently supported
Commercial property:	Live clients offering this product in one US state
General liability:	Live clients offering this product in one US state
BOP:	Live clients offering this product in one US state
Commercial crime:	Live clients offering this product in one US state
Commercial auto:	Live clients offering this product in one US state
E&O/D&O:	Live clients offering this product in one US state
Inland marine:	Live clients offering this product in one US state
Professional liability (including medical malpractice):	Live clients offering this product in one US state
Commercial package:	Live clients offering this product in one US state
Specialty:	Live clients offering this product in one US state
Workers' comp:	Not currently supported
Surety:	Live clients offering this product in one US state
Other personal lines:	Not currently supported
Other commercial lines:	Not currently supported

#### **Client Base**

Globally, AdvantageGo has four clients live on Navigator, all of which are insurer clients (i.e., not MGAs, self-insureds). Two of these insurer clients are live in North America. AdvantageGo's clients are a mix of smaller (under \$1B) and larger (over \$1B) companies using the solution to support commercial lines.

Publicly announced clients include Canopius, UnipolRe, and Coverys.

#### **Key Functions and Differentiators**

AdvantageGo cites the key functions of Navigator as:

- Workflow-driven pre- and post-bind administration, including submission and quote processing
- Policy administration for direct and assumed business in the same instance
- · Claims administration and processing
- Ceded reinsurance calculations and processing
- Integration to the Advantage Platform microservices

The company cites as its key differentiators its proactive notifications (based on business rules) that are delivered into a central business and operations work tray; automation through business rules and workflow tasks; smart insights based on contextual insurance information; integration to a suite of relevant, cloud-hosted insurance business microservices; and highly configurable insurance products, workflow, and business rules for all commercial lines of business.

#### **Solution Architecture and History**

Navigator launched in 2014. The latest release was in December 2018. AdvantageGo reports that 40% of the solution's customers are on the latest version, while 60% are on an older version. No customers have been through an upgrade. The solution supports Microsoft SQL Server databases and Windows platforms. The solution is written in .NET (C#/VB.NET).

#### **APIs and Integration**

AdvantageGo reports that the solution provides a comprehensive set of policy administration APIs that can be used for accessing/updating information and for system-to-system integration.

#### **Configurability and User Interface**

Navigator has a browser-based interface for users.

Configuration for insurance products and document authoring is via tools for BAs and non-IT staff. Configuration for screens, workflows, and rules is via tools for IT analysts. Configuration for integration to third-party service calls is available via developer tools, XML manipulation, or a scripting language.

#### **Deployment Options**

AdvantageGo deploys Navigator on-prem, hosted at a private data center, and hosted on MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades. The hosted solution is a single-tenant app server and database.

#### **Average Implementation Length and Cost**

AdvantageGo implements the solution through the company's own resources or a partner. The company reports that Navigator can be ready for initial go-live in 90 days or less and fully rolled out in an additional 180 days or less. The company reports that the average implementation cost is \$1M-\$2M.

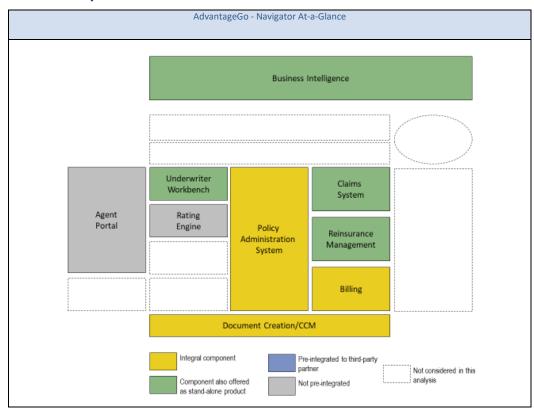
#### Support

Of the 420 direct employees on the AdvantageGo team, there are approximately 220 on the product design and engineering team, 100 on the implementation (not counting partnerships) team, and 100 on the support team. Support for the solution is provided from the UK and India. AdvantageGo offers customer engagement activities that include a customer advisory committee, a user event, and training seminars.

#### **Systems Integrator and Other Partners**

Publicly announced technology partnerships include UNIT4 Financials, Kofax KCCM, Pyramid Analytics, and multiple data partners powering the company's microservices platform.

#### **Functionality**



#### **Policy Administration Functions**

The solution includes policy issue, premium accounting, out-of-sequence endorsement, roster management, bordereaux import, and forms management out of the box with no configuration necessary. Manuscripted policies are available with configuration via simple tools targeted for IT analysts or BAs.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

#### **Rating Functions**

Rating functions are not pre-integrated as part of the suite.

#### **Underwriter Workbench Functions**

Underwriting is integral to the suite and is also marketed as a stand-alone solution.

Uploading/importing the submission data from a structured data feed is available out of the box. Uploading/importing the submission information from documents (OCR-like functionality) is available via out-of-the-box integration to a third-party system or service.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, cancellation transactions, and underwriting multiple submissions as one work portfolio are all standard.

Allowing individual quotes for different lines to be combined into a single proposal; capturing underwriting analysis; capturing underwriter loss analysis; underwriter checklists that can validate information and process completeness; and providing a single current and historical view of an insured's account across the enterprise, lines of business, and policy systems are standard. Submission rating as well as pricing analysis and scheduled rating information are available via out-of-the-box integration to a third-party system or service.

Document creation (proposals, applications, correspondence) and document storage are standard functions.

A rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); a rules engine that interfaces to conditionally order specific data; inline reports/dashboards on tasks/work/work status; inline reports/dashboards to support underwriting analysis; and displaying aggregate risk accumulations for the existing book at granular location level (i.e., geo-mashup of the existing book and proposed risk) are standard.

IM collaboration with other underwriters and screen sharing with other underwriters are standard functions. Agent-facing capabilities are available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include proposal coauthoring with other underwriters.

Support for variable binding/approval authority by role and support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) are standard.

Preconfigured interfaces with policy admin systems, third-party data services, and external predictive scoring models; preconfigured integration with business intelligence environments; and natively calculated predictive scores are standard. Preconfigured interfaces with agent portals are available with configuration via developer tools, XML manipulation, or a scripting language.

#### **Document Functions**

Document functions are integral to the suite via an OEM arrangement with a third party. They are not marketed as a stand-alone solution.

Document functions support mass-produced documents, e.g., statements. Pre-packaged, pre-built forms, libraries, and templates for ACORD are included out of the box. AdvantageGo notes that this is only active in the E&S market and is not for state-admitted lines.

The primary authoring environment is MS Word or a Kofax third-party tool. Content and business rules are managed by business analysts; schema mapping and data sources are maintained by technical resources.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is available with configuration via tools for IT analysts or BAs.

Clients primarily use external tools for document authoring and content management workflow, but they have the option to use built-in tools. A content repository, content management tools, and archival capabilities for all documents generated are standard functions. The solution supports ACORD XML schemas out of the box.

### **Agent Portal Functions**

An agent portal is not pre-integrated as part of the suite.

#### **Reinsurance Functions**

Navigator is integral to the suite and is also marketed as a stand-alone solution.

Ceded reinsurance management functions like the manual entry and tracking of cessions, reserves, and limits are standard. Automated notification if a reserve reaches a specific amount or treaties approach set limits and automated identification/calculation of accounts with applicable reinsurance are available with configuration via tools for IT analysts or BAs.

Assumed reinsurance management functions like the manual entry and tracking of assumed reinsurance contracts and retrocession reinsurance management are standard. Automated assumed reinsurance calculations based on reinsured data feeds/connections are available with configuration via developer tools, XML manipulation, or a scripting language.

Treaty management, facultative management, proportional support, non-proportional/excess of loss, multiple basis types (risks attaching, losses occurring, and claims made), and retroactive processing of late placements or midterm contract changes are standard. Configuration of contract rules, formulas, and types is available with configuration via tools for IT analysts or BAs.

End-user interfaces for manual entry of contracts, for manual flagging of premiums and claims subject to reinsurance, and for review and approval of assumed policies as part of facultative contracts are available out of the box.

Real-time data intake from core systems (PAS, claims) via API or another mechanism and integration between other insurer/reinsurer systems are standard functions.

Batch file import/export for integration to other systems and real-time integration to an underwriting system (e.g., to display limits/reserves) are available with configuration via developer tools, XML manipulation, or a scripting language.

A standard library of canned reports; ad hoc reporting; and integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc. are standard functions. The solution does not currently include statutory and regulatory reporting, automated Schedule F reporting, or automated bordereau reporting.

Viewing the full history and status of claims and claim recovery is available out of the box. Automated recoverable claims identification is available with configuration via developer tools, XML manipulation, or a scripting language.

Tracking reinsurance payables and receivables, entity management (CRM), document management and storage of the actual contracts, multi-currency support, multi-language support, and an audit trail for all transactions are standard.

## **Business Intelligence Functions**

Acumen is part of the suite and is also sold as a stand-alone business intelligence component.

AdvantageGo reports that its data warehouse and analytics solution provides analysis across the complete insurance and reinsurance life cycle, turning structured and unstructured data into visualizations and insights. The solution provides real-time, context-aware analysis to help customers enhance decision support. Navigator integrates with the Acumen Data Warehouse Product to provide analytics from OLAP cubes.

The solution includes tools to support data governance, dictionaries, quality, and validation; a presentation/reporting component; standard, predefined reports and predefined insurance dashboards; and an ad hoc reporting tool. The solution also includes some tools/features for data mining and analytics as a secondary part of the offering.

The solution supports data movement via batch ETL.

## **Billing Functions**

Billing functionality is integral to the suite via an OEM arrangement with Unit4 Financials. It is not marketed as a stand-alone solution. Payment and billing plan configurability is available with configuration via tools for IT analysts and BAs. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Account or list bill:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Third-party (i.e., mortgagee) bill:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Split or multi-payer bill:	Available with configuration using simple tools targeted
	for IT analysts or BAs

Flexible and configurable payment plans:	Available with configuration using simple tools targeted for IT analysts or BAs
Support for flexible payment types (e.g.,	Available with configuration using simple tools targeted
payment card, check, EFT, payroll deduction):	for IT analysts or BAs
Automated rules for payment application	Available with configuration using simple tools targeted
and disbursements:	for IT analysts or BAs
Real-time account and payment calculation,	Available with configuration using simple tools targeted
scheduling, recalculation, and rescheduling:	for IT analysts or BAs
Commission calculation and payment:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Collections activities and interfaces:	Available with configuration using simple tools targeted for IT analysts or BAs
Equity billing support:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Automated workflow and task	Available with configuration using simple tools targeted
management:	for IT analysts or BAs
Electronic bill presentment:	Available with configuration using simple tools targeted for IT analysts or BAs
Agent portal:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Consumer portal:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Online payment:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Out-of-the-box integration with	No
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Billing dashboarding/reporting:	Available with configuration using simple tools targeted for IT analysts or BAs
Workers' compensation monthly self-	Not available
reporting:	
Pay-as-you-report for workers' comp:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Invoice and correspondence:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Check generation/production:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Billing for non-premium receivables (such	Available with configuration using simple tools targeted
as claims deductibles paid):	for IT analysts or BAs
Payment of non-refund payables (such as	Available with configuration using simple tools targeted
policy dividends or mutual dividends):	for IT analysts or BAs
Multi-currency support in a single instance	No
of the application:	

#### **Claims Functions**

Navigator is part of the suite and is also sold as a stand-alone claims component.

### **Adjudication**

The solution does not currently include adjudication functionality.

#### Catastrophe

Catastrophe definition, automatic identification of catastrophe claims, and attaching multiple LOBs and causes of loss to a single catastrophe are all standard functions. Mapping tools are available with configuration via for IT analysts or BAs.

#### **Disbursements**

OFAC checking is a standard function. Calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), and combining multiple pending payments for a single client into one disbursement are available with configuration via tools for IT analysts or BAs. The solution does not currently include check processing, calculating and scheduling recurring payments, or handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support).

#### **Documents**

Document rendering, a content repository, content management tools, and multi-channel delivery and output of documents (e.g., PDF, email, web, print) are available out of the box. Image and media management is available with configuration via tools for IT analysts or BAs. The solution does not currently include a correspondence or forms library or state-specific claims reporting templates.

#### **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; handling of FROI/SROI EDI reporting; claimant contact management data capture; and checking for duplicate claims are standard functions. Claim characteristics scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claims) is available with configuration via tools for IT analysts or BAs. The solution does not currently include mobile and smart device input; scripting for claims intake with reflexive questioning; custom question sets to prompt additional, mandatory questions depending given answers; or integration with external vendors and services (e.g., car rental companies, car/equipment repair shops).

#### Fraud

Configurable business rules and tasks (specific to fraud and special investigations) are available with configuration via tools for IT analysts or BAs. The solution does not currently include the provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims.

### Litigation

The solution does not currently include litigation management functionality.

#### **Multi-Channel**

An agent portal with self-service is available with configuration via tools for IT analysts or BAs. The solution does not currently include e-signature, a policyholder portal with self-service, or call center integration for FNOL/claims status check via telephony.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location, etc.), assignment to reinsurance treaties, and assignment to facultative arrangements are available out of the box.

### Reporting

Standard reporting of claims performance monitoring, including claims handling, and high-risk indicators, e.g., fatality, large losses, fraud; standard reporting of configurable metrics for claims reporting; ad hoc reports; and dashboards are standard. Reporting that includes jurisdiction-specific reports and forms is available with configuration via tools for IT analysts or BAs. The solution does not currently include electronic reporting or automated state filings.

### Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; subrogation billing and the production of correct GL entries; granular tracking of reserves and payments; automatic reserve calculations using business rules and risk characteristics; and direct, case, average, factor, and expense reserve types are all standard functions. Automatic subrogation identification is available with configuration via tools for IT analysts or BAs. The solution does not currently include jurisdictional wage and rate calculations integrated for workers' comp.

### **Vendor Management**

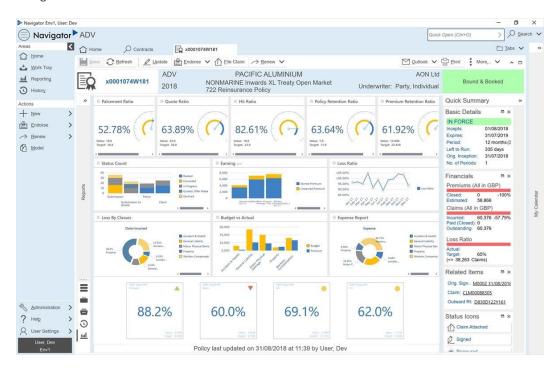
The solution does not currently include vendor management functionality.

### Workflow

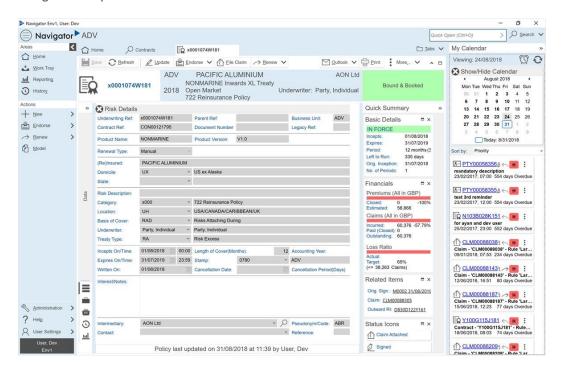
Automated workflow/task generation; OCR-triggered workflow; overriding automated processes and triggering workflow processes manually; automatic work assignment based on configurable rules; generating notes, diaries, and reminders; inclusion of external documents (e.g., letters, pictures) in file notes; assigning multiple adjusters to a single claim; compliance with the Document Repository Interface (DRI) standards; processing claim workflow trigger (CWT) files at insurer-defined interval; and full integration with electronic court filings (ECF2) are standard functions

## **Screenshots**

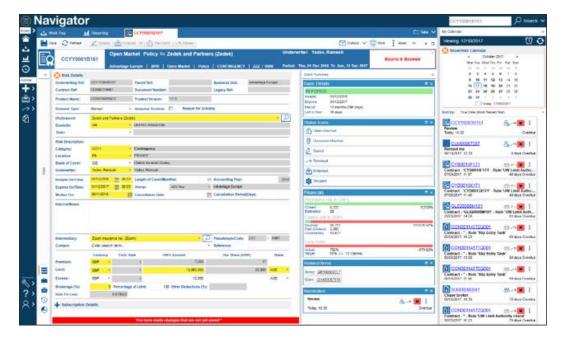
**Navigator Dashboard** 



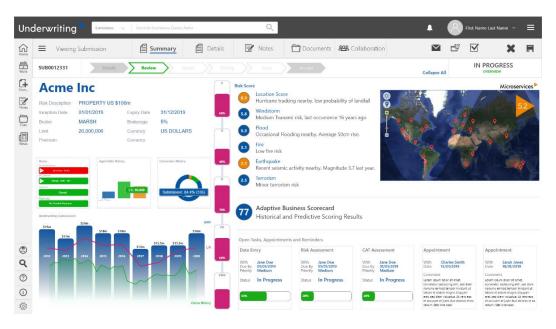
### Navigator Policy Screen



## **Policy Input**



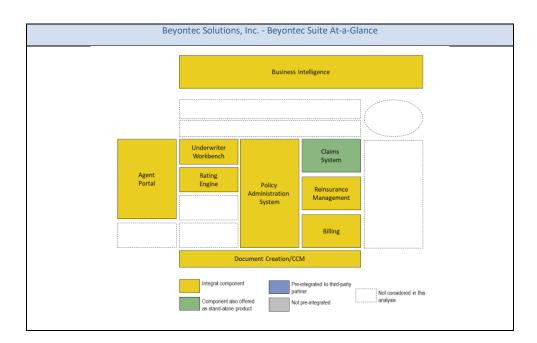
## **Underwriting Scoring Submission**



# **Beyontec Solutions, Inc. - Beyontec Suite**

## **Executive Summary**

- Beyontec Solutions, Inc. is a privately held company headquartered in Irving, TX. The company employs 340 people and reports annual revenue in the range of \$10M-\$20M.
- Beyontec Suite is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, billing, claims, and business intelligence components.
- It currently has 14 live US/Canadian insurer clients using the suite, most of which are smaller companies (under \$1B) using the solution to support personal lines with some commercial.
- Publicly announced clients include Georgia Underwriting Authority, New Mexico Property Insurance Program, Oregon FAIR Plan, Michigan Basic Property Insurance Association, and Clements Worldwide.
- The solution is browser-based for all user interface functions. It is written mainly in Java with some PL/SQL.
- Configuration for insurance products and document authoring is via tools for BAs and non-IT staff. Workflow and rules are configurable via tools for IT analysts. Configuration for screens and integration to third-party service calls is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's own resources. Beyontec offers the
  solution on-prem and hosted on Liquid Web. The company offers a SaaS delivery model that
  includes hosting, license, maintenance and support, ongoing access to the latest version, and
  implementation of the upgrades.
- The company reports that the average time to initial go-live is 180 days or less and that the average implementation cost is \$500K-\$1M.



## **Lines of Business Supported**

Personal auto:	Live clients offering this product in 2-9 US states
Homeowners:	Live clients offering this product in 10-49 US states
Personal umbrella:	Solution is designed to support, but no clients live or implementing
Dwelling fire:	Live clients offering this product in 10-49 US states
Boatowners:	Solution is designed to support, but no clients live or implementing
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Live clients offering this product in 10-49 US states
General liability:	Live clients offering this product in all 50 US states
BOP:	Live clients offering this product in all 50 US states
Commercial crime:	Live clients offering this product in all 50 US states
Commercial auto:	Live clients offering this product in all 50 US states
E&O/D&O:	Live clients offering this product in 2-9 US states
Inland marine:	Live clients offering this product in 2-9 US states
Professional liability (including medical malpractice):	Live clients offering this product in one US state
Commercial package:	Live clients offering this product in all 50 US states
Specialty:	Live clients offering this product in all 50 US states
Workers' comp:	Live clients offering this product in 10-49 US states
Surety:	Live clients offering this product in 2-9 US states
Other personal lines:	Solution is designed to support, but no clients live or implementing
Other commercial lines†:	Live clients offering this product in 10-49 US states

<sup>&</sup>lt;sup>†</sup> Other commercial lines include fiduciary, GAP, CPI, RLP, SLI, and LDW.

## **Client Base**

Globally, Beyontec Solutions, Inc. has 44 clients live on Beyontec Suite, 39 of which are insurer clients (i.e., not MGAs, self-insureds). There are 14 insurer clients live in the US and Canada, most of which are smaller companies (under \$1B) using the solution to support personal lines with some commercial.

Publicly announced clients include Georgia Underwriting Authority, New Mexico Property Insurance Program, Oregon FAIR Plan, Michigan Basic Property Insurance Association, and Clements Worldwide.

## **Key Functions and Differentiators**

Beyontec Solutions, Inc. cites the key functions of Beyontec Suite as:

- Integrated modules that support real-time transaction processing for rating and quoting, policy issuance, billing, portal functionality, etc.
- Preconfigured agent, insured, and third-party portals to enable users to control what each constituent can see and do in the solution
- · Workflow- or task-driven suite with role- and task-based, configurable user workbasket
- Dynamic notes and automatic diary system for user communication and, with the business rules engine, automatic file documentation and user/system follow-ups
- Single-screen customer service features for payments, billing inquiries, policy/claims history review, and endorsements

The company cites as its key differentiators an end-to-end solution for P/C entities; customer independence via the configuration toolset, which enables customer control of functions such as rate changes, product changes, user group authorities, etc.; its ability to reflect clients' chosen business practices; its interactive delivery process that includes show-and-tell demonstrations throughout the project implementation life cycle; as well as multiple, flexible pricing methods based on customer objectives.

## **Solution Architecture and History**

Beyontec Suite launched in 2010. The latest release was in 2019. Beyontec Solutions, Inc. reports that 70% of the solution's customers are on the latest version, while 30% are on a version older than three years. None have been through one upgrade.

The solution supports Oracle databases as well as UNIX/Linux and Windows platforms. Beyontec Suite is written mainly in Java with some PL/SQL.

### **APIs and Integration**

The solution provides REST and SOAP APIs.

## **Configurability and User Interface**

Beyontec Suite is browser-based for all user interface functions.

Configuration for insurance products and document authoring is via tools for BAs and non-IT staff. Workflow and rules are configurable via tools for IT analysts. Configuration for screens and integration to third-party services is via developer tools, XML manipulation, or a scripting language.

## **Deployment Options**

Beyontec deploys Beyontec Suite on-prem and hosted on Liquid Web. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades. The hosted solution is a single-tenant app server and database.

## **Average Implementation Length and Cost**

Implementation is available through the company's own resources. It reports that Beyontec Suite can be ready for initial go-live in 180 days or less and fully rolled out in an additional 180 days or less. The company reports that the average implementation cost is \$500K-\$1M.

## **Support**

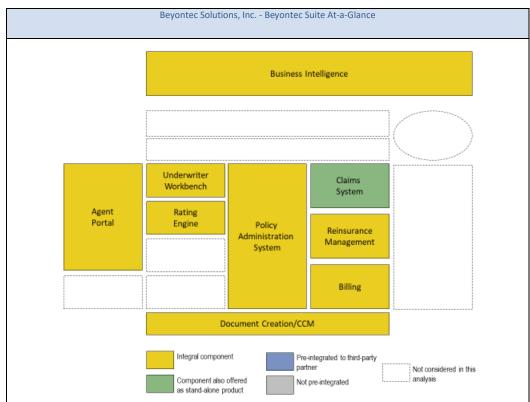
Of the 340 people employed at Beyontec Solutions, there are between ten and 50 on each of the product design and engineering, implementation (not counting partnerships), and support teams.

Beyontec has employees at various locations across the US including its home office in Irving, TX; India, including its delivery center in Chennai; the United Arab Emirates; and Kenya. Beyontec Solutions offers customer engagement activities such as online training, a user event, and training seminars.

## **Systems Integrator and Other Partners**

Publicly announced partnerships include Oracle (database), Quadbase (reports using ERES product), Windward (document creation/management), and Liquid Web (hosting partner).

## **Functionality**



#### **Policy Administration Functions**

The solution includes out-of-sequence endorsements out of the box. Policy issue, premium accounting, bordereaux import, forms management, and manuscripted policies are available with configuration via tools for IT analysts or BAs.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

### **Rating Functions**

A rating engine is integral to the suite and is not marketed as a stand-alone solution.

Out-of-sequence endorsements are standard. Quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are available with configuration via tools for IT analysts or BAs.

Compliance and change control functions like versioning and update management, change control functions, and auditability of rate versioning are standard. An applications and forms library with standard and customizable applications and forms is available with configuration via tools for IT analysts or BAs.

Download to agency management systems is available with configuration via tools for IT analysts or BAs. Pre-integration to third-party data providers is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include ISO rates/rules support, NCCI/Bureau of Workers' Comp rates/rules support, ISO-formatted statistical data, or ISO ERC integration.

Multi-carrier comparison and setting carrier-specific defaults are available with configuration via tools for IT analysts or BAs. The solution does not currently include product design and development tools.

Rule definition and management functions like maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, and the import/export of rating tables to/from spreadsheets (e.g., Excel) are all standard functions. Rating and rule definition and management (e.g., automatic driver assignment) and date management capabilities are available with configuration via tools for IT analysts or BAs.

Displacement testing (i.e., the ability to run existing book of business through proposed rate/product changes to determine impact) and testing, modeling, and product analysis are available with configuration via tools for IT analysts or BAs.

### **Underwriter Workbench Functions**

Underwriting functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing the submission data from a structured data feed is available with configuration via tools for IT analysts or BAs. The solution does not currently include uploading/importing the submission information from documents (OCR-like functionality), but it could be available with a system enhancement.

Supporting new business transactions/underwriting and supporting policy change transactions/underwriting are standard functions. Support for renewal transactions/underwriting, non-renewal transaction, cancellation transaction, and the underwriting of multiple submissions as one work portfolio is available with configuration via tools for IT analysts or BAs.

Providing a current and historical view of insured accounts across the enterprise, lines of business, and policy systems is a standard function. Allowing individual quotes for different lines to combined into a single proposal, capturing underwriting analysis, capturing an underwriter's loss analysis, underwriter checklists that can validate information completeness and process completeness, submission rating, and pricing analysis and scheduled rating information are available with configuration via tools for IT analysts or BAs.

Document storage is a standard function. Document creation (proposals, applications, correspondence) is available with configuration via tools for IT analysts or BAs.

A rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); a rules engine that interfaces to conditionally order specific data; inline reports/dashboards on tasks/work/work status; inline reports/dashboards to support underwriting analysis; and displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) are available with configuration via tools for IT analysts or BAs.

The solution does not currently include IM collaboration with other underwriters, but it could be available with a system enhancement. Proposal co-authoring with other underwriters is available with configuration via tools for IT analysts or BAs.

The solution does not currently include screen sharing with other underwriters, but it could be available with a system enhancement. Agent-facing capabilities are available out of the box. Support for variable binding/approval authority by role is available with configuration via tools for IT analysts or BAs. Support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) is a standard function.

Preconfigured interfaces with policy admin systems, agent portals, third-party data services, and external predictive scoring models are available with configuration via developer tools, XML manipulation, or a scripting language. Preconfigured integration with business intelligence environments is available with configuration via tools for IT analysts or BAs. The solution does not currently include natively calculated predictive scores.

#### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents, e.g., statements (the most common use case) and ad hoc documents, e.g., correspondence and manuscripted policies (the less common use case).

The solution does not currently include ISO/ACORD forms. The primary authoring environment is MS Word. Content is designed to be managed by the average business user, with business rules, schema mapping, and data sources maintained by business analysts.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is available out of the box. Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository and content management tools are available with configuration via tools for IT analysts or BAs, and archival capabilities for all generated documents are standard. The solution supports industry-standard schemas like ACORD XML and ebXML out of the box.

### **Agent Portal Functions**

Agent portal functions are integral to the suite and are not marketed as a stand-alone solution.

P/C portal functionality like policy change entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, account or client view in addition to a policy view, underwriter view and/or tools, agent/underwriter collaboration, and a rating engine are standard.

New business entry/submission, account clearance, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, online payment, renewal quote entry/submission, proposal creation, ACORD application creation, and side-by-side quote comparison are available with configuration via tools for IT analysts or BAs. Integration and pre-fill with data services and agency management system upload are available with configuration via developer tools, XML manipulation, or a scripting language.

Support for e-signature; file attachment support; and scheduling, diary, and calendar functions are standard. Document creation, workflow and task management capabilities, and business intelligence and reporting are available with configuration via tools for IT analysts or BAs. A consumer portal is available with configuration via developer tools, XML manipulation, or a scripting language.

#### **Reinsurance Functions**

Reinsurance is integral to the suite and is not marketed as a stand-alone solution.

Ceded reinsurance management functions like the manual entry and tracking of cessions, reserves, and limits are available out of the box. Automated notification (if a reserve reaches a specific amount or treaties approach set limits) and automated identification/calculation of accounts with applicable reinsurance are available with configuration via tools for IT analysts or BAs.

Assumed reinsurance management functions like the manual entry and tracking of assumed reinsurance contracts, automated assumed reinsurance calculations based on reinsured data feeds/connections, and retrocession reinsurance management are available with configuration via tools for IT analysts or BAs.

Contract management capabilities including treaty management, facultative management, proportional support, and non-proportional/excess of loss are standard functions. Multiple basis types (risks attaching, losses occurring, and claims made); retroactively processing late placements or midterm contract changes; and configuration of contract rules, formulas, and types are available with configuration via tools for IT analysts or BAs.

An end-user interface for manual contract entry and an end-user interface for review and approval of assumed policies as part of facultative contracts are standard functions. An end-user interface for manual flagging of premiums and claims subject to reinsurance is available with configuration via tools for IT analysts or BAs.

Real-time data intake from core systems (PAS, claims) via API or other mechanism and real-time integration to an underwriting system (e.g., to display limits/reserves) are standard functions. Batch file import/export for integration to other systems is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include integration between other insurer/reinsurer systems.

Reporting functions like a standard library of canned reports and ad hoc reporting are available out of the box. Statutory and regulatory reporting; automated Schedule F reporting; automated bordereau reporting; and integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc. are available with configuration using simple tools targeted for IT analysts or BAs.

Claim management capabilities, including automated recoverable claims identification and viewing the full history and status of claims and claim recovery, are standard functions.

Document management and storage of the actual contracts, multi-currency support, and an audit trail for all transactions are standard functions. Tracking reinsurance payables and receivables and multi-language support are available with configuration via tools for IT analysts or BAs. The solution does not currently include entity management (CRM).

## **Business Intelligence Functions**

Beyontec Suite is pre-integrated with Quadbase's Express Report Enterprise Edition as an integrated BI tool. Beyontec reports that all captured fields are available to the tool with further application of functions available.

The solution includes a presentation/reporting component, standard predefined reports and predefined insurance dashboards, and an ad hoc reporting tool. It includes tools to support data governance, dictionaries, quality, and validation as a secondary part of the offering.

The solution supports data movement via batch ETL.

### **Billing Functions**

Billing is integral to the suite and is not marketed as a stand-alone solution. Payment and billing plan configurability is available with configuration via tools for IT analysts or BAs. The table below shows the availability of other billing functions.

B1 (199)	A STATE OF COLUMN CO. AND ADDRESS OF THE COLUMN CO.
Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available with configuration using simple tools targeted for IT analysts or BAs
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	· ·
deduction):	
Automated rules for payment application	Available with configuration using simple tools targeted
and disbursements:	for IT analysts or BAs
Real-time account and payment calculation,	Available with configuration using simple tools targeted
scheduling, recalculation, and rescheduling:	for IT analysts or BAs
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available with configuration using simple tools targeted
management:	for IT analysts or BAs
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Consumer portal:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Online payment:	Available with configuration using developer tools, XML
	manipulation, or a scripting language
Out-of-the-box integration with	No
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Billing dashboarding/reporting:	Available with configuration using simple tools targeted
Madagal company the control of	for IT analysts or BAs
Workers' compensation monthly self-	Not available
reporting	Available with configuration using developer tools VAAL
Pay-as-you-report for workers' comp:	Available with configuration using developer tools, XML
Invoice and correspondence	manipulation, or a scripting language  Available with configuration using simple tools targeted
Invoice and correspondence:	for IT analysts or BAs
Check generation/production:	Available with configuration using simple tools targeted
Check generation/production.	for IT analysts or BAs
Billing for non-premium receivables (such	Available with configuration using simple tools targeted
as claims deductibles paid):	for IT analysts or BAs
Payment of non-refund payables (such as	Available with configuration using simple tools targeted
policy dividends or mutual dividends):	for IT analysts or BAs
Multi-currency support in a single instance	Yes
of the application:	

#### **Claims Functions**

Beyontec Suite Claims is part of the suite and is also sold as a stand-alone claims component.

#### **Adjudication**

Medical case management, automated coverage verification, and deductible tracking are standard functions. Injury detail maintenance (coding) and aggregate tracking (erosion of policy limits) are available with configuration via tools for IT analysts or BAs. The solution does not currently include disability management.

#### Catastrophe

Mapping tools are standard. Catastrophe definition, automatic identification of catastrophe claims, and attaching multiple LOBs and multiple causes of loss to a single catastrophe are available with configuration via tools for IT analysts or BAs.

#### **Disbursements**

Calculating and scheduling recurring payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, and OFAC checking are standard. Check processing, calculating partial or one-off payments, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) are available with configuration via tools for IT analysts or BAs.

#### **Documents**

Image and media management, document rendering, a content repository and content management tools, and multi-channel delivery and output of documents (including PDF, email, web, and print) are standard functions. A correspondence or forms library and state-specific claims reporting templates are available with configuration via tools for IT analysts or BAs.

### **FNOL**

Checking for duplicate claims comes standard. Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; handling of FROI/SROI EDI reporting; scripting for claims intake with reflexive questioning; custom question sets to prompt additional mandatory questions depending on given answers (branch scripting); claim characteristics scoring (to calculate alerts, trigger workflow, assign a claims handler, or otherwise segment the claim); and claimant contact management data capture are available with configuration via tools for IT analysts or BAs. Mobile and smart device input as well as integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) are available with configuration via developer tools, XML manipulation, or a scripting language.

#### **Fraud**

Configurable business rules and tasks (specific to fraud and special investigations) and the provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims are standard.

### Litigation

Litigation process tracking, including negotiation details and litigation costs, is a standard function. Creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management is available with configuration via tools for IT analysts or BAs.

#### **Multi-Channel**

E-signature is standard. An agent portal with self-service and a policyholder portal with self-service are available with configuration via tools for IT analysts or BAs. Call center integration for FNOL via telephony is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include call center integration for claims status check via telephony.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, and assignment to facultative arrangements are standard functions.

#### Reporting

Standard reporting of configurable metrics for claims reporting is available out of the box. Standard reporting of claims performance monitoring, including claims handling, and high-risk indicators such as fatality, large losses, and fraud; ad hoc reports; dashboards; and reporting that includes jurisdiction-specific reports and forms are available with configuration via tools for IT analysts or BAs. Electronic reporting or automated state filings are available with configuration via developer tools, XML manipulation, or a scripting language.

#### Reserves, Recoveries, Subrogation

Granular tracking of reserves and payments and automatic reserve calculations using business rules and risk characteristics are standard. Creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; subrogation billing and the production of correct GL entries; and direct, case, average, factor, and expense reserve types are available with configuration via tools for IT analysts or BAs. Jurisdictional wage and rate calculations integrated for workers' comp are available via out-of-the-box integration to a third-party system or service.

#### **Vendor Management**

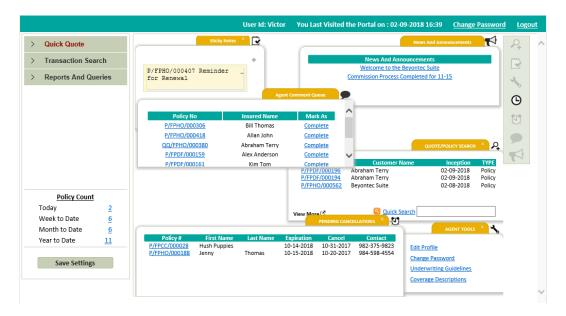
Vendor management functions and processing required forms (including 1099s) are standard.

#### Workflow

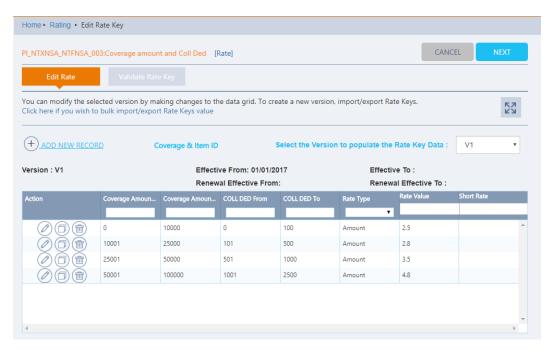
Automated workflow/task generation; automatic work assignment based on configurable rules; generating notes, diaries, and reminders; and assigning multiple adjusters to a single claim are all standard functions. Overriding automated processes and manually triggering workflow processes, the inclusion of external documents (letters and pictures) in file notes, compliance with Document Repository Interface (DRI) standards, and processing claim workflow trigger (CWT) files at insurer-defined intervals are available with configuration via tools for IT analysts or BAs. The solution does not currently include OCR-triggered workflow or full integration with electronic court filings (ECF2).

## **Screenshots**

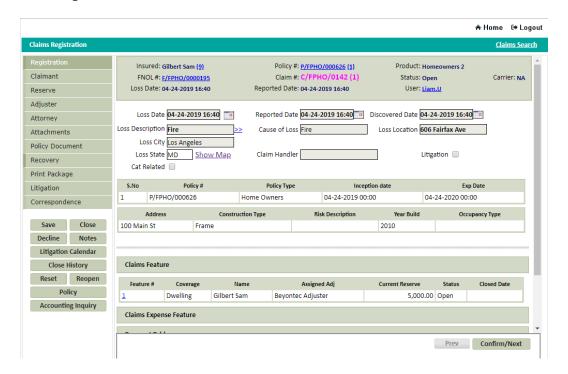
Agent Workbench



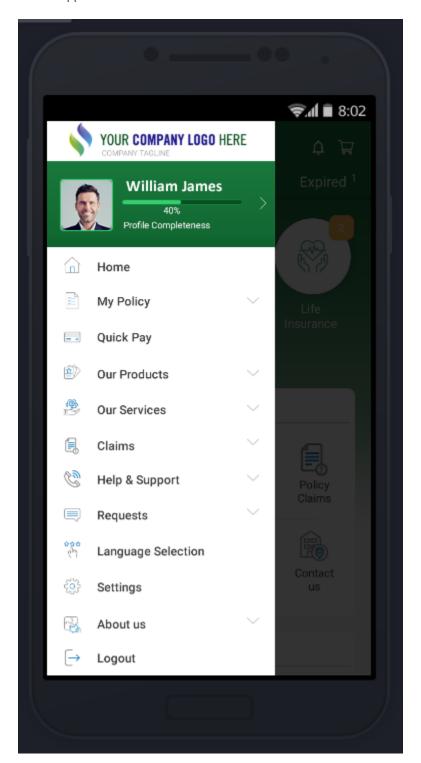
### Rate Key Screen



### Claims Registration Screen



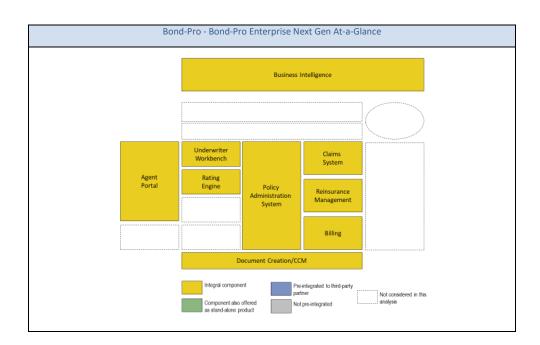
## **Mobile Application**



# **Bond-Pro - Enterprise Next Gen**

## **Executive Summary**

- Bond-Pro is a private surety technology software and services company headquartered in Tampa, FL. It employs 80 people. As a privately held company, its annual revenue is undisclosed.
- Bond-Pro Enterprise Next Gen is a suite of solutions that includes core surety policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has 25 live US/Canadian insurer clients using the suite, most of which are larger companies (over \$1B) using the solution to support surety.
- Publicly announced clients include Chubb, Tokio Marine, IAT, Swiss Re, and Markel.
- The solution is browser-based for all user interface functions. It is written in .NET (C#) and Angular.
- Configuration for insurance products, screens, workflows, rules, and document authoring is
  via "no-code" tools for BAs and non-IT staff. Integration to third-party service calls is
  configured via code.
- Implementation is available through the company's own resources or a partner. Bond-Pro
  offers on-premise, hosted at a private data center, and hosted on MS Azure deployment
  options. The company offers a SaaS delivery model that includes hosting, license,
  maintenance and support, ongoing access to the latest version, and implementation of the
  upgrades.
- The company reports that the average time to initial go-live is 12 months or less; it notes
  that the average implementation cost varies depending on the size of the surety book and
  other factors.



## **Lines of Business Supported**

Personal auto:	Clients currently in implementation for this line/product
Homeowners:	Not currently supported
Personal umbrella:	Not currently supported
Dwelling fire:	Not currently supported
Boatowners:	Not currently supported
Personal package:	Not currently supported
Commercial property:	Not currently supported
General liability:	Not currently supported
BOP:	Not currently supported
Commercial crime:	Not currently supported
Commercial auto:	Not currently supported
E&O/D&O:	Not currently supported
Inland marine:	Not currently supported
Professional liability (including medical malpractice):	Not currently supported
Commercial package:	Not currently supported
Specialty:	Not currently supported
Workers' comp:	Not currently supported
Surety:	Live clients offering this product in all 50 US states
Other personal lines:	Not currently supported
Other commercial lines†:	Clients currently in implementation for this line/product

<sup>†</sup>Other commercial lines include trade credit via tight integration to Schumann CAM.

### **Client Base**

Globally, there are 25 clients live on Bond-Pro Enterprise Next Gen Carrier Edition, all of which are insurer clients (i.e., not MGAs, self-insureds) live in the US and Canada. Most are larger companies (over \$1B) using the solution to support surety.

Publicly announced clients include Chubb, Tokio Marine, IAT, Swiss Re, and Markel.

## **Key Functions and Differentiators**

Bond-Pro cites the key functions of Bond-Pro Enterprise Next Gen as:

- Surety account management and underwriting
- Surety bond life-cycle management and issuance
- Surety claims management
- Surety workbench
- Surety agency and principal portals

The company cites as its key differentiators its no-code system that includes highly configurable business rules and workflow automation; its B2B Surety Hub that seamlessly connects surety insurers and brokers, enables real-time collaboration, and eliminates repetitive data entry; its more than 10,000 continuously updated surety forms and a drag-and-drop forms designer tool; its surety digital signature and e-filing capabilities; and its proven surety implementation methodology with a large team of surety experts and network of SI partners.

## **Solution Architecture and History**

Bond-Pro launched in 1991 and its software platform was re-architected in 2015. The latest major release was in 2021.

Bond-Pro reports that 80% of the solution's insurer customers are on the latest version, with 20% on a version less than three years old. 90% of all clients have been through at least one upgrade.

The solution supports MS SQL Server and SQL Azure databases along with Windows platforms. The solution is written in .NET (C#) and Angular.

## **APIs and Integration**

The solution provides REST and SOAP APIs.

## **Configurability and User Interface**

Bond-Pro Enterprise Next Gen is browser-based for all user interface functions.

Configuration for insurance products, screens, workflows, rules, and document authoring is via "no-code" tools for BAs and non-IT staff. Configuration for integration to third-party service calls is via developer tools, XML manipulation, or a scripting language.

## **Deployment Options**

The solution can be deployed on-prem, hosted at a private data center, or hosted on MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades. The solution is a multi-tenant app server and database with single-tenant options available.

Bond-Pro asserts that in order to provide the highest degree of deployment flexibility, uptime, and information security, all tenants on the SaaS solution are isolated (i.e., each client has its own segregated application instance, database, and file storage).

## Average Implementation Length and Cost

Bond-Pro implements the solution through its own company's resources or partners. It reports that Bond-Pro Enterprise Next Gen can be ready for initial go-live in 12 months or less and fully rolled out in an additional 180 days or less. The company reports that the average implementation cost varies depending on the size of the surety book, scope of the implementation, and other factors.

## Support

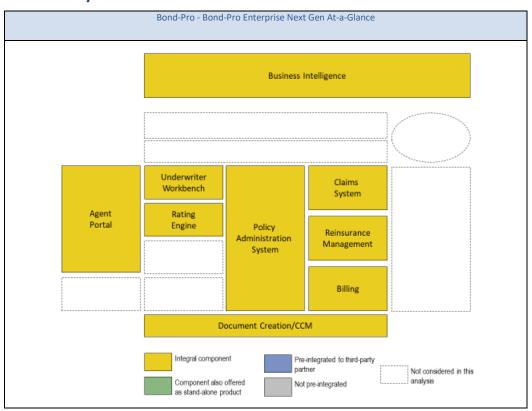
Of the 80 people employed at Bond-Pro, there are between ten and 50 on each of the product design and engineering, implementation (not counting partnerships), and support teams.

Support is provided out of the United States. Bond-Pro offers customer engagement activities such as an online community, online training, a customer advisory committee, and training seminars.

## **Systems Integrator and Other Partners**

Publicly announced technology partnerships include Duck Creek, Insurity, Schumann, and Surety2000. Publicly announced SI partnerships include Accenture, Birlasoft, Capgemini, Coforge, Cognizant, and TCS.

## **Functionality**



#### **Policy Administration Functions**

The solution includes out-of-sequence endorsement, forms management, and manuscripted policies out of the box. Policy issue, premium accounting, and bordereaux import are available with configuration via tools for IT analysts or BAs.

The following are independent objects in the solution's data model: policy (bond), product, policyholder (principal), individual, distributor, and insured (account). Bond-Pro notes that in addition, there are surety-specific objects including obligee, form, account, financial statement, and work in progress.

### **Rating Functions**

A rating engine is integral to the suite and is not marketed as a stand-alone solution.

Out-of-sequence endorsements and rating multiple coverage/quote alternatives are standard functions. Quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; and multi-line, multi-state, and multi-location rating on a single policy are available with configuration using simple tools targeted for IT analysts or BAs.

Compliance and change control functions like versioning and update management, change control functions, and auditability of rate versioning are standard. An application and forms library with standard and customizable applications and forms is available out of the box.

Integration functions like pre-integration to third-party data providers are available with configuration using developer tools, XML manipulation, or a scripting language. Bond-Pro notes that download to agency management systems functionality is under development and should be available in less than six months.

ISO rates/rules support and ISO-formatted statistical data is available out of the box. Bond-Pro reprots that rates/rules from the Surety & Fidelity Association of America (SFAA) are also available out of the box. The solution does not currently include NCCI/Bureau of Workers' Comp rates/rules support or ISO ERC integration.

The solution does not currently include multi-carrier comparison. Setting carrier-specific defaults is availabe with configuration using Bond-Pro's "no-code" system administration tools. Saving/storing an in-process or completed policy change transaction to allow issuance at a later date and product design and development tools are standard.

Rate table design and update management tools as well as date management capabilities are standard. Maintaining rating algorithm definition and management separately from rate tables, the import/export of rating tables to/from spreadsheets (e.g., Excel), and rating and rule definition and management (e.g., automatic driver assignment) are available with configuration via tools for IT analysts or BAs.

The solution does not currently include displacement testing (the ability to run existing book of business through proposed rate/product changes to determine impact) or testing, modeling, and product analysis.

#### **Underwriter Workbench Functions**

Underwriting functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing submission data from a structured data feed is a standard function. Uploading/importing submission information from documents (OCR-like functionality) is available via out-of-the-box integration to a third-party system or service.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, cancellation transactions, and underwriting multiple submissions as one work portfolio are standard.

Allowing individual quotes for different lines to be combined into a single proposal is not currently available.

Capturing underwriting analysis, capturing an underwriter's loss analysis, underwriter checklists that can validate information completeness and process completeness, document creation (proposals, applications, correspondence), and document storage are all standard functions.

Submission rating; pricing analysis and scheduled rating information; and a rules engine that automatically applies underwriting, workflow, and general business rules are available with configuration using simple tools targeted for IT analysts or BAs.

Providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems is available with configuration using developer tools, XML manipulation, or a scripting language.

Workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); inline reports/dashboards on tasks/work/work status; and inline reports/ dashboards to support underwriting analysis are standard functions.

A rules engine that interfaces to conditionally order specific data and displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) are available with configuration using simple tools targeted for IT analysts or BAs.

Proposal co-authoring with other underwriters and agent-facing capabilities are standard functions. IM collaboration and screen sharing with other underwriters are not currently available.

Support for variable binding/approval authority by role and for email notification/ communication with agents and underwriters within the system (retaining a record of all emails) are standard functions.

Preconfigured interfaces with policy admin systems and agent portals are available out of the box. Preconfigured integration with business intelligence environments, preconfigured interfaces with external predictive scoring models, and preconfigured interfaces with third-party data services are available via out-of-the-box integration to a third-party system or service. Natively calculated predictive scores are available with configuration using simple tools targeted for IT analysts or BAs.

## **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents (e.g., statements) and ad hoc documents (e.g., correspondence, manuscripted policies).

The solution includes pre-packaged, pre-built forms, libraries, or templates from ACORD. The primary authoring environment is a custom environment. Content is designed to be maintained by the average business user. Business rules are designed to be maintained by business analysts, while schema mapping and data sources are designed to be maintained by technical resources.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is a standard function. Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository and content management tools as well as archival capabilities for all generated documents are available with configuration using simple tools targeted for IT analysts or BAs. The solution supports industry-standard schemas such as ACORD XML and XBRL out of the box.

## **Agent Portal Functions**

Agent portal functions are integral to the suite and are not marketed as a stand-alone solution.

P/C portal functionality like new business entry/submission, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, policy change entry/submission, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, proposal creation, ACORD application creation, account or client view in addition to a policy view, underwriter view and/or tools, and agent/underwriter collaboration are standard functions.

A rating engine is available with configuration using simple tools targeted for IT analysts or BAs. Account clearance, integration and pre-fill with data services, and online payment are available via out-of-the-box integration to a third-party system or service.

The solution does not currently include billing inquiry, claims inquiry, or side-by-side quote comparison. Bond-Pro notes that agency management system upload functionality is under development and should be available in less than six months.

Document creation; file attachment support; scheduling, diary, and calendar functions; workflow and task management capabilities; business intelligence and reporting; and a consumer portal are available out of the box. Support for e-signature is available via out-of-the-box integration to a third-party system or service.

#### **Reinsurance Functions**

Bond-Pro Centralized Special Arrangements Module is integral to the suite and is also marketed as a stand-alone component.

Ceded reinsurance management functions like the manual entry and tracking of cessions, reserves, and limits as well as automated identification/calculation of accounts with applicable reinsurance are standard. Automated notification if a reserve reaches a specific amount or treaties approach set limits is available with configuration via simple tools targeted for IT analysts or BAs.

Assumed reinsurance management functions like the manual entry and tracking of assumed reinsurance contracts are standard. The solution does not currently include automated assumed reinsurance calculations based on reinsured data feeds/connections or retrocession reinsurance management.

Contract management functions like treaty management, facultative management, proportional support, non-proportional/excess of loss, and multiple basis types (risks attaching, losses occurring, and claims made) are standard. Configuration of contract rules, formulas, and types is available using simple tools targeted for IT analysts or BAs. The solution does not currently include retroactively processing late placements or midterm contract changes.

End-user interfaces for manual entry of contracts, for manual flagging of premiums and claims subject to reinsurance, and for review and approval of assumed policies as part of facultative contracts are available out of the box.

Real-time integration to an underwriting system (e.g., to display limits/reserves) is standard. Batch file import/export for integration to other systems, real-time data intake from core systems (PAS, claims) via API or other mechanism, and integration between other insurer/reinsurer systems are available with configuration via developer tools, XML manipulation, or a scripting language.

A standard library of canned reports is available out of the box. Statutory and regulatory reporting as well as ad hoc reporting are available with configuration using simple tools targeted for IT analysts or BAs. The solution does not currently include automated Schedule F reporting; automated bordereau reporting; or integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc.

Viewing the full history and status of claims and claim recovery is available out of the box. The solution does not currently include automated recoverable claims identification.

Entity management (CRM), document management and contract storage, and an audit trail for all transactions are standard. Tracking of reinsurance payables and receivables is available via out-of-the-box integration to a third-party system or service. Multi-currency support is available with configuration using simple tools targeted for IT analysts or BAs. The solution does not currently include multi-language support.

## **Business Intelligence Functions**

Business intelligence functions are integral to the suite and are not marketed as a stand-alone solution.

The solution provides a standard/canned reporting tool; database mirroring; and surety analytics with configurable in-app dashboards, KPIs, and reports; and a data warehouse.

The solution leverages a scalable, cloud-based MPP solution such as AWS Redshift, Google BigQuery, or Azure SQL Data Warehouse.

It includes a presentation/reporting component, standard predefined reports and predefined insurance dashboards, and data mining and analytics tools. The solution also includes some tools to support data governance, dictionaries, quality, and validation; an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes; a data lake to support schema on read and unstructured data; and an ad hoc reporting tool as a secondary part of the offering.

The solution supports real-time streaming data movement (e.g., use of Kafka).

## **Billing Functions**

Billing is integral to the suite and is not marketed as a stand-alone solution. Payment and billing plan configurability is standard. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
	,
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Currently not available but could be available with a
	system enhancement
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available via out-of-the-box integration to a third-party
payment card, check, EFT, payroll	system or service
deduction):	
Automated rules for payment application	Currently not available but could be available with a
and disbursements:	system enhancement
Real-time account and payment calculation,	Available with configuration using simple tools targeted
scheduling, recalculation, and rescheduling:	for IT analysts or BAs
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available via out-of-the-box integration to a third-party
	system or service
Equity billing support:	Available via out-of-the-box integration to a third-party
	system or service
Automated workflow and task	Available with configuration using simple tools targeted
management:	for IT analysts or BAs
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available via out-of-the-box integration to a third-party
	system or service
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Not applicable
Billing dashboarding/reporting:	Available via out-of-the-box integration to a third-party
	system or service
Workers' compensation monthly self-	Not applicable
reporting	
Pay-as-you-report for workers' comp:	Not applicable
Invoice and correspondence:	Available via out-of-the-box integration to a third-party
	system or service
Check generation/production:	Available via out-of-the-box integration to a third-party
	system or service
Billing for non-premium receivables (such	Available via out-of-the-box integration to a third-party
as claims deductibles paid):	system or service
Payment of non-refund payables (such as	Available via out-of-the-box integration to a third-party
policy dividends or mutual dividends):	system or service
Multi-currency support in a single instance	Yes
of the application:	

## **Claims Functions**

Bond-Pro Claims Module is integral to the suite and is also marketed as a stand-alone solution.

#### **Adjudication**

Bond-Pro notes that adjudication functionality is not applicable for its solution.

### Catastrophe

Bond-Pro asserts that catastrophe functionality is not applicable for this suite.

#### **Disbursements**

Calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support, etc.) are standard. Check processing and OFAC checking are available via out-of-the-box integration to a third-party system or service.

#### **Documents**

Image/media management, a correspondence or forms library, document rendering, and multichannel delivery and output of documents (including PDF, email, web, and print) are available out of the box. State-specific claims reporting templates along with a content repository and content management tools are available with configuration using simple tools targeted for IT analysts or BAs.

#### **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; handling of FROI/SROI EDI reporting; mobile and smart device input; and claimant contact management data capture are standard. The solution does not currently include scripting for claims intake with reflexive questioning, custom question sets to prompt mandatory additional questions depending on the answers given (branch scripting), claim checking duplication, or integration with external vendors and services (e.g., car rental companies, car/equipment repair shops).

Bond-Pro notes that claim characteristics scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim) is under development and should be available in less than six months.

#### **Fraud**

The solution does not currently include configurable business rules and tasks (specific to fraud and special investigations) or the provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims.

#### Litigation

Litigation process tracking, including negotiation details and litigation costs, is standard. Bond-Pro notes that capabilities for creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management are under development and should be available in less than six months.

#### **Multi-Channel**

E-signature capability is available via out-of-the-box integration to a third-party system or service. Currently, the solution does not include an agent portal with self-service, a policyholder portal with self-service, call center integration for FNOL via telephony, or call center integration for claims status check via telephony.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location, etc.), assignment to reinsurance treaties, and assignment to facultative arrangements are available out of the box.

#### Reporting

Standard reporting of claims performance monitoring, including claims handling, and high-risk indicators such as fatality, large losses, and fraud; standard reporting of configurable metrics for claims reporting; ad hoc reports; and dashboards are standard functions. Reporting that includes jurisdiction-specific reports and forms is available with configuration using simple tools targeted for IT analysts or BAs. The solution does not currently include electronic reporting or automated state filings.

#### Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; and the granular tracking of reserves and payments are available out of the box. Subrogation billing and the production of correct GL entries are available via out-of-the-box integration to a third-party system or service. Automatic reserve calculations using business rules and risk characteristics as well as direct, case, average, factor, and expense reserve types are available with configuration using simple tools targeted for IT analysts or BAs. The solution does not currently include jurisdictional wage and rate calculations integrated for workers' comp.

#### **Vendor Management**

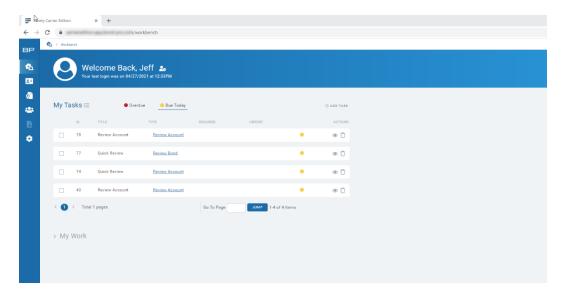
Vendor management functions are standard. The processing of required forms (including 1099s) is not currently available.

## Workflow

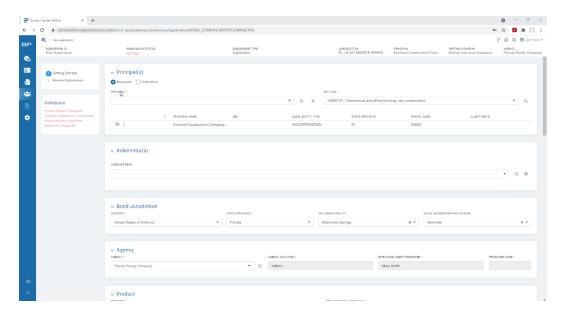
Overriding automated processes and manually triggering workflow processes; generating notes, diaries, and reminders; inclusion of external documents (letters and pictures) in file notes; assigning multiple adjusters to a single claim; and processing claim workflow trigger (CWT) files at insurer-defined intervals are standard functions. Automated workflow/task generation is available with configuration using simple tools targeted for IT analysts or BAs. Bond-Pro asserts that automated workflow/task generation is under development and should be available in less than six months. The solution does not currently include OCR-triggered workflow, compliance with the Document Repository Interface (DRI) standards, or full integration with electronic court filings (ECF2).

## **Screenshots**

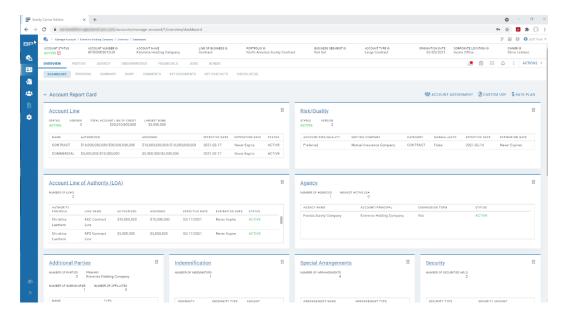
Role-Specific Workbenches and Workflow Management



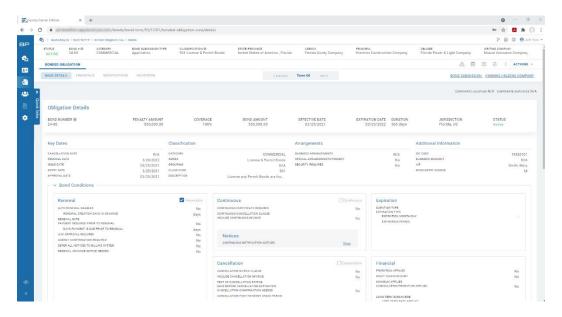
## **Dynamic Bond Application Submission**



## Account Underwriting and Life-Cycle Management



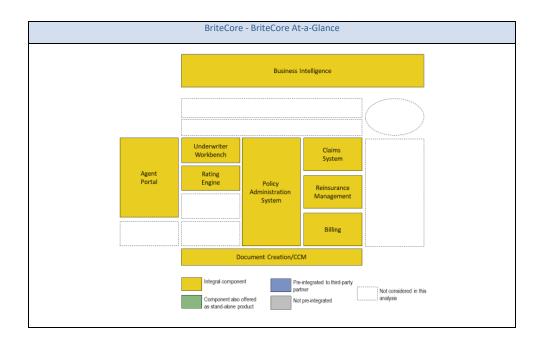
## Bond Life-Cycle Management



## **BriteCore - BriteCore**

## **Executive Summary**

- BriteCore was founded in 2009 when six mutual insurance companies partnered to build modern insurance solutions. Today, the company serves more than 70 insurance carriers, MGAs, and InsureTechs.
- BriteCore has headquarters in Springfield, MO and employs 190 people. The company's annual revenue is in the range of \$10M-\$20M.
- BriteCore is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has 53 live US/Canadian insurer clients using the suite, most of which are smaller companies (under \$1B) using the solution to support personal and commercial lines.
- Publicly announced clients include Loudon Mutual Insurance Company, Municipal Mutual Insurance Company (WV), Cameron Mutual Insurance Company, Jetty Inc., and Farmers Mutual of Tennesse.
- The solution is browser-based for all user interface functions. It is written in Python with some JavaScript.
- Configuration for insurance products, screens, and rules is via tools for BAs and non-IT staff.
   Document authoring is configurable via tools for IT analysts. Configuration for workflow and integration to third-party service calls is via code.
- Implementation is available through the company's own resources or a partner. The solution
  is hosted on AWS. The company offers a SaaS delivery model that includes hosting, license,
  maintenance and support, ongoing access to the latest version, and implementation of the
  upgrades.
- The company reports that the average time to initial go-live is 180 days or less and that the average implementation cost is \$500K-\$1M.



## **Lines of Business Supported**

Personal auto:	Clients currently in implementation for this line/product
Homeowners:	Live clients offering this product in 10-49 US states
Personal umbrella:	Live clients offering this product in 10-49 US states
Dwelling fire:	Live clients offering this product in 10-49 US states
Boatowners:	Live clients offering this product in 10-49 US states
Personal package:	Live clients offering this product in 2-9 US states
Commercial property:	Live clients offering this product in 10-49 US states
General liability:	Live clients offering this product in 10-49 US states
BOP:	Live clients offering this product in 10-49 US states
Commercial crime:	Live clients offering this product in 2-9 US states
Commercial auto:	Not currently supported
E&O/D&O:	Live clients offering this product in one US state
Inland marine:	Live clients offering this product in 10-49 US states
Professional liability (including medical malpractice):	Live clients offering this product in 2-9 US states
Commercial package:	Live clients offering this product in 2-9 US states
Specialty:	Live clients offering this product in all 50 US states
Workers' comp:	Solution is designed to support but no clients live or implementing
Surety:	Not currently supported
Other personal lines*:	Live clients offering this product in 10-49 US states
Other commercial lines†:	Live clients offering this product in 2-9 US states

<sup>\*</sup>Other personal lines include personal property in commercial storage and building personal property.

†Other commercial lines include church protector, church fire, bed and breakfast, liquor liability, vacant land liability, monoline liability, hog and poultry, surplus lines, and special events.

### **Client Base**

Globally, there are 61 clients live on BriteCore, 53 of which are insurer clients (i.e., not MGAs, self-insureds). These insurer clients are all live in the US and Canada. Most are smaller companies (under \$1B) using the solution to support personal and commercial lines.

Publicly announced clients include Loudon Mutual Insurance Company, Municipal Mutual Insurance Company (WV), Cameron Mutual Insurance Company, Jetty Inc., and Farmers Mutual of Tennessee.

# **Key Functions and Differentiators**

BriteCore cites its key functions as:

- Policy, billing, and claims modules that provide end-to-end policy life-cycle coverage
- Configuration and product management tools (e.g., product definition, rating, underwriting rules) that enable rapid development
- Agent portals and a customizable policyholder mobile app and web portal
- Data/analytics capabilities, including stock reports, ad hoc reports, and data mining tools
- RESTful APIs and a decoupled UI to support integration and running the platform headlessly

The company cites as its key differentiators that the solution is a Python web application with a cloud-native architecture, which enables insurers to fully realize the flexibility and scalability benefits of the cloud; the company's experience with the AWS platform (all customers deploy on AWS, and BriteCore has advanced-tier and financial competency designations in the AWS partner network); rapid product configuration that accelerates speed to market for new products; continuous delivery and deployment model that enables a steady release of new capabilities to customers; and support for a 100% remote work environment for customers, with a system that is highly redundant and durable through multi-zone hosting in AWS's global infrastructure.

# **Solution Architecture and History**

BriteCore launched in 2010 and was re-architected in 2019. The latest major release was in March 2021. BriteCore notes that it operates on a continuous development cycle, with incremental updates released to clients on a regular basis, typically two to four times per week.

BriteCore reports that 94% of the solution's insurer customers are on the latest version, and all clients have been through at least one upgrade. BriteCore asserts that three of its in-production insurer customers have gone off the master code branch to pursue custom development.

The solution supports Aurora, MySQL, and PostgreSQL databases and Mainframe/Mini (zSeries, iSeries), UNIX/Linux, Windows, OSX, iOS, and Android platforms. The solution is written in Python with some JavaScript.

## **APIs and Integration**

The solution provides REST APIs. BriteCore reports that it offers a fully published RESTful API that allows insurers to extend the system's core functionality through API integrations. BriteCore clients are using its APIs to build integrations and stand-alone applications.

## **Configurability and User Interface**

BriteCore is browser-based for all user interface functions.

Configuration for insurance products, screens, and rules is via tools for BAs and non-IT staff. Configuration for document authoring is via tools for IT analysts. Workflow and integration to third-party service calls are configurable via code.

# **Deployment Options**

The solution is hosted on AWS. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades. The solution is a single-tenant app server and database.

# **Average Implementation Length and Cost**

BriteCore implements the solution through the company's resources or partners. It reports that BriteCore can be ready for initial go-live in 180 days or less and fully rolled out in an additional nine months or less. The company reports that the average implementation cost is \$500K-\$1M.

## Support

Of the 190 people employed at BriteCore, there are between 50 and 100 on the product design and engineering team, between ten and 50 on the implementation team (not counting partnerships), and between ten and 50 on the support team.

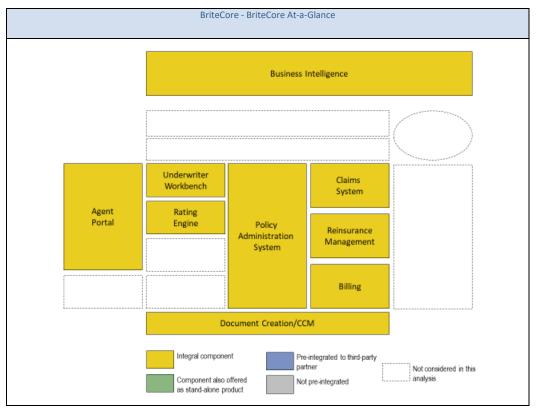
BriteCore has operated as a fully remote organization for years, with all team members working primarily from their individual home offices. In the past, the company maintained a headquarters and satellite offices. The company asserts that its remote workforce has proven fully capable of supporting its cloud-based products and client needs without a central physical or IT infrastructure, so the company no longer maintains physical office locations.

BriteCore offers customer engagement activities such as an online community, online training, a customer advisory committee, a user event, and training seminars.

## **Systems Integrator and Other Partners**

Publicly announced technology partnerships include Amazon Web Services (advanced tier), ISO/Verisk, LexisNexis, e2value, and Mass Printing. Publicly announced SI partnerships include Tech Mahindra, Ernst & Young, Xceedance, OnRamp, and Rented Mule.

# **Functionality**



## **Policy Administration Functions**

The solution includes policy issue, premium accounting, out-of-sequence endorsement, bordereaux import, and forms management out of the box. Manuscripted policies are available with configuration via tools for IT analysts or BAs.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

## **Rating Functions**

A rating engine is integral to the suite and is not marketed as a stand-alone solution.

Core rating functions like quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are standard.

Compliance and change control functions like versioning and update management, change control functions, and auditability of rate versioning are standard. An application and forms library with standard and customizable applications and forms is available with configuration via tools for IT analysts or BAs.

Integration functions like pre-integration to third-party data providers and download to agency management systems are standard.

ISO rates/rules support and NCCI/Bureau of Workers' Comp rates/rules support are available with configuration via tools for IT analysts or BAs. ISO-formatted statistical data and ISO ERC integration are available with configuration via developer tools, XML manipulation, or a scripting language.

Setting carrier-specific defaults and multi-carrier comparison functions are available with configuration via tools for IT analysts or BAs. Saving/storing an in-process or completed policy change transaction to allow issuance at a later date and product design and development tools are standard.

Maintaining rating algorithm definition and management separately from rate tables and date management capabilities are standard functions. Rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), and rating and rule definition and management (e.g., automatic driver assignment) are available with configuration via tools for IT analysts or BAs.

Displacement testing (the ability to run existing book of business through proposed rate/product changes to determine impact) and testing, modeling, and product analysis are available with configuration via tools for IT analysts or BAs.

#### **Underwriter Workbench Functions**

Underwriting functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing submission data from a structured data feed is a standard function. The solution does not currently include uploading/importing submission information from documents (OCR-like functionality), but the company notes this function could be available with a system enhancement.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, cancellation transactions, and underwriting multiple submissions as one work portfolio are standard.

Capturing underwriting analysis; underwriter checklists that can validate information completeness and process completeness; submission rating; pricing analysis and scheduled rating information; and providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are standard functions.

Document creation (proposals, applications, correspondence) and document storage are standard functions. The ability to combine individual quotes for different lines into a single proposal and capturing an underwriter's loss analysis are available with configuration via tools for IT analysts or BAs.

A rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); a rules engine that interfaces to order specific data conditionally; inline reports/dashboards on tasks/work/work status; and inline reports/dashboards to support underwriting analysis are standard functions.

Displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) is available via out-of-the-box integration to a third-party system or service.

Proposal co-authoring with other underwriters and agent-facing capabilities are standard functions. IM collaboration and screen sharing with other underwriters are available via out-of-the-box integration to a third-party system or service.

Support for variable binding/approval authority by role and for email notification/ communication with agents and underwriters within the system (retaining a record of all emails) are standard functions.

Preconfigured interfaces with agent portals and with external predictive scoring models are standard functions. Preconfigured interfaces with third-party data services are available with configuration using simple tools targeted for IT analysts or BAs. Preconfigured integration with business intelligence environments is available with configuration via developer tools, XML manipulation, or a scripting language.

The solution does not currently include preconfigured interfaces with policy admin systems. The solution does not currently natively calculated predictive scores, but the company notes that this function could be available with a system enhancement.

#### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents (e.g., statements) and ad hoc documents (e.g., correspondence, manuscripted policies).

The solution does not currently include pre-packaged, pre-built forms, libraries, or templates from ISO or ACORD. The primary authoring environment is a custom environment or a non-Microsoft/Adobe solution. Content and business rules are designed to be maintained by the average business user while schema mapping and data sources are designed to be maintained by business analytsts.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is a standard function. Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository and content management tools as well as archival capabilities for all generated documents are standard. The solution supports industry-standard schemas such as ACORD XML out of the box.

#### **Agent Portal Functions**

Agent portal functions are integral to the suite and are not marketed as a stand-alone solution.

P/C portal functionality like new business entry/submission, account clearance, quick quote, integration and pre-fill with data services, policy change entry/submission, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry,

proposal creation, side-by-side quote comparison, account or client view in addition to a policy view, underwriter view and/or tools, and agent/underwriter collaboration are standard functions.

ACORD application creation and a rating engine are available with configuration using simple tools targeted for IT analysts or BAs. Uploading/importing data from Excel (e.g., locations, cars, drivers) is available with configuration via developer tools, XML manipulation, or a scripting language. Online payment and agency management system upload are available via out-of-the-box integration to a third-party system or service.

Document creation; file attachment support; scheduling, diary, and calendar functions; workflow and task management capabilities; business intelligence and reporting; and a consumer portal are available out of the box. Support for e-signature is not currently available.

#### **Reinsurance Functions**

Reinsurance is integral to the suite and is not marketed as a stand-alone component.

Ceded reinsurance management functions like the manual entry and tracking of cessions, reserves, and limits are standard. Automated notification if a reserve reaches a specific amount or treaties approach set limits and automated identification/calculation of accounts with applicable reinsurance are available with configuration via developer tools, XML manipulation, or a scripting language.

Assumed reinsurance management functions like the manual entry and tracking of assumed reinsurance contracts, automated assumed reinsurance calculations based on reinsured data feeds/connections, and retrocession reinsurance management are available with configuration via tools for IT analysts or BAs.

Contract management functions like configuration of contract rules, formulas, and types as well as retroactively processing late placements or midterm contract changes are standard. Treaty management, facultative management, proportional support, non-proportional/excess of loss, and multiple basis types (risks attaching, losses occurring, claims made) are available with configuration via tools for IT analysts or BAs.

End-user interfaces for manual entry of contracts, manual flagging of premiums and claims subject to reinsurance, and review and approval of assumed policies as part of facultative contracts are available out of the box.

Real-time integration to an underwriting system (e.g., to display limits/reserves) is standard. Batch file import/export for integration to other systems, real-time data intake from core systems (PAS, claims) via API or other mechanisms, and integration between other insurer/reinsurer systems are available with configuration via developer tools, XML manipulation, or a scripting language.

A standard library of canned reports is available out of the box. Statutory and regulatory reporting, automated Schedule F reporting, automated bordereau reporting, and ad hoc reporting are available with configuration via tools for IT analysts or BAs.

Integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc., is available via out-of-the-box integration to a third-party system or service.

Automated recoverable claims identification and viewing the full history and status of claims and claim recovery are available out of the box.

Entity management (CRM), document management and contract storage, and an audit trail for all transactions are standard. Tracking of reinsurance payables and receivables are available via out-of-the-box integration to a third-party system or service. The solution does not currently include multi-currency or multi-language support.

## **Business Intelligence Functions**

Business intelligence functions are integral to the suite and are not marketed as a stand-alone solution.

The solution features user-defined data reports and extracts with dashboarding output. It includes tools to support data governance, dictionaries, quality, and validation; standard predefined reports and predefined insurance dashboards; and an ad hoc reporting tool. Data mining and analytics tools are available as a secondary part of the offering.

The solution supports data movement via batch ETL.

## **Billing Functions**

Billing is integral to the suite and is not marketed as a stand-alone solution. Payment and billing plan configurability are available with configuration via tools for IT analysts or BAs. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available out of the box with no configuration necessary
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available via out-of-the-box integration to a third-party
payment card, check, EFT, payroll	system or service
deduction):	
Automated rules for payment application	Available with configuration using simple tools targeted
and disbursements:	for IT analysts or BAs
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Collections activities and interfaces:	Currently not available, but could be available with a
	system enhancement
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	No
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Currently not available, but could be available with a
	system enhancement
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Available with configuration using simple tools targeted
reporting	for IT analysts or BAs
Pay-as-you-report for workers' comp:	Available via out-of-the-box integration to a third-party
	Attailable the out of the box integration to a time party
	system or service
Invoice and correspondence:	
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Check generation/production:  Billing for non-premium receivables (such	system or service Available out of the box with no configuration necessary Available via out-of-the-box integration to a third-party system or service Currently not available, but could be available with
Check generation/production:  Billing for non-premium receivables (such as claims deductibles paid):	system or service Available out of the box with no configuration necessary Available via out-of-the-box integration to a third-party system or service Currently not available, but could be available with integration to another system or service
Check generation/production:  Billing for non-premium receivables (such as claims deductibles paid):  Payment of non-refund payables (such as	system or service  Available out of the box with no configuration necessary  Available via out-of-the-box integration to a third-party system or service  Currently not available, but could be available with integration to another system or service  Currently not available, but could be available with

#### **Claims Functions**

Claims is integral to the suite and is not marketed as a stand-alone solution.

#### **Adjudication**

Automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard functions. The solution does not include medical case management, injury detail maintenance (coding), or disability management.

#### Catastrophe

Automatic identification of catastrophe claims and attaching multiple LOBs and causes of loss to a single catastrophe are standard. Catastrophe definition is available with configuration via tools for IT analysts or BAs. Mapping tools are available via out-of-the-box integration to a third-party system or service.

#### **Disbursements**

Calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, and OFAC checking are standard. The solution also includes check processing and calculating and scheduling recurring payments via out-of-the-box integration to a third-party system or service. The solution does not currently include handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support).

#### **Documents**

Image/media management, a correspondence or forms library, state-specific claims reporting templates, document rendering, a content repository and content management tools, and multichannel delivery and output of documents (PDF, email, web, and print) are standard.

## **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; mobile and smart device input; and claimant contact management data capture are standard. Integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) is available via out-of-the-box integration to a third-party system or service. The solution does not currently include FROI/SROI EDI reporting, scripting for claims intake with reflexive questioning, custom question sets to prompt mandatory additional questions depending on given answers (branch scripting), claim characteristics scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim), or checking of duplicate claims.

#### **Fraud**

The solution does not currently include configurable business rules and tasks (specific to fraud and special investigations) or the provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims.

## Litigation

Litigation process tracking, including negotiation details and litigation costs, is standard. The solution does not currently include creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management.

#### **Multi-Channel**

An agent portal with self-service and a policyholder portal with self-service are standard. Esignature, call center integration for FNOL via telephony, and call center integration for claims status check via telephony are available via out-of-the-box integration to a third-party system or service.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location, etc.), assignment to reinsurance treaties, and assignment to facultative arrangements are available with configuration using simple tools targeted for IT analysts or BAs.

#### Reporting

Standard reporting of claims performance monitoring, including claims handling, and high-risk indicators such as fatality, large losses, and fraud; standard reporting of configurable metrics for claims reporting; and dashboards are standard functions. Ad hoc reports, reporting that includes jurisdiction-specific reports and forms, and electronic reporting or automated state filings are available with configuration via tools for IT analysts or BAs.

#### Reserves, Recoveries, Subrogation

Subrogation billing and the production of correct GL entries, as well as the granular tracking of reserves and payments, are standard. Automatic subrogation identification is available with configuration via tools for IT analysts or BAs. Automatic reserve calculations using business rules and risk characteristics are available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include creating separate tasks, workflow, diaries, and business rules for subrogated cases; direct, case, average, factor, and expense reserve types; or jurisdictional wage and rate calculations integrated for workers' comp.

## **Vendor Management**

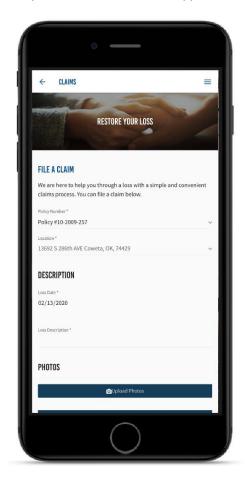
Vendor management functions are standard. The processing of required forms (including 1099s) is available via out-of-the-box integration to a third-party system or service.

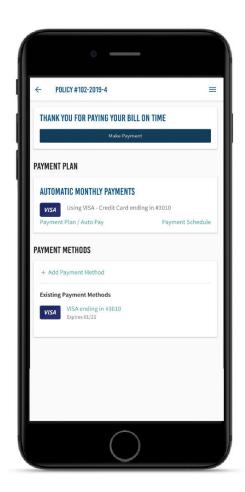
## Workflow

Generating notes, diaries, and reminders; inclusion of external documents (letters and pictures) in file notes; and assigning multiple adjusters to a single claim are standard functions. The solution does not currently include automated workflow/task generation, OCR-triggered workflow, overriding automated processes and manually triggering workflow processes, automatic work assignment based on configurable rules, compliance with the Document Repository Interface (DRI) standards, processing claim workflow trigger (CWT) files at insurer-defined intervals, or full integration with electronic court filings (ECF2).

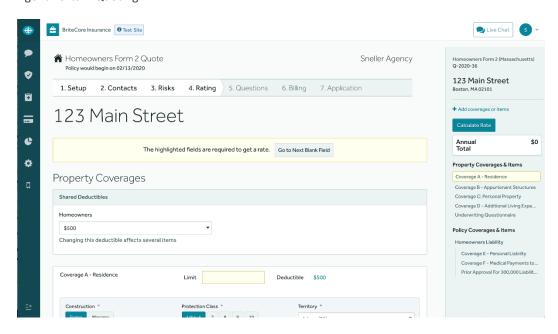
## **Screenshots**

Policyholder Portal and Mobile App

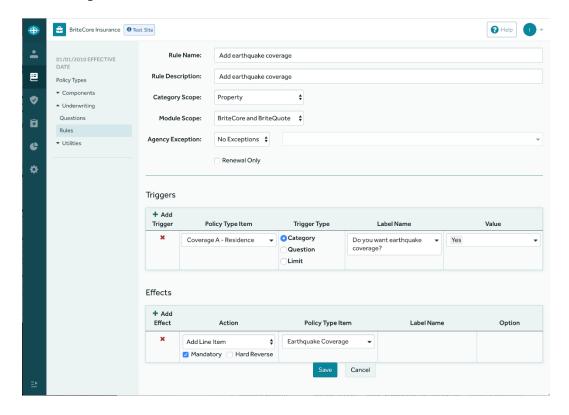




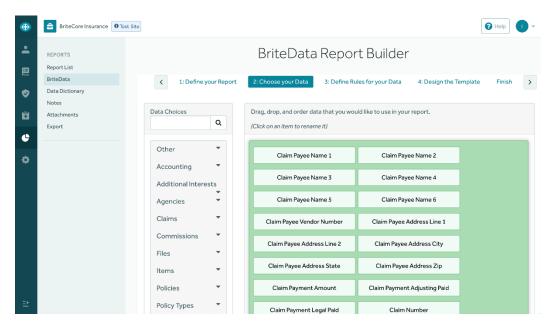
## Agent Portal - Quoting



## Underwriting Rules - Business User Interface

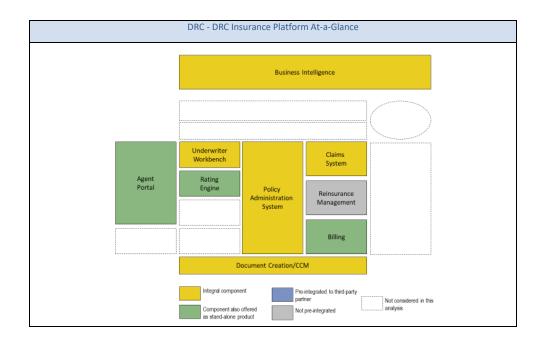


## BriteData Drag-and-Drop Reporting Interface



# **Decision Research Corporation - DRC Insurance Platform Executive Summary**

- Decision Research Corporation (DRC) has provided software solutions to the P/C insurance industry for 50 years, from large carriers to small startups to MGAs in the US and globally. DRC's SaaS and on-site solutions managed a total written premium in excess of \$7B. The company reports that its web-based administration system expedites implementation, lowers costs, and simplifies maintenance across insurance products. DRC has headquarters in Honolulu, HI and employs 130 people.
- DRC Insurance Platform is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, billing, and claims components.
- It currently has 11 live US/Canadian insurer clients using the suite, most of which are midsize companies. Most clients are using the solution to support personal lines with some commercial and specialty lines.
- Publicly announced clients include Beazley US, Tokio Marine HCC, K2-Aegis, MS Amlin, and Mutual of Eumclaw.
- The solution is browser-based for all user-interface functions. It is written in .NET (C#/VB.NET) with some GoLang.
- Insurance products, screens, and rules are configured via tools for BAs and non-IT staff. Document authoring is configured via tools for IT analysts. Workflows and integration to third-party service calls are configured via developer tools.
- Implementation is available through the company's resources. DRC deploys the solution on MS Azure. The company offers a SaaS delivery model that includes hosting, license, support, ongoing access to the latest version, and implementation of upgrades.
- The company reports that the average time to initial go-live is 12 months or less and that the average implementation cost is \$500K-\$1M.



# **Lines of Business Supported**

Personal auto:	Live clients offering this product in 2-9 US states
Homeowners:	Live clients offering this product in 10-49 US states
Personal umbrella:	Live clients offering this product in 2-9 US states
Dwelling fire:	Live clients offering this product in 10-49 US states
Boatowners:	Solution is designed to support, but no clients live or implementing
Personal package:	Live clients offering this product in 2-9 US states
Commercial property:	Solution is designed to support, but no clients live or implementing
General liability:	Live clients offering this product in 2-9 US states
BOP:	Clients currently in implementation for this line/product
Commercial crime:	Solution is designed to support, but no clients live or implementing
Commercial auto:	Solution is designed to support, but no clients live or implementing
E&O/D&O:	Solution is designed to support, but no clients live or implementing
Inland marine:	Solution is designed to support, but no clients live or implementing
Professional liability (including medical malpractice):	Clients currently in implementation for this line/product
Commercial package:	Live clients offering this product in all 50 US states
Specialty:	Live clients offering this product in all 50 US states
Workers' comp:	Live clients offering this product in one US state
Surety:	Solution is designed to support, but no clients live or implementing
Other personal lines*:	Live clients offering this product in one US state
Other commercial lines†:	Live clients offering this product in one US state

<sup>\*</sup> Other personal lines include motorcycle, renters, manufactured home, and landlord.

## **Client Base**

Globally, DRC has 12 clients live on DRC Insurance Platform, all of which are insurer clients (i.e., not MGAs, self-insureds). There are 11 clients in the US and Canada, most of which are midsize companies. Most of these clients use the solution to support personal lines with some commercial and specialty lines.

Publicly announced clients include Beazley US, Tokio Marine HCC, K2-Aegis, MS Amlin, and Mutual of Eumclaw.

## **Key Functions and Differentiators**

DRC cites the key functions of DRC Insurance Platform as:

- Library of open API, compliant services for granular integration
- End-to-end policy administration, from quote through claims and analytics
- Detailed agency administration supporting multi-variable commissions, license, appointing, and E&O insurance tracking
- Security access module configurable by users, task groups, and user groups
- Low code/no-code product screen configuration

<sup>†</sup> Other commercial lines include builder's risk, environmental, and cyber.

The company cites as its key differentiators the use of Excel to model rules, rates, and screens to rely less on developers and code and increase configuration by analysts and SMEs; full-featured, mature policy administration system; multi-language support with full internalization; multiple portals supported by a central rate and rules engine; as well as integrated document generation, management, and distribution.

## **Solution Architecture and History**

DRC Insurance Platform launched in 2012. The latest release was in January 2021. DRC reports that 60% of the solution's customers are on the latest version, 20% are on a version less than three years old, and 20% are on a version older than three years. Approximately 40-45% of clients have been through at least one upgrade. DRC notes that current maintenance clients stay current with semi-monthly or monthly base synchronization releases.

The solution requires Microsoft SQL Server databases and Windows platforms. The solution is written in .NET (C#/VB.NET) and GoLang.

# **APIs and Integration**

The solution provides REST, SOAP, and open APIs.

DRC reports that it provides documentation and training for API integrations. External systems can trigger events in the system, which can be responded to by a workflow or business rule. An API developer portal is available for support and descriptions.

# **Configurability and User Interface**

DRC Insurance Platform is browser-based for all user interface functions.

Configuration for insurance products, screens, and rules is via tools for BAs and non-IT staff. Document authoring is configurable via tools for IT analysts. Configuration for workflows and integration to third-party service calls is via developer tools, XML manipulation, or a scripting language.

# **Deployment Options**

DRC deploys DRC Insurance Platform on MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades.

The hosted solution is a multi-tenant app server and database with single-tenant options available.

## **Average Implementation Length and Cost**

DRC implements the solution through its resources or its implementation partner, Mindtree. It reports that DRC Insurance Platform can be ready for initial go-live in 12 months or less and fully rolled out in an additional 180 days or less. The company reports that the average implementation cost is \$500K-\$1M.

## **Support**

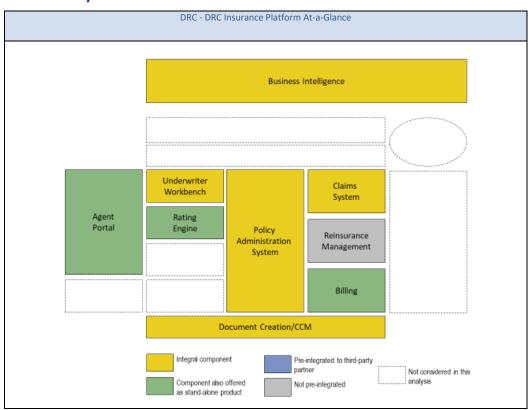
Of DRC's 130 employees, there are between ten and 50 employees on each of the product design and engineering, implementation (not counting partnerships), and support teams. In addition to local resources at the client site, support staff are provided out of DRC's Honolulu and Philadelphia offices.

DRC offers customer engagement activities such as online training, a customer advisory committee, and a user event.

## **Systems Integrator and Other Partners**

Publicly announced technology partnerships include Microsoft, OpenText, DocuSign, Verisk, and e2Value.

## **Functionality**



## **Policy Administration Functions**

Policy issue, premium accounting, out-of-sequence endorsement, bordereaux import, and forms management are available out of the box. Manuscripted policies are available with configuration via tools for IT analysts or BAs. DRC notes that full policy life-cycle processing as well as pending transactions and real-time, online, out-of-sequence processing are additional standard functions.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

#### **Rating Functions**

RS X Rating is part of the suite and is also sold as a stand-alone rating engine.

Quick quote; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are standard.

Versioning and update management, change control functions, and auditability of rate versioning are standard. An applications and forms library with standard and customizable applications and forms is available via out-of-the-box integration to a third-party system or service.

Download to agency management systems is available with configuration via developer tools, XML manipulation, or a scripting language. Pre-integration to third-party data providers is available via out-of-the-box integration to a third-party system or service. ISO rates/rules support, NCCI/Bureau of Workers' Comp rates/rules support, and ISO-formatted statistical data are available with configuration using developer tools, XML manipulation, or a scripting language. Currently, the solution does not include ISO ERC integration.

Multi-carrier comparison, setting carrier-specific defaults, product design and development tools, and saving/storing in-process or completed policy change transactions to allow issuance at a later date are standard functions.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are standard functions. DRC reports that business users can continue to maintain and update complex raters in spreadsheets that are consumed by the RS X compiler.

Displacement testing (i.e., the ability to run existing book of business through proposed rate/product changes to determine impact) and testing, modeling, and product analysis are standard.

## **Underwriter Workbench Functions**

Underwriting functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing the submission data from a structured data feed is a standard function. The solution does not currently include uploading/importing the submission information from documents (OCR-like functionality).

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, cancellation transactions, and underwriting multiple submissions as one work portfolio are standard functions.

The ability to combine individual quotes for different lines into a single proposal; submission rating; pricing analysis and scheduled rating information; and providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are standard functions.

Capturing underwriting analysis, capturing underwriter loss analysis, and underwriter checklists that can validate information and process completeness are available with configuration via tools for IT analysts or BAs.

Document creation (e.g., proposals, applications, correspondence) and document storage are standard functions.

A rules engine that applies underwriting, workflow, and general business rules automatically; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); a rules engine that interfaces to order specific data conditionally; inline reports/dashboards on tasks/work/work status; and inline reports/dashboards to support underwriting analysis are standard functions.

Displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) and agent-facing capabilities are available with configuration using simple tools targeted for IT analysts or BAs. Currently, the solution does not include proposal co-authoring or screensharing with other underwriters. DRC notes that IM collaboration with other underwriters is currently under development and should be available in less than six months.

Preconfigured interfaces with policy admin systems, agent portals, and third-party data services, as well as preconfigured integration with business intelligence environments, are standard. Preconfigured interfaces with external predictive scoring models are available with configuration via tools for IT analysts or BAs.

Support for variable binding/approval authority by role is a standard function. The solution does not currently include natively calculated predictive scores. DRC notes that the system can send automated emails but does not include an email tracking system (e.g., no integration with Outlook); configuration for automated emails is available within the system administration component.

#### **Document Functions**

Document management functionality is pre-integrated as part of the suite; document creation is accomplished via integration with OpenText Exstream.

The solution supports mass-produced documents (e.g., statements) and ad hoc documents (e.g., correspondence, manuscripted policies).

The solution does not currently include pre-packaged, pre-built forms, libraries, or templates from ISO or ACORD. The primary authoring environment is a custom environment. Content and business rules are designed to be maintained by businss analysts while schema mapping and data sources are designed to be maintained by technical resources.

The solution supports print and e-delivery output channels. Managing preferences for print vs. electronic delivery is a standard function. Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository and content management tools as well as archival capabilities for all generated documents are standard. The solution supports industry-standard schemas such as ebXML out of the box.

## **Agent Portal Functions**

DRC Agent Portal is part of the suite and is also sold as a stand-alone agent portal.

New business entry/submission, account clearance, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, policy change entry/submission, online payment, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, proposal creation, side-by-side quote comparison, account or client view in addition to a policy view, underwriter view and/or tools, and a rating engine are standard.

Integration with pre-fill with data services, billing inquiry, claims inquiry, ACORD application creation, and agency management system upload are available with configuration via developer tools, XML manipulation, or a scripting language. DRC asserts that agent/underwriter collaboration is under development and should be available in less than six months.

E-signature; document creation; file attachment support; workflow and task management capabilities; business intelligence and reporting; a consumer portal; and scheduling, diary, and calendar functions are standard.

#### **Reinsurance Functions**

Reinsurance functions are not integral to the suite.

#### **Business Intelligence Functions**

Business intelligence capabilities are part of the suite and not sold as a stand-alone business intelligence component.

DRC Analytics is a component of the DRC Insurance Platform. It provides the ability to have standard reports as well as ad hoc.

The solution includes a presentation/reporting component, standard predefined reports and predefined insurance dashboards, an ad hoc reporting tool, and data mining and analytics tools.

The solution also includes some tools to support data governance, dictionaries, quality, and validation; an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes; and a data lake to support schema on read and unstructured data as a secondary part of the offering.

The solution supports data movement via batch ETL.

#### **Billing Functions**

DRC Billing is part of the suite and is also sold as a stand-alone billing component. Payment and billing plan configurability are available with configuration via tools for IT analysts or BAs. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Currently not available, but could be available with a
	system enhancement
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	,
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	Available out of the box with no configuration necessary
	Available out of the box with no configuration recossary
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	And the latest and a find a latest and the same of the
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Currently not available, but could be available with
	integration to another system or service
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available via out-of-the-box integration to a third-party
	system or service
Agent portal:	Available via out-of-the-box integration to a third-party
	system or service
Consumer portal:	Available via out-of-the-box integration to a third-party
	system or service
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Currently not available, but could be available with
- <b>.,</b>	integration to another system or service
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Currently not available, but could be available with
reporting	integration to another system or service
	-
Pay-as-you-report for workers' comp:	Currently not available, but could be available with a
Invales and some area deman	system enhancement
Invoice and correspondence:	Available via out-of-the-box integration to a third-party
	system or service
Check generation/production:	Available via out-of-the-box integration to a third-party
	system or service
Billing for non-premium receivables (such	Currently not available, but could be available with a
as claims deductibles paid):	system enhancement
Payment of non-refund payables (such as	Currently not available, but could be available with a
policy dividends or mutual dividends):	system enhancement
	system enhancement Yes

#### **Claims Functions**

Claims functionality is part of the suite and is not sold as a stand-alone claims component.

#### **Adjudication**

Aggregate tracking (erosion of policy limits) is a standard function. The solution does not currently include medical case management, injury detail maintenance (coding), disability management, automated coverage verification, or deductible tracking.

#### Catastrophe

Catastrophe definition, automatic identification of catastrophe claims, and attaching multiple LOBs and causes of loss to a single catastrophe are standard functions. Mapping tools are not currently available.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, and accommodating multiple pay parties (e.g., garnishments) are standard functions. The solution does not currently include combining multiple pending payments for a single client into one disbursement, OFAC checking, or handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support).

#### **Documents**

Image and media management, a content repository, content management tools, and multichannel delivery and output of documents (e.g., PDF, email, web, and print) are standard functions. Document rendering is available with configuration via tools for IT analysts or BAs.

A correspondence or forms library and state-specific claims reporting templates are available with configuration via developer tools, XML manipulation, or a scripting language.

#### **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; claimant contact management data capture; and checking for duplicate claims are standard functions. Custom question sets to prompt additional, mandatory questions depending on given answers (branch scripting) are available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include FROI/SROI EDI reporting, mobile and smart device input, scripting for claims intake with reflexive questioning, claim characteristic scoring, or integration with external vendors and services (e.g., car rental companies, car/equipment repair shops).

#### **Fraud**

The solution does not currently include configurable business rules and tasks (specific to fraud and special investigations) or the provision of multiple search and reporting criteria for fraud detection (via the ability to track common clients across multiple claims).

## Litigation

Litigation process tracking, including negotiation details and litigation costs, is standard. The solution does not currently include the ability to creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management.

#### **Multi-Channel**

E-signature is available via out-of-the-box integration to a third-party system or service. DRC notes that an agent portal with self-service and a policyholder portal with self-service are under development and should be available in less than six months. The solution does not currently include call center integration for FNOL via telephony or call center integration for claim status check via telephony.

#### Reinsurance

The solution does not currently include identification of claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, or assignment to facultative arrangements.

#### Reporting

Standard reporting of configurable metrics for claims reporting, ad hoc reports, and dashboards are all standard functions. The solution does not currently include standard reporting of claims performance monitoring, including claims handling, and high-risk indicators such as fatality, large losses, and fraud; reporting that includes jurisdiction-specific reports and forms; or electronic reporting or automated state filings.

## Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; subrogation billing and the production of correct GL entries; granular tracking of reserves and payments; and direct, case, average, factor, and expense reserve types are available out of the box.

Currently, the solution does not include automatic subrogation identification, automatic reserve calculations using business rules and risk characteristics, or jurisdictional wage and rate calculations integrated for workers' comp.

## **Vendor Management**

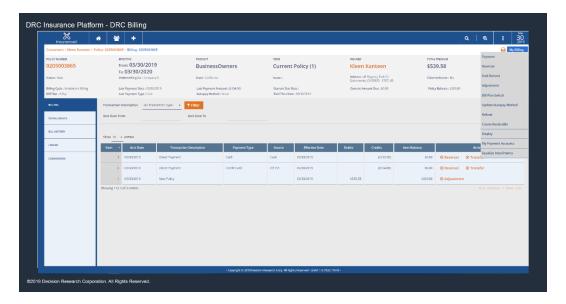
Vendor management and processing required forms (including 1099s) are standard functions.

## Workflow

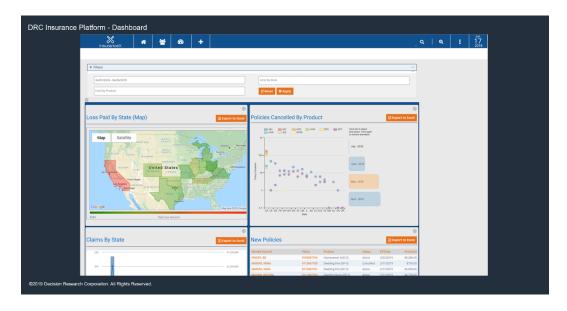
Automated workflow/task generation; generating notes, diaries, and reminders; the inclusion of external documents (e.g., letters, pictures) in file notes, and assigning multiple adjusters to a single claim are standard functions. The solution does not currently include OCR-triggered workflow, overriding automated processes and triggering workflow processes manually, automatic work assignment based on configurable rules, compliance with the Document Repository Interface (DRI) standards, processing claim workflow trigger (CWT) files at insurer-defined intervals, or full integration with electronic court filings (ECF2).

## **Screenshots**

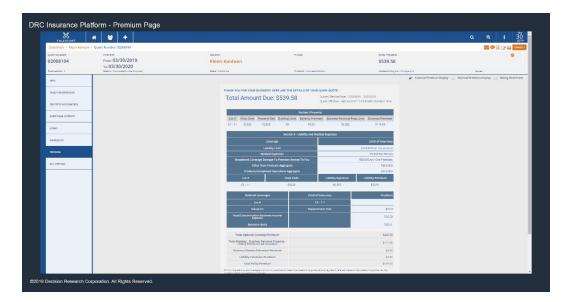
Billing



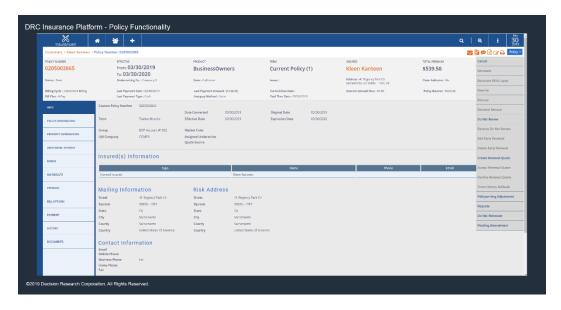
## **DRC** Dashboard



## Premium Page

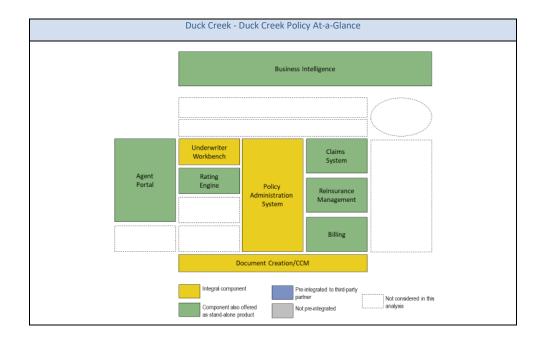


## **Policy Functionality**



# **Duck Creek Technologies LLC - Duck Creek Policy Executive Summary**

- Duck Creek Technologies (NASDAQ: DCT) provides P/C insurance software and services for insurers of all sizes worldwide, with 12 offices in five countries. The company offers a full suite of solutions on which insurers can run their business.
- Duck Creek has headquarters in Boston, MA and employs 1,400 people. Its annual revenue is in the range of \$100M-\$250M.
- Duck Creek Policy is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components. The company notes it also includes distribution management.
- It currently has 60 live US/Canadian insurer clients using Duck Creek Policy, most of which are smaller companies (under \$1B) using the solution to support a mix of personal and commercial lines.
- Publicly announced clients include American National, AIG, Builders Mutual, Munich Re, and Manitoba Public Insurance.
- The solution is browser-based for all user interface functions. It is written in .NET (C#/VB.NET) with some SQL and ManuScript, plus a small amount of JavaScript.
- Configuration for insurance products, screens, workflows, rules, and document authoring is
  via tools intended for BAs and non-IT staff. Configuration for integration to third-party
  service calls is via tools targeted for IT analysts.
- Implementation is available through the company's own resources or a partner. Duck Creek
  deploys the solution hosted on MS Azure. The company offers a SaaS delivery model that
  includes hosting, license, maintenance and support, ongoing access to the latest version, and
  implementation of the upgrades.
- The company reports that the average time to initial go-live is nine months or less and that the average implementation cost is \$2M-\$5M.



# **Lines of Business Supported**

Personal auto:	Live clients offering this product in all 50 US states
Homeowners:	Live clients offering this product in all 50 US states
Personal umbrella:	Live clients offering this product in all 50 US states
Dwelling fire:	Live clients offering this product in all 50 US states
Boatowners:	Live clients offering this product in all 50 US states
Personal package:	Live clients offering this product in all 50 US states
Commercial property:	Live clients offering this product in all 50 US states
General liability:	Live clients offering this product in all 50 US states
BOP:	Live clients offering this product in all 50 US states
Commercial crime:	Live clients offering this product in all 50 US states
Commercial auto:	Live clients offering this product in all 50 US states
E&O/D&O:	Live clients offering this product in all 50 US states
Inland marine:	Live clients offering this product in all 50 US states
Professional liability (including medical malpractice):	Live clients offering this product in all 50 US states
Commercial package:	Live clients offering this product in all 50 US states
Specialty:	Live clients offering this product in all 50 US states
Workers' comp:	Live clients offering this product in all 50 US states
Surety:	Live clients offering this product in all 50 US states
Other personal lines*:	Live clients offering this product in all 50 US states
Other commercial lines†:	Live clients offering this product in all 50 US states

<sup>\*</sup> Other personal lines include event, helmsman yacht, high-performance boat, mobile home, motorcycle, recreational vehicle, and off-road.

Duck Creek customers currently offer a personal auto telematic product on demand that rerates based on regular updates from telematics providers. This product was a point-of-sale product, and Duck Creek notes that it has also supported a recreational vehicle carrier offering insurance through a point of sale. The solution can also support event-based insurance sold through a third party.

## **Client Base**

Globally, Duck Creek has 75 clients live on Duck Creek Policy, 65 of which are insurer clients (i.e., not MGAs, self-insureds). There are 60 insurer clients live in the US and Canada, most of which are smaller companies (under \$1B) using the solution to support a mix of personal and commercial lines.

Publicly announced clients include American National, AIG, Builders Mutual, Munich Re, and Manitoba Public Insurance.

<sup>†</sup> Other commercial lines include umbrella, floater, portfolio, excess/casualty, aerospace, and liquor liability.

## **Key Functions and Differentiators**

Duck Creek cites the key functions of Duck Creek Policy as:

- Policy administration and quoting (all channels)
- ISO, AAIS, and NCCI commercial lines templates (rating, forms, and pages)
- Automated and manual underwriting and pricing
- Reusable product components
- Product definition and maintenance

The company cites as key differentiators its comprehensive P/C insurance SaaS offering via Duck Creek OnDemand, including anywhere managed interactions (AMI); single point of change using low-code configuration for insurance product definition and maintenance; full insurance product life-cycle management, from requirements definition through development and testing; visual page design of responsive, persona-specific UIs native to the Duck Creek platform; as well as full implementation of ISO, AAIS, and NCCI lines in every state live in production and numerous program lines.

## **Solution Architecture and History**

Duck Creek Policy launched in 2001 and was re-architected in 2009. The latest release was in February 2021. Duck Creek reports that 30% of the solution's customers are on the latest version, 40% are on an older version released in the last three years, and 30% are on a version older than three years. Approximately 60% of customers have been through at least one upgrade.

The solution requires Microsoft SQL Server databases and Windows platforms. The solution is written in .NET (C#/VB.NET), with some SQL and ManuScript, plus a small amount of JavaScript.

# **APIs and Integration**

The solution provides REST and SOAP APIs. Duck Creek notes that all functions of the system are available via API.

## **Configurability and User Interface**

Duck Creek Policy is browser-based for all user interface functions.

Configuration for insurance products, screens, workflows, rules, and document authoring is via tools intended for BAs and non-IT staff. Configuration for integration to third-party service calls is via tools targeted for IT analysts.

## **Deployment Options**

Duck Creek deploys the solution on-prem and hosted on MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades.

The hosted solution is a single-tenant app server and database.

# **Average Implementation Length and Cost**

Duck Creek implements the solution through the company's own resources or a partner. It reports that Duck Creek Policy can be ready for initial go-live in nine months or less and fully rolled out in an additional 90 days or less. It reports that the average implementation cost is \$2M-\$5M.

## **Support**

Of the 1,400 employees at Duck Creek, there are between 250 and 1,000 employees on each of the product design and engineering, implementation (not counting partnerships), and support teams.

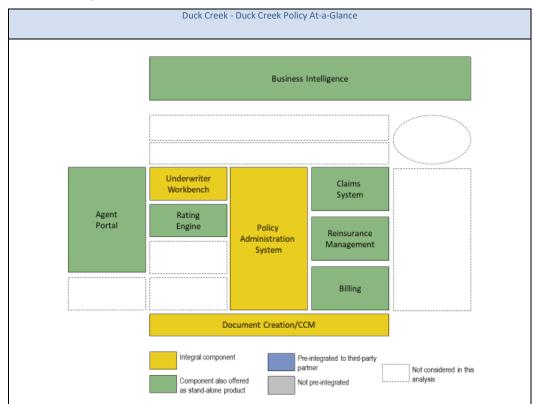
Duck Creek has North American offices in Bolivar, MO; Boston, MA; Chicago, IL; and Columbia, SC. Duck Creek has offices outside of North America in Sydney, Australia; Barcelona, Spain; Madrid, Spain; London, England; Chandigarh, India; and Mumbai, India.

Duck Creek offers customer engagement activities such as an online community, online training, a customer advisory committee, a user event, and training seminars.

## **Systems Integrator and Other Partners**

Publicly announced technology partnerships include LexisNexis, Verisk, Hyland, Microsoft, and Precisely. Publicly announced SI partnerships include Accenture, Coforge, Cognizant, Mindtree, and Cognizant.

# **Functionality**



#### **Policy Administration Functions**

The solution includes policy issue, premium accounting, out-of-sequence endorsement, forms management, and manuscripted policies out of the box. Bordereaux import is available with configuration using simple tools targeted for IT analysts or BAs.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

## **Rating Functions**

Duck Creek Rating is part of the suite and is also sold as a stand-alone rating engine.

Core rating functions like quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are all standard functions.

Compliance and change control functions like versioning and update management, change control functions, and auditability of rate versioning are standard functions. An applications and forms library with standard and customizable applications and forms is standard.

Integration functions like download to agency management systems and pre-integration to third-party data providers are standard. ISO rates/rules support, NCCI/Bureau of Workers' Comp rates/rules support, and ISO-formatted statistical data are standard functions. The solution does not currently include ISO ERC integration.

Setting insurer-specific defaults is a standard function. Multi-carrier comparison is available with configuration via tools for IT analysts or BAs. Product design and development tools are standard.

Rule definition and management functions including maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are standard.

Displacement testing (i.e., the ability to run existing books of business through proposed rate/product changes to determine impact) and testing, modeling, and product analysis are standard functions.

## **Underwriter Workbench Functions**

Duck Creek Underwriter Workbench is integral to the suite and is not marketed as a stand-alone solution.

Uploading/importing the submission data from a structured data feed and uploading/importing the submission information from documents (OCR-like functionality) are available out of the box.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, cancellation transaction, and underwriting multiple submissions as one work portfolio are all standard.

Capabilities like capturing underwriting analysis, capturing an underwriter's loss analysis, underwriter checklists that can validate information completeness and process completeness, submission rating, and pricing analysis and scheduled rating information are standard.

Allowing individual quotes for different lines to be combined into a single proposal is available with configuration via simple tools for IT analysts or BAs. Single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are available out of the box.

Document creation (proposals, applications, correspondence) and document storage are standard. A rules engine that automatically applies underwriting, workflow, and general business rules and inline reports/dashboards on tasks/work/work status are standard.

Workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries), a rules engine that interfaces to conditionally order specific data, and inline reports/dashboards to support underwriting analysis are available with configuration via tools for IT analysts or BAs.

Displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) is available with configuration via developer tools, XML manipulation, or a scripting language.

IM collaboration with other underwriters is available with configuration via developer tools, XML manipulation, or a scripting language. Proposal co-authoring with other underwriters, screen sharing with other underwriters, and agent-facing capabilities are standard.

Support for variable binding/approval authority by role is standard. Support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) is available with configuration via tools for IT analysts or BAs.

Preconfigured interfaces with policy admin systems, agent portals, and third-party data services are standard. Preconfigured integration with business intelligence environments is also standard. Preconfigured interfaces with external predictive scoring models are available via out-of-the-box integration to a third-party system or service.

The solution does not currently include natively calculated predictive scores.

## **Document Functions**

Duck Creek reports that while its document creation functions can be pre-integrated with Hyland OnBase, document functions are integral to Duck Creek Policy and not marketed as a stand-alone solution.

The solution supports mass-produced documents (e.g., statements) and ad hoc documents (e.g., correspondence, manuscripted policies).

The suite includes pre-packaged, pre-built forms, libraries, and templates from ISO and ACORD. The primary authoring environment is MS Word or Adobe Creative Suite. Content is designed to be managed by the average business user, with business rules, schema mapping, and data sources maintained by business analysts.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is available with configuration via tools for IT analysts or BAs.

Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools as well. A content repository and content management tools are available via out-of-the-box integration to a third-party system or service. Archival capabilities for all generated documents are standard. The solution supports ACORD XML industry-standard schema out of the box when paired with Duck Creek Producer.

#### **Agent Portal Functions**

Duck Creek Producer is part of the suite and is also sold as stand-alones solutions.

New business entry/submission, account clearance, agency management system upload, account or client view in addition to a policy view, underwriter view and/or tools, and agent/underwriter collaboration are standard.

Duck Creek notes that when integrated with Duck Core Systems, the following capabilities are available out of the box: policy change entry/submission, online payment, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, and a rating engine. Configuration through APIs would be required to integrate with a third-party system.

Quick quote is available with configuration using simple tools targeted for IT analysts or BAs. Uploading/importing data from Excel (e.g., locations, cars, drivers), renewal quote entry/submission, proposal creation, ACORD application creation, and side-by-side quote comparison are available with configuration using developer tools, XML manipulation, or a scripting language.

File attachment support is standard. Duck Creek notes that document creation is available out of the box when integrated with Duck Core Systems; configuration through APIs would be required to integrate with a third-party system.

Scheduling, diary, and calendar functions; workflow and task management capabilities; business intelligence and reporting; and a consumer portal are available with configuration via developer tools, XML manipulation, or a scripting language. Support for e-signature is available via out-of-the-box integration to a third-party system or service.

## **Reinsurance Functions**

Duck Creek Reinsurance Management is integral to the suite and is also offered as a stand-alone solution.

Automated notification if a reserve reaches a specific amount or treaties approach set limits and automated identification/calculation of accounts with applicable reinsurance are standard. Manual entry and tracking of cessions, reserves, and limits are available with configuration via tools for IT analysts or BAs.

Manual entry and tracking of assumed reinsurance contracts and automated assumed reinsurance calculations based on reinsured data feeds/connections are standard. The solution does not currently include retrocession reinsurance management.

Treaty management; facultative management; proportional support; non-proportional/excess of loss; multiple basis types (risks attaching, losses occurring, claims made); retroactive processing of late placements or midterm contract changes; and configuration of contract rules, formulas, and types are standard functions.

An end-user interface for manual contract entry is standard. An end-user interface for manual flagging of premiums and claims subject to reinsurance and an end-user interface for review and approval of assumed policies as part of facultative contracts are available with configuration via tools for IT analysts or BAs.

Batch file import/export for integration to other systems and real-time integration to an underwriting system (e.g., to display limits/reserves) are available with configuration via tools for IT analysts or BAs.

Real-time data intake from core systems (PAS, claims) via API or other mechanism and integration between other insurer/reinsurer systems are available with configuration via developer tools, XML manipulation, or a scripting language.

A standard library of canned reports, automated Schedule F reporting, and automated bordereau reporting are standard. Ad hoc reporting is available with configuration via tools for IT analysts or BAs. Duck Creek reports that integrated analytics for profitability analysis, exposure, "what if" analysis, risk profile, etc. is under development and should be available in less than six months. The solution does not currently include statutory or regulatory reporting.

Automated recoverable claim identification and viewing the full history and status of claims and claim recovery are standard.

Tracking reinsurance payables and receivables, entity management (CRM), document management and storage of the actual contracts, multi-currency support, and an audit trail for all transactions are standard. The solution does not currently include multi-language support.

## **Business Intelligence Functions**

Duck Creek Insights is part of the suite and is also sold as a stand-alone business intelligence component.

Duck Creek Insights provides a suite for enterprise data management capabilities. Data Hub consolidates and organizes internal and external data to enable operations and management reporting, analytics, and feeding downstream systems for business—including senior management, operations, actuaries, and statisticians.

The data management platform provides users control and insight into the quality and reliability of data and facilitates stewardship and data governance; it simplifies, documents, and automates the integration of data into insights, tracking business and technical metadata to enable stewardship and automate enterprise data lineage.

Business Analytics and Reporting offers Duck Creek customers insurance-based financial transaction data as well as out-of-the-box measures and report blueprints to address customer reporting and analytics needs via data marts and tabular models.

Duck Creek Insights' data functions include tools to support data governance, dictionaries, quality, and validation; an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes; and standard predefined reports and predefined insurance dashboards.

The solution also includes a presentation/reporting component, an ad hoc reporting tool, and data mining and analytics tools as a secondary part of the solution.

Duck Creek notes that the solution is cloud-based and does not incorporate a data lake, nor does it leverage an MPP solution, but it can be integrated with or co-exist with these environments.

The solution supports data movement via a hybrid of asynchronous messaging and batch and micro-batch ETL.

# **Billing Functions**

Duck Creek Billing is part of the suite and is also sold as a stand-alone billing component. Payment and billing plan configurability are standard. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available with configuration using developer tools, XML
	manipulation, or a scripting language
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available via out-of-the-box integration to a third-party
	system or service
Consumer portal:	Available with configuration using developer tools, XML
	manipulation, or a scripting language
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Available with configuration using developer tools, XML
	manipulation, or a scripting language
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Available with configuration using simple tools targeted
reporting	for IT analysts or BAs
Pay-as-you-report for workers' comp:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available via out-of-the-box integration to a third-party
	system or service
Billing for non-premium receivables (such	Available out of the box with no configuration necessary
as claims deductibles paid):	
as claims deductibles paid): Payment of non-refund payables (such as	Available with configuration using simple tools targeted
	Available with configuration using simple tools targeted for IT analysts or BAs
Payment of non-refund payables (such as	

#### **Claims Functions**

Duck Creek Claims is part of the suite and is also sold as a stand-alone claims component.

#### **Adjudication**

Medical case management, injury detail maintenance (coding), disability management, automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard functions.

#### Catastrophe

Catastrophe definition, automatic identification of catastrophe claims, attaching multiple LOBs and causes of loss to a single catastrophe, and mapping tools are standard functions.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, OFAC checking, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) are standard functions.

#### **Documents**

Image and media management, a correspondence or forms library, document rendering, a content repository and content management tools, and multi-channel delivery and output of documents (PDF, email, web, and print) are standard functions. State-specific claims reporting templates are available with configuration via tools for IT analysts or BAs.

#### **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; scripting for claims intake with reflexive questioning; custom question sets to prompt additional mandatory questions depending on given answers (branch scripting); claim characteristics scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim); claimant contact management data capture; and claim checking duplication are standard functions.

Mobile and smart device input are available with configuration via tools for IT analysts or BAs. Handling of FROI/SROI EDI reporting and integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) are available with configuration via developer tools, XML manipulation, or a scripting language.

#### Fraud

Configurable business rules and tasks (specific to fraud and special investigations) and the provision of multiple search and reporting criteria for fraud detection (via the ability to track common clients across multiple claims) are standard functions.

## Litigation

Litigation process tracking, including negotiation details and litigation costs, and creating separate tasks, workflow, diaries, and business rules for litigated cases (to allow legal case management) are standard functions.

#### **Multi-Channel**

An agent portal with self-service and a policyholder portal with self-service are available with configuration via simple tools targeted for IT analysts or BAs. E-signature capabilities are available via out-of-the-box integration to a third-party system or service. The solution does not currently include call center integration for FNOL via telephony or call center integration for claims status check via telephony.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, and assignment to facultative arrangements are available with configuration via tools for IT analysts or BAs.

#### Reporting

Standard reporting of configurable metrics for claims reporting, ad hoc reports, and dashboards are standard. Standard reporting of claims performance monitoring (including claims handling and high-risk indicators, e.g., fatality, large losses, fraud), reporting that includes jurisdiction-specific reports and forms, and electronic reporting or automated state filings are available with configuration via tools for IT analysts or BAs.

## Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; subrogation billing and the production of correct GL entries; granular tracking reserves and payments; automatic reserve calculations using business rules and risk characteristics; direct, case, average, factor, and expense reserve types; and jurisdictional wage and rate calculations integrated for workers' comp are standard.

#### **Vendor Management**

Vendor management functions and processing of required forms (including 1099s) are standard.

#### Workflow

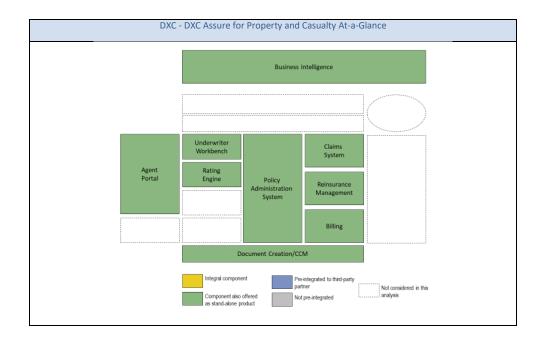
Automated workflow/task generation; overriding automated processes and manually triggering workflow processes; automatic work assignment based on configurable rules; generating notes, diaries, and reminders; inclusion of external documents (letters and pictures) in file notes; and assigning multiple adjusters to a single claim are standard functions.

Processing claim workflow trigger (CWT) files at insurer defined intervals is available with configuration using simple tools targeted for IT analysts or BAs. Compliance with the Document Repository Interface (DRI) standards is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include OCR-triggered workflow or full integration with electronic court filings (ECF2).

## **DXC - DXC Assure for Property and Casualty**

## **Executive Summary**

- DXC (NYSE: DXC) is an independent, end-to-end IT services company. It helps clients with digital transformation, expanding capabilities, and innovation efforts.
- DXC has headquarters in Tysons, VA and employs 138,000 people. The company reports an annual revenue of over \$21B.
- DXC Assure for Property and Casualty (includes DXC Assure Policy, Billing, Claims, and Reinsurance) is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has 13 US insurer clients, a mix of larger (over \$1B) and smaller (under \$1B) companies, using DXC Assure Policy to support personal and commercial lines.
- Publicly announced clients include Safety Insurance, Ohio Mutual, Pharmacists Mutual,
   Cincinnati Insurance Company, and FBL.
- The solution is browser-based for all user interface functions. It is written in Java with some .NET (C#/VB.NET).
- Configuration for insurance products, screens, and workflows is via tools for BAs and non-IT staff. Configuration for rules and document authoring is via tools for IT analysts. Integration to third-party service calls is available out of the box for most vendors using APIs.
- Implementation is available through the company's own resources. DXC deploys the solution on-prem, hosted at a private data center, and hosted on AWS.
- The company offers a SaaS delivery model that includes hosting, license, maintenance and support, perpetual access to the latest version, and the implementation of the upgrades.
- The company reports that the average time to initial go-live is 12 months or less and that the average cost is \$500K-\$1M.



## **Lines of Business Supported**

Demonal autor	Live elicate effection this product in 2 0 LIC states
Personal auto:	Live clients offering this product in 2-9 US states
Homeowners:	Live clients offering this product in 2-9 US states
Personal umbrella:	Live clients offering this product in 2-9 US states
Dwelling fire:	Live clients offering this product in 2-9 US states
Boatowners:	Live clients offering this product in 2-9 US states
Personal package:	Live clients offering this product in 2-9 US states
Commercial property:	Live clients offering this product in all 50 US states
General liability:	Live clients offering this product in all 50 US states
BOP:	Live clients offering this product in 10-49 US states
Commercial crime:	Live clients offering this product in all 50 US states
Commercial auto:	Live clients offering this product in all 50 US states
E&O/D&O:	Live clients offering this product in all 50 US states
Inland marine:	Live clients offering this product in all 50 US states
Professional liability (including medical malpractice):	Live clients offering this product in 10-49 US states
Commercial package:	Live clients offering this product in all 50 US states
Specialty:	Live clients offering this product in all 50 US states
Workers' comp:	Live clients offering this product in all 50 US states
Surety:	Live clients offering this product in all 50 US states
Other personal lines*:	Live clients offering this product in 2-9 US states
Other commercial lines†:	Live clients offering this product in all 50 US states

<sup>\*</sup> Other personal lines include renters.

## **Client Base**

Globally, DXC has 96 clients live on DXC Assure for Property and Casualty, all of which are insurer clients (i.e., not MGAs, self-insureds). There are 82 insurer clients in the US and Canada, a mix of larger (over \$1B) and smaller (under \$1B) companies.

DXC reports that there are 13 US insurer clients using DXC Assure Policy, the core policy administration software of DXC Assure for Property and Casualty, to support personal and commercial lines. DXC notes that it has another 30 US insurer clients using POINT IN (from which DXC Assure Policy is derived) to support personal and commercial lines.

Publicly announced clients include Safety Insurance, Ohio Mutual, Pharmacists Mutual, Cincinnati Insurance Company, and FBL.

<sup>†</sup> Other commercial lines include commercial fire, liability umbrella, and excess liability.

## **Key Functions and Differentiators**

DXC cites the key functions of DXC Assure for Property and Casualty as:

- Policy administration
- Claims and disbursements
- Billing and collections
- Rating and underwriting
- Management and analytics reporting

The company cites as its key differentiators its BPS and SaaS offerings; its digital extensions; its partner ecosystem, including InsureTechs; that it offers consulting, BPS, and implementation services; and that it is built on DXC's automated digital platform.

## **Solution Architecture and History**

DXC Assure Policy is the core policy administration software of DXC Assure for Property and Casualty, which was launched in 2019. The latest release was in March 2021. DXC reports that 20% of the solution's customers are on the latest version, 30% are on a version less than three years old, and 50% are on a version older than three years. Approximately 90% of customers have been through at least one upgrade.

The solution supports Microsoft SQL Server and Mongo databases as well as UNIX/Linux and Windows platforms. The solution is written in Java with some .NET (C#/VB.NET).

## **APIs and Integration**

The solution provides REST APIs; DXC notes that APIs are available for 80% of functionality.

## **Configurability and User Interface**

DXC Assure for Property and Casualty is browser-based and device-responsive for all user interface functions.

Configuration for insurance products, screens, and workflows is via tools for BAs and non-IT staff. Configuration for rules and document authoring is via tools for IT analysts. Integration to third-party service calls is available out of the box for most vendors using APIs.

#### **Deployment Options**

DXC offers the solution on-prem, hosted at a private data center, and hosted on AWS. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, perpetual access to the latest version, and the implementation of upgrades. The hosted solution is a single-tenant app server and database. (Multi-tenant options are available for claims.)

## **Average Implementation Length and Cost**

DXC implements the solution through its own resources. It reports that DXC Assure for Property and Casualty can be ready for initial go-live in 12 months or less and fully rolled out in an additional 90 days or less. The company reports that the average implementation cost is \$500K-\$1M.

## Support

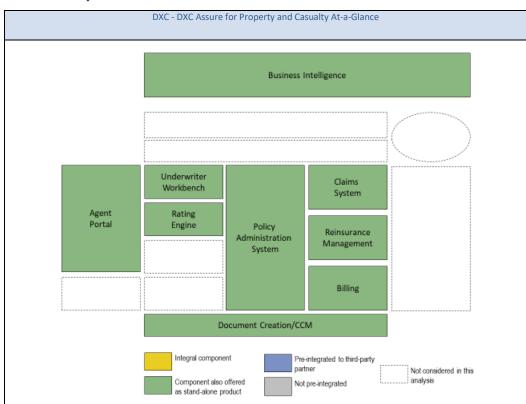
Of the 138,000 people employed at DXC, there are between 250 and 1,000 on each of the product design and engineering, implementation (not counting partnerships), and support teams. Support is provided from locations in the US, Canada, Bulgaria, Vietnam, and India.

DXC offers customer engagement activities such as an online community, online training, a customer advisory committee, a user event, and training seminars.

## **Systems Integrator and Other Partners**

DXC implements the solution through its own resources. Publicly announced technology partnerships include Amazon Web Services, IBM Watson, Microsoft, Sisense, and Xybion.

## **Functionality**



## **Policy Administration Functions**

The solution includes policy issue, premium accounting, out-of-sequence endorsement, bordereaux import, forms management, and manuscripted policies out of the box with no configuration necessary.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured. DXC notes that the system is role-based, so the same screens are used for policyholders, agents, etc. with configuration based on the role defined. DXC also asserts that it offers a system of engagement which provides an agent or consumer portal for all lines of business that can be integrated through its API framework to any policy admin system.

#### **Rating Functions**

DXC Assure Product is part of the suite and is also sold as a stand-alone rating engine.

A quick-quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are standard functions.

Versioning and update management, change control functions, and auditability of rate versioning are standard. An application and forms library with standard and customizable applications and forms is available via out-of-the-box integration to a third-party system or service.

Download to agency management systems and pre-integration to third-part data providers are standard. ISO rates/rules support, NCCI/Bureau of Workers' Comp rates/rules support, and ISO-formatted statistical data are standard. The solution does not currently include ISO ERC integration.

Setting insurer-specific defaults is available with configuration via tools for IT analysts or BAs. Multi-carrier comparison is available with configuration via developer tools, XML manipulation, or a scripting language. Saving/storing an in-process or completed policy change transaction to allow issuance at a later date as well as product design and development tools are standard.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), and date management capabilities are standard functions. Rating and rule definition and management (e.g., automatic driver assignment) are available with configuration via tools for IT analysts or BAs.

Testing, modeling, and product analysis are standard functions. Displacement testing (i.e., the ability to run existing book of business through proposed rate/product changes to determine impact) is available with configuration via tools for IT analysts or BAs.

#### **Underwriter Workbench Functions**

DXC Digital Underwriting is integral to the suite and is also marketed as a stand-alone solution.

Uploading/importing submission data from a structured data feed and uploading/importing the submission information from documents (OCR-like functionality) are available out of the box.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, and cancellation transactions are standard functions. The solution does not currently include supporting underwriting multiple submissions as one work portfolio.

Capturing underwriting analysis; underwriter checklists that can validate information completeness and process completeness; submission rating; pricing analysis and scheduled rating information; and providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are standard. Capturing underwriter loss analysis is available via out-of-the-box integration to a third-party system or service.

DXC reports that the ability to combine individual quotes for different lines into a single proposal is under development and should be available in less than six months. Document creation (proposals, applications, correspondence) and document storage are standard functions.

Workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries), a rules engine that interfaces to conditionally order specific data, inline reports/dashboards on tasks/work/work status, and inline reports/dashboards to support underwriting analysis are standard functions. A rules engine that applies underwriting, workflow, and general business rules automatically is available with configuration via tools for IT analysts or BAs.

Displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) is available via out-of-the-box integration to a third-party system or service.

IM collaboration with other underwriters, screen-sharing with other underwriters, and agent-facing capabilities are standard functions. The solution does not currently include proposal co-authoring with other underwriters.

Preconfigured interfaces with policy admin systems, agent portals, and third-party data services, as well as preconfigured integration with business intelligence environments, are available out of the box. Preconfigured interfaces with external predictive scoring models are available with configuration using simple tools targeted for IT analysts or BAs. Natively calculated predictive scores are available with configuration via developer tools, XML manipulation, or a scripting language.

Support for variable binding/approval authority by role and email notification/communication with agents and underwriters within the system (retaining a record of all emails) are standard functions.

#### **Document Functions**

DXC's Document Production is integral to the suite and is also marketed as a stand-alone solution.

The solution supports mass-produced documents (e.g., statements) and ad hoc documents (e.g., correspondence, manuscripted policies). It includes pre-packaged, pre-built forms, libraries, and templates from ACORD and ISO. The primary authoring environment is MS Word or a non-Microsoft/Adobe solution. Content is designed to be managed by business analysts; business rules, schema mapping, and data sources are maintained by technical resources.

The solution supports print, e-delivery, and mobile output channels. Management of preferences for print vs. electronic delivery is available out of the box. Clients must use the solution's built-in toolset for document authoring and content management workflow.

A content repository and content management tools as well as archival capabilities for all generated documents are standard. The solution supports industry-standard schemas from ACORD XML out of the box.

#### **Agent Portal Functions**

DXC Assure System of Engagement is integral to the suite and is also marketed as a stand-alone solution.

New business entry/submission, account clearance, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, integration and pre-fill with data services, policy change entry/submission, online payment, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, proposal creation, side-by-side quote comparison, agency management system upload, account or client view in addition to a policy view, underwriter view and/or tools, a rating engine, and agent/underwriter collaboration are all standard functions.

ACORD application creation is available with configuration via tools for IT analysts or BAs.

File attachment support; scheduling, diary, and calendar functions; workflow and task management capabilities; and a consumer portal are standard. E-signature, document creation, and business intelligence and reporting are available via out-of-the-box integration to a third-party system or service.

#### **Reinsurance Functions**

SICS Cede is integral to the suite and is also marketed as a stand-alone solution.

Ceded reinsurance management functions like manual entry and tracking of cessions, reserves, and limits; automated notification if a reserve reaches a specific amount or treaties approach set limits; and automated identification/calculation of accounts with applicable reinsurance are standard.

Automated assumed reinsurance calculations based on reinsured data feeds/connections and retrocession reinsurance management are standard functions. Manual entry and tracking of assumed reinsurance contracts are available with configuration using simple tools targeted for IT analysts or BAs.

Treaty management; facultative management; proportional support; non-proportional/excess of loss; multiple basis types (risks attaching, losses occurring, and claims made); retroactive processing of late placements or midterm contract changes; and configuration of contract rules, formulas, and types are standard functions.

End-user interfaces for manual entry of contracts, for manual flagging of premiums and claims subject to reinsurance, and for review and approval of assumed policies as part of facultative contracts are available out of the box.

Real-time data intake from core systems (e.g., PAS, claims) via API or other mechanism and real-time integration to an underwriting system (e.g., to display limits/reserves) are available out of the box. Batch file import/export for integration to other systems and integration between other insurer/reinsurer systems are available with configuration via developer tools, XML manipulation, or a scripting language.

Statutory and regulatory reporting, a standard library of canned reports, automated Schedule F reporting, and automated bordereau reporting are available with configuration via tools for IT analysts or BAs. Ad hoc reporting and integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc. are available via out-of-the-box integration to a third-party system or service.

Automated recoverable claims identification is available with configuration via tools for IT analysts or BAs. Viewing the full history and status of claims and claim recovery is available via out-of-the-box integration to a third-party system or service.

Tracking reinsurance payables and receivables, entity management (CRM), document management and storage of the actual contracts, multi-currency support, and audit trail for all transactions are standard functions. Multi-language support is available with configuration using developer tools, XML manipulation, or a scripting language.

### **Business Intelligence Functions**

DXC's Business Analytics is integral to the suite and is also marketed as a stand-alone solution.

Business Analytics is an integrated query, reporting, and analysis solution that allows users to access data from desktops to view, sort, and analyze policy data. The solution is cloud-native and browser- and device-agnostic.

The solution incorporates a data lake to support schema on read and unstructured data.

The solution includes self-service dashboards for business users with report output; a UI that includes embedded geographic maps, NLP capabilities, and AI/ML; in-chip analytics; multiple data sources, and more than 100 data source connectors; as well as live connections for near-real-time data.

The solution includes a presentation/reporting component, standard predefined reports and predefined insurance dashboards, an ad hoc reporting tool, and data mining and analytics tools.

The solution supports real-time streaming data movement (e.g., use of Kafka).

## **Billing Functions**

DXC Assure Billing is part of the suite and is also sold as a stand-alone billing component. Payment and billing plan configurability is available out of the box. The table below on the following page shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available out of the box with no configuration necessary
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available via out-of-the-box integration to a third-party
	system or service
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Available out of the box with no configuration necessary
Billing dashboarding/reporting:	Available via out-of-the-box integration to a third-party
	system or service
Workers' compensation monthly self-	Available out of the box with no configuration necessary
reporting	
Pay-as-you-report for workers' comp:	Available out of the box with no configuration necessary
Invoice and correspondence:	Available via out-of-the-box integration to a third-party
	system or service
Check generation/production:	Available via out-of-the-box integration to a third-party
	system or service
Billing for non-premium receivables (such	Available with configuration using simple tools targeted
as claims deductibles paid):	for IT analysts or BAs
Payment of non-refund payables (such as	Available with configuration using simple tools targeted
policy dividends or mutual dividends):	for IT analysts or BAs
Multi-currency support in a single instance	Yes
of the application:	

#### **Claims Functions**

DXC Assure Claims is part of the suite and is also sold as a stand-alone claims component.

#### **Adjudication**

Medical case management, injury detail maintenance (coding), disability management, automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard functions.

#### Catastrophe

Catastrophe definition, automatic identification of catastrophe claims, attaching multiple LOBs and causes of loss to a single catastrophe, and mapping tools are standard functions.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, OFAC checking, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support, etc.) are standard functions.

#### **Documents**

Image and media management, a correspondence or forms library, state-specific claims reporting templates, document rendering, a content repository and content management tools, and multi-channel delivery and output of documents (e.g., PDF, email, web, and print) are standard functions.

#### **FNOL**

Recording and storage of new loss notices (FROI/SROI) from a web portal, email, fax, or manual entry; handling of FROI/SROI EDI reporting; mobile and smart device input; scripting for claims intake with reflexive questioning; customized uestion sets to prompt mandatory additional questions depending on the answers given (branch scripting); claim characteristics scoring (to calculate alerts, trigger workflow, assign a claims handler, or otherwise segment the claim); claimant contact management data capture; checking for duplicate claims; and integration with external vendors and services (e.g., car rental companies or car/equipment repair shops) are all standard functions.

#### Fraud

Configurable business rules and tasks (specific to fraud and special investigations) and the provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims are available via out-of-the-box integration to a third-party system or service.

#### Litigation

Litigation process tracking (including negotiation details and litigation costs) and creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management are standard functions.

#### **Multi-Channel**

E-signature capability, an agent portal with self-service, a policyholder portal with self-service, call center integration for FNOL via telephony and call center integration for claims status check via telephony are available via out-of-the-box integration to a third-party system or service.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, and assignment to facultative arrangements are available via out-of-the-box integration to a third-party system or service.

#### Reporting

Standard reporting of claims performance monitoring (including claims handling and high-risk indicators, e.g., fatality, large losses, fraud), standard reporting of configurable metrics for claims reporting, ad hoc reports, dashboards, reporting that includes jurisdiction-specific reports and forms, and electronic reporting or automated state filings are available via out-of-the-box integration to a third-party system or service.

#### Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; subrogation billing and the production of correct GL entries; granular tracking of reserves and payments; automatic reserve calculations using business rules and risk characteristics; direct, case, average, factor, and expense reserve types; and jurisdictional wage and rate calculations integrated for workers' comp are standard functions.

#### **Vendor Management**

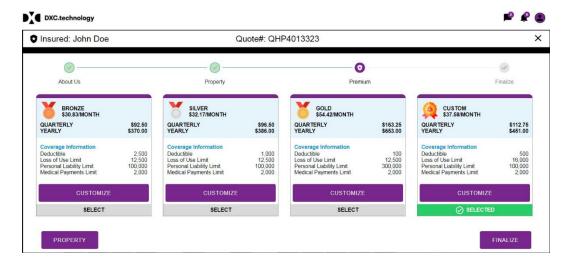
Vendor management functions and processing required forms (including 1099s) are standard.

#### Workflow

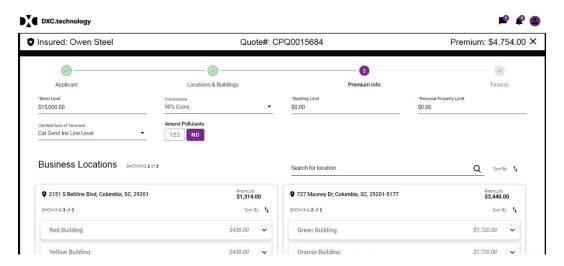
Overriding automated processes and triggering workflow processes manually; automatic work assignment based on configurable rules; generating notes, diaries, and reminders; inclusion of external documents (letters and pictures) in file notes; and assigning multiple adjusters to single claims are standard functions. Automated workflow/task generation and processing claim workflow trigger (CWT) files at insurer-defined intervals are available with configuration via tools for IT analysts or BAs. Compliance with the Document Repository Interface (DRI) standards is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include OCR-triggered workflow or full integration with electronic court filings (ECF2).

## **Screenshots**

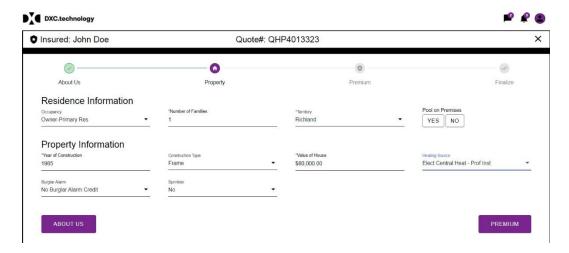
Ability to Generate Quote Options



Commercial Pre-Fill With Multiple Locations



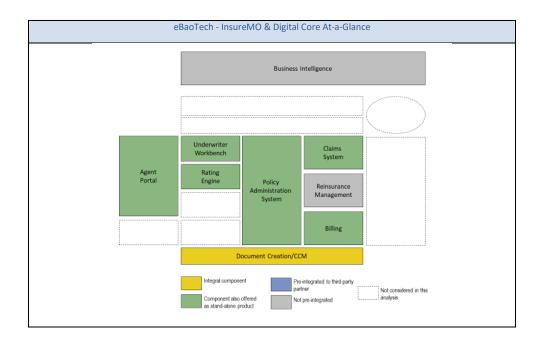
## Entry and Pre-Fill of Quote Details



## eBaoTech - InsureMO & Digital Core

## **Executive Summary**

- eBaoTech is a privately held company with international headquarters in Singapore. It employs 1,700 people and has an annual revenue in the range of \$50M-\$100M.
- InsureMO & Digital Core is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, billing, and claims components.
- It currently has three live US insurer clients using the suite, which are a mix of larger (over \$1B) and smaller (under \$1B) companies using the solution to support commercial lines with some personal.
- eBaoTech did not disclose any clients for the suite.
- The solution is browser-based for all user interface functions. It is written in Java, JavaScript, and a small amount of a proprietary database language.
- Configuration for insurance products, screens, workflows, rules, and document authoring is
  via simple tools targeted for BAs or non-IT staff. Integration to third-party service calls is
  configured using developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's own resources or an implementation
  partner. eBaoTech notes that the solution is cloud-agnostic, with current US
  implementations on AWS and MS Azure. The company offers a SaaS delivery model that
  includes hosting, license, maintenance and support, ongoing access to the latest version, and
  the implementation of upgrades.
- The company reports that the average time to initial go-live is 180 days or less and that the average implementation cost is \$500K-\$1M.



## **Lines of Business Supported**

Personal auto:	Live clients offering this product in 10-49 US states
Homeowners:	Live clients offering this product in 10-49 US states
Personal umbrella:	Live clients offering this product in 10-49 US states
Dwelling fire:	Solution is designed to support, but no clients live or implementing
Boatowners:	Solution is designed to support, but no clients live or implementing
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Live clients offering this product in all 50 US states
General liability:	Live clients offering this product in all 50 US states
BOP:	Solution is designed to support, but no clients live or implementing
Commercial crime:	Live clients offering this product in all 50 US states
Commercial auto:	Live clients offering this product in 2-9 US states
E&O/D&O:	Live clients offering this product in 10-49 US states
Inland marine:	Live clients offering this product in all 50 US states
Professional liability (including medical malpractice):	Live clients offering this product in 10-49 US states
Commercial package:	Live clients offering this product in all 50 US states
Specialty:	Live clients offering this product in all 50 US states
Workers' comp:	Clients currently in implementation for this line/product
Surety:	Solution is designed to support, but no clients live or implementing
Other personal lines*:	Live clients offering this product in 10-49 US states
Other commercial lines:	Live clients offering this product in all 50 US states

<sup>\*</sup> Other personal lines include personal accident and travel.

eBaoTech provides APIs that allow on-demand, point-of-sale products like flight, travel, and event insurance to be embedded into third-party sales channels.

## **Client Base**

Globally, eBaoTech has 66 clients live on InsureMO & Digital Core, 36 of which are insurer clients (i.e., not MGAs, self-insureds).

There are three insurer clients in the US, which are a mix of larger (over \$1B) and smaller (under \$1B) companies using the solution to support commercial lines with some personal.

eBaoTech did not disclose any clients for the suite.

<sup>†</sup> Other commercial lines include auto physical damage and non-trucking liability.

## **Key Functions and Differentiators**

eBaoTech cites the key functions of InsureMO & Digital Core as:

- Digital Product Library (DIPL) supporting life and P/C insurance, which provides flexible product definition capability enabling rapid release and business expansion
- Digital Core, including policy management, claims, billing, and collections, that is cloudenabled and has API-based capabilities to support the entire policy life cycle
- Digital Claims module that provides end-to-end claims process and is supported by 400+ prebuilt APIs that enable fast implementation
- Digital Billing, Collection, and Payment module with pre-built APIs that manages real-time financial records, handles countersettlements, and supports transfer/GL processes
- Data warehouse and analytics, which support a complete big data ecosystem and integrate internal systems' data with external, third-party data

The company cites as its key differentiators that it offers a configurable, API-based platform with open integration framework and platform that supports heterogeneous system integration and dynamic expansion models based on ACORD models; out-of-the-box support for standard, excess, and surplus market with support for all mainstream personal and commercial lines, both admitted and non-admitted; a pre-built Digital Product Factory (DIPL) that enables customers to configure simple and complex products as well as reuse existing product assets for faster new product launch and product life-cycle maintenance; workflow and service orchestration that allow insurance companies to combine/customize processes per their business needs; and a user interface SDK, which uses the latest UI technology to reduce the UI development effort and provide a high-quality user experience.

## **Solution Architecture and History**

InsureMO & Digital Core launched in 2002 and were re-architected in 2015. The latest release was in 2020.

eBaoTech reports that 60% of the solution's customers are on the latest version, with 30% on a version less than three years old and 30% on a version older than three years. 30% of customers have been through at least one upgrade.

The solution supports Oracle, Microsoft SQL Server, MySQL, MariaDB, and PostgreSQL databases as well as UNIX/Linux, Windows, AWS, and MS Azure platforms. It is written in Java, JavaScript, and a small amount of a proprietary database language.

## **APIs and Integration**

The solution provides REST APIs. eBaoTech notes that its API-first approach exposes all services via highly available and ready-to-use APIs.

## **Configurability and User Interface**

InsureMO & Digital Core are browser-based for all user interface functions.

Configuration for insurance products, screens, workflows, rules, and document authoring is via simple tools targeted for BAs and non-IT staff. Integration to third-party service calls is configured via developer tools, XML manipulation, or a scripting language.

## **Deployment Options**

eBaoTech notes that the solution is cloud-agnostic, with current US implementations on AWS and MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades.

The hosted solution is a multi-tenant app server and database with single-tenant options available.

## **Average Implementation Length and Cost**

eBaoTech implements the solution through its own resources or through an implementation partner.

It reports that InsureMO & Digital Core can be ready for initial go-live in 90 days or less and fully rolled out in an additional 12 months or less. The company reports that the average implementation cost is \$500K-\$1M.

## Support

Of the 1,700 people employed at eBaoTech, there are between 250 and 1,000 on each of the product design and engineering, implementation (not counting partnerships), and support teams.

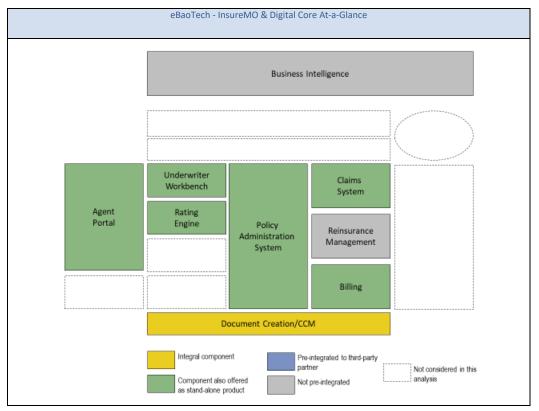
eBaoTech notes that it has offices in 16 locations around the world. In the US, it combines a remote workforce with near-shore and offshore delivery center network locations in Brazil, China, India, and Australia.

eBaoTech offers customer engagement activities such as online training.

## **Systems Integrator and Other Partners**

Publicly announced technology partnerships include AWS Partner Network and MS Azure. Publicly announced SI partnerships include Cognizant, HCL, and Candella Labs.

## **Functionality**



#### **Policy Administration Functions**

Policy issue, premium accounting, out-of-sequence endorsement, forms management, and manuscripted policies are standard functions. The solution does not currently include bordereaux import.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

## **Rating Functions**

InsureMO Rating is integral to the suite and is also marketed as a stand-alone solution.

A quick-quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are standard functions.

Versioning and update management, change control functions, and auditability of rate versioning are standard functions. An application and forms library with standard and customizable applications and forms is available via out-of-the-box integration to a third-party system or service.

Download to agency management systems is available out of the box. Pre-integration to third-party data providers is available via out-of-the-box integration to a third-party system or service.

NCCI/Bureau of Workers' Comp rates/rules support and ISO-formatted statistical data are not currently available. eBaoTech reports that ISO rates/rules support and ISO ERC integration are under development and should be available in less than six months.

Saving/storing an in-process or completed policy change transaction to allow issuance at a later date is standard. The ability to set insurer-specific defaults and multi-carrier comparison are available with configuration using simple tools targeted for IT analysts or BAs.

Product design and development tools are available out of the box.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, and import/export rating tables to/from spreadsheets (e.g., Excel). Rating and rule definition and management (e.g., automatic driver assignment) and date management capabilities are available with configuration via tools for IT analysts or BAs.

Currently, the solution does not include testing, modeling, and product analysis or displacement testing (i.e., the ability to run existing books of business through proposed rate/product changes to determine impact).

#### **Underwriter Workbench Functions**

InsureMO Digital Underwriting is integral to the suite and is also marketed as a stand-alone solution.

Uploading/importing the submission data from a structured data feed is available out of the box with no configuration necessary. Uploading/importing the submission information from documents (OCR-like functionality) is available via out-of-the-box integration to a third-party system or service.

Support for new business transactions/underwriting, policy change transaction/underwriting, renewal transactions/underwriting, the non-renewal transaction, and cancellation transactions is available out of the box. Supporting underwriting multiple submissions as one work portfolio and allowing individual quotes for different lines to be combined into a single proposal are also available out of the box with no configuration necessary.

The ability to combine individual quotes for different lines into a single proposal; capturing underwriting analysis; capturing an underwriter's loss analysis; underwriter checklists that can validate information completeness and process completeness; submission rating; pricing analysis and scheduled rating information; and providing a single current and historical view of the insured's account across the enterprise, lines of business, and policy systems are standard.

Document storage is standard. Document creation (proposals, applications, correspondence) is available with configuration using simple tools targeted for IT analysts or BAs.

A rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); and inline reports/dashboards on tasks/work/work status are standard.

A rules engine that interfaces to conditionally order specific data, inline reports/dashboards to support underwriting analysis, and displaying aggregate risk accumulations for existing book at granular location level (i.e., geo-mashup of existing book and proposed risk) are available with configuration using developer tools, XML manipulation, or a scripting language.

Proposal co-authoring with other underwriters is available with configuration using developer tools, XML manipulation, or a scripting language. Screensharing with other underwriters is available via out-of-the-box integration to a third-party system or service. Agent-facing capabilities are standard. Currently, the solution does not include IM collaboration with other underwriters.

Preconfigured interfaces with policy admin systems, preconfigured interfaces with agent portals, preconfigured integration with business intelligence environments, and preconfigured interfaces with third-party data services are standard.

Natively calculated predictive scores and preconfigured interfaces with external predictive scoring models are available with configuration using developer tools, XML manipulation, or a scripting language.

Support for variable binding/approval authority by role and support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) are standard.

#### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents, e.g., statements (the most common use case), and ad hoc documents, e.g., correspondence and manuscripted policies (the less common use case). The solution includes pre-packaged, pre-built forms, libraries, and templates for ISO.

The primary authoring environment is a custom environment. Content, business rules, schema mapping, and data sources are all designed to be maintained by business analysts.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is available with configuration using developer tools, XML manipulation, or a scripting language. Clients primarily use external tools for document authoring and content management workflow, but they have the option to use built-in tools as well.

A content repository, content management tools, and archival capabilities for all generated documents are standard. The solution supports ACORD XML industry-standard schemas out of the box.

#### **Agent Portal Functions**

Agent portal functionality is integral to the suite and is not marketed as a stand-alone solution.

New business entry/submission, account clearance, quick quote, integration and pre-fill with data services, policy change entry/submission, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, proposal creation, account or client view in addition to a policy view, underwriter view and/or tools, agent/underwriter collaboration, and a rating engine are standard.

Uploading/importing data from Excel (e.g., locations, cars, drivers) and agency management system upload are available with configuration using developer tools, XML manipulation, or a scripting language. ACORD application creation and side-by-side quote comparison are available with configuration using simple tools targeted for IT analysts or BAs. Currently, the solution does not include online payment.

File attachment support and workflow and task management capabilities are standard. Document creation is available with configuration using simple tools targeted for IT analysts or BAs. Scheduling, diary, and calendar functions as well as a consumer portal are available with configuration using developer tools, XML manipulation, or a scripting language. Business intelligence and reporting capabilities are not currently available. eBaoTech notes that support for e-signature is under development and should be available in less than six months.

#### **Reinsurance Functions**

Reinsurance is not pre-integrated as part of the suite.

## **Business Intelligence Functions**

eBaoTech provides an ETL process to extract data from transaction systems to a predefined, dimensional data model, which can be accessed by any kind of BI tool.

### **Billing Functions**

Digital Core Billing is integral to the suite and is also marketed as a stand-alone solution. Payment and billing plan configurability is available via out-of-the-box integration to a third-party system or service. The table below shows the availability of other billing functions.

Direct bill:	Currently not available, but could be available with a
	system enhancement
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Currently not available, but could be available with a
	system enhancement
Split or multi-payer bill:	Available with configuration using developer tools, XML
	manipulation, or a scripting language
Flexible and configurable payment plans:	Currently not available, but could be available with a
	system enhancement
Support for flexible payment types (e.g.,	Currently not available, but could be available with a
payment card, check, EFT, payroll	system enhancement
deduction):	
Automated rules for payment application	Available with configuration using developer tools, XML
and disbursements:	manipulation, or a scripting language

Real-time account and payment calculation,	Currently not available, but could be available with a
scheduling, recalculation, and rescheduling:	system enhancement
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Available with configuration using simple tools targeted for IT analysts or BAs
Automated workflow and task management:	Available out of the box with no configuration necessary
Electronic bill presentment:	Currently not available, but could be available with a system enhancement
Agent portal:	Available with configuration using developer tools, XML manipulation, or a scripting language
Consumer portal:	Available with configuration using developer tools, XML manipulation, or a scripting language
Online payment:	Available via out-of-the-box integration to a third-party
	system or service
Out-of-the-box integration with banks/credit card companies for token-based processing:	No
Payroll deduction:	Currently not available, but could be available with
	integration to another system or service
Billing dashboarding/reporting:	Available with configuration using developer tools, XML manipulation, or a scripting language
Workers' compensation monthly self-	Currently not available, but could be available with
reporting	integration to another system or service
Pay-as-you-report for workers' comp:	Currently not available, but could be available with a system enhancement
Invoice and correspondence:	Available via out-of-the-box integration to a third-party system or service
Check generation/production:	Available with configuration using developer tools, XML manipulation, or a scripting language
Billing for non-premium receivables (such as claims deductibles paid):	Available out of the box with no configuration necessary
Payment of non-refund payables (such as policy dividends or mutual dividends):	Available out of the box with no configuration necessary
Multi-currency support in a single instance of the application:	Yes

## **Claims Functions**

Digital Core Claims is integral to the suite and is also marketed as a stand-alone solution.

## **Adjudication**

Deductible tracking is standard.

Medical case management, injury detail maintenance (coding), disability management, automated coverage verification, and aggregate tracking (erosion of policy limits) are available with configuration using simple tools targeted for IT analysts or BAs.

#### Catastrophe

Attaching multiple LOBs and causes of loss to a single catastrophe is standard. Catastrophe definition and mapping tools are available with configuration using simple tools targeted for IT analysts or BAs. The solution does not currently include automatic identification of catastrophe claims.

#### **Disbursements**

Calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), and combining multiple pending payments for a single client into one disbursement are standard functions. Check processing is available via out-of-the-box integration to a third-party system or service. Currently, the solution does not include calculating and scheduling recurring payments, OFAC checking, or handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support).

#### **Documents**

Image and media management, a correspondence or forms library, state-specific claims reporting templates, document rendering, a content repository and content management tools, and multi-channel delivery and output of documents (PDF, email, web, and print) are all available via out-of-the-box integration to a third-party system or service.

#### **FNOL**

Claim characteristics scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim), claimant contact management data capture, and checking for duplicate claims are all standard functions.

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; handling of FROI/SROI EDI reporting; mobile and smart device input; scripting for claims intake with reflexive questioning; and custom question sets to prompt additional mandatory questions depending on given answers (branch scripting) are available with configuration using simple tools targeted for IT analysts or BAs. Integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) is available via out-of-the-box integration to a third-party system or service.

#### Fraud

Configurable business rules and tasks (specific to fraud and special investigations) are standard. Provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims are not currently available.

#### Litigation

Litigation process tracking, including negotiation details and litigation costs, is standard. The ability to create separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management is available with configuration using developer tools, XML manipulation, or a scripting language.

#### **Multi-Channel**

E-signature capability, an agent portal with self-service, a policyholder portal with self-service, call center integration for FNOL via telephony, and call center integration for claims status check via telephony are available via out-of-the-box integration to a third-party system or service.

# Reinsurance

The solution does not currently include identification of claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, or assignment to facultative arrangements.

#### Reporting

Standard reporting of claims performance monitoring, including claims handling, and high-risk indicators such as fatality, large losses, and fraud; standard reporting of configurable metrics for claims reporting; ad hoc reports; dashboards; and reporting that includes jurisdictional-specific reports and forms are all available via out-of-the-box integration to a third-party system or service. The solution does not currently include electronic reporting or automated state filings.

#### Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; subrogation billing and the production of correct GL entries; and granular tracking of reserves and payments are standard. Automatic reserve calculations using business rules and risk characteristics are available with configuration using simple tools targeted for IT analysts or BAs. Direct, case, average, factor, and expense reserve types are available with configuration using developer tools, XML manipulation, or a scripting language. The solution does not currently include jurisdictional wage and rate calculations integrated for workers' comp.

### **Vendor Management**

Vendor management and processing required forms (including 1099s) are standard functions.

#### Workflow

Automated workflow/task generation; overriding automated processes and manually triggering workflow processes; generating notes, diaries, and reminders; and assigning multiple adjusters to a single claim are standard. Processing claim workflow trigger (CWT) files at insurer-defined intervals is available with configuration using developer tools, XML manipulation, or a scripting language. The inclusion of external documents (letters and pictures) in file notes and compliance with the Document Repository Interface (DRI) standards are available via out-of-the-box integration to a third-party system or service. The solution does not currently include OCR-triggered workflow or full integration with electronic court filings (ECF2).

#### **Screenshots**

InsureMO Components



Pre-Built Digital Product Library Catalog



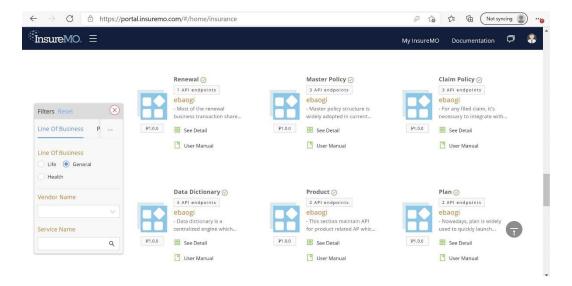
# Cyber Liability Insurance

Explore

Cyber liability insurance provides coverage for certain losses incurred as result of data breaches. When customer data is compromised, it's usually not arbitrary or otherwise public information being targeted. Credit card data, names, phone numbers, addresses, driver's license numbers, health records, and even social security numbers can quickly find themselves in the wrong hands with a few strokes of the keyboard. Cyber liability insurance can protect the company from a range of cyber-attacks. Aside from basic cyber liability coverage, cyber liability policy typically also includes coverage for Website Media Content Liability, Regulatory Defense and Penalties as well as PCI Fines, Expenses and Costs.

#### **Key Features** Stock Keeping Units Rating Coverages Offered Rules Forms/Endorsements Offered 2 SKU's / variations Standard rating calculation is In this product, InsureMO A comprehensive list of Standard set of already provided, and insurer offering typical cyber liability business and validation rules forms/endorsements offered & with combination of coverages, standalone Cyber insurance specific pricing is subject to coverages and also includes variety of exclusions/extensions to provided that govern various and a package Cyber product insurer design, review, and coverage for Website Media validation, underwriting including Technology E&O and Miscellaneous Professional attach to policy contracts (display on screen and print on approval. Content Liability, Regulatory threshold (refer, decline, and Defense and Penalties as well risk appetite limits). Liability coverages. as PCI Fines, Expenses and policy documents).

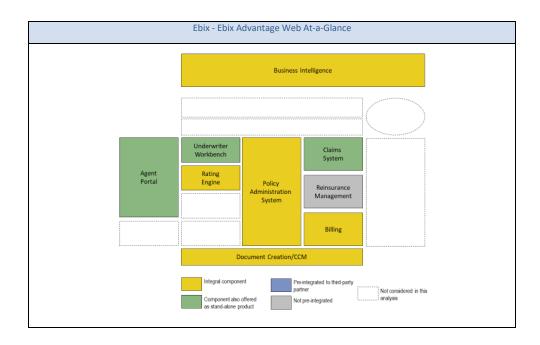
#### eBaoTech Insurance Service API Screenshot



## **Ebix - Ebix Advantage Web**

## **Executive Summary**

- Ebix is a public company (NASDAQ: EBIX) with a market cap of over \$1B.
- Ebix has headquarters in Atlanta, GA and employs 9,000 people. The company's annual revenue is in the range of \$500M-\$1B.
- Ebix Advantage Web is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, billing, and claims components.
- It currently has 17 live US/Canadian insurer clients using the suite, most of which are smaller companies (under \$1B) using the solution to support commercial lines with some personal.
- Publicly announced clients include FUMI, WMIC, Wright Risk, ISMIE, and MEDMARC.
- The solution is browser-based for all user interface functions. It is written in .NET (C#/VB.NET).
- Configuration for insurance products, workflows, rules, integration to third-party service
  calls, and document authoring is via developer tools, XML manipulation, or a scripting
  language. Configuration for screens is via code.
- Implementation is available through a partner. Ebix deploys the solution on-prem, hosted at
  a private data center, and hosted on AWS. The company offers a SaaS delivery model that
  includes hosting, license, maintenance and support, ongoing access to the latest version, and
  the implementation of upgrades.
- The company reports that the average time to initial go-live is 180 days or less and that the average implementation cost is \$500K-\$1M.



## **Lines of Business Supported**

Personal auto:	Live clients offering this product in 2-9 US states
Homeowners:	Live clients offering this product in 10-49 US states
Personal umbrella:	Live clients offering this product in one US state
Dwelling fire:	Solution is designed to support, but no clients live or implementing
Boatowners:	Solution is designed to support, but no clients live or implementing
Personal package:	Live clients offering this product in one US state
Commercial property:	Live clients offering this product in one US state
General liability:	Live clients offering this product in one US state
BOP:	Live clients offering this product in one US state
Commercial crime:	Live clients offering this product in one US state
Commercial auto:	Live clients offering this product in 2-9 US states
E&O/D&O:	Not currently supported
Inland marine:	Live clients offering this product in 2-9 US states
Professional liability (including medical malpractice):	Live clients offering this product in all 50 US states
Commercial package:	Live clients offering this product in one US state
Specialty:	Not currently supported
Workers' comp:	Live clients offering this product in 2-9 US states
Surety:	Not currently supported
Other personal lines*:	Live clients offering this product in 10-49 US states
Other commercial lines:	Not currently supported

<sup>\*</sup> Other personal lines include farm.

## **Client Base**

Globally, Ebix has 20 clients live on Ebix Advantage Web, all of which are insurer clients (i.e., not MGAs, self-insureds). There are 17 clients in the US and Canada, most of which are smaller companies (under \$1B) using the solution to support commercial lines with some personal.

Publicly announced clients include FUMI, WMIC, Wright Risk, ISMIE, and MEDMARC.

## **Key Functions and Differentiators**

Ebix cites the key functions of Ebix Advantage Web as:

- Fully integrated policy administration system
- Contact management
- Rating and underwriting
- Claims management
- Billing and accounting

The company cites as its key differentiators a table-driven line-of-business builder, full functionality off the shelf, a high degree of configurability, and cost efficiency.

## **Solution Architecture and History**

Ebix Advantage Web launched in 1989 and was re-architected in 2009. The latest release was in November 2018. Ebix reports that 70% of the solution's customers are on the latest version, while 30% are on a version older than three years. All of the customers have been through at least one upgrade.

The solution supports Microsoft SQL Server databases and Windows platforms. It is written in .NET (C#/VB.NET).

## **APIs and Integration**

The solution provides REST and SOAP APIs.

## **Configurability and User Interface**

Ebix Advantage Web is browser-based for all user interface functions.

Configuration for insurance products, workflows, rules, integration to third-party service calls, and document authoring is via developer tools, XML manipulation, or a scripting language. Configuration for screens is via code.

## **Deployment Options**

Ebix deploys the solution on-prem, hosted at a private data center, and hosted on AWS. The private data center is Ebix Cloud, co-located at an SSAE 16 compliant data center. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades. The hosted solution is a multitenant app server and database. A single-tenant app server option is also available.

## Average Implementation Length and Cost

Ebix implements the solution through a partner. It reports that Ebix Advantage Web can be ready for initial go-live in 180 days or less and fully rolled out in an additional 12 months or less. The company reports that the average implementation cost is \$500K-\$1M.

## Support

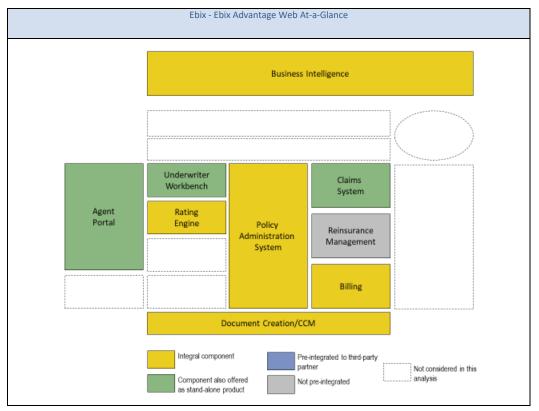
Of the 9,000 people employed at Ebix, there are between 100 and 250 on the product design and engineering team, between 50 and 100 on the implementation team (not counting partnerships), and between ten and 50 on the support team.

Resources are located out of the US, India, and Singapore. Ebix offers customer engagement activities such as an online community, online training, and a user event.

## Systems Integrator and Other Partners

Publicly announced technology partnerships include ISO, Metro Bureau Reporting, Mitchell, ACORD, and NCCI.

## **Functionality**



#### **Policy Administration Functions**

Policy issue, premium accounting, out-of-sequence endorsement, bordereaux import, and forms management are standard functions. The solution does not currently include manuscripted policies.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

## **Rating Functions**

A rating engine is integral to the suite and is not marketed as a stand-alone solution.

Multi-line, multi-state, and multi-location rating on a single policy is a standard function. Quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; and rating multiple coverage/quote alternatives are available with configuration via tools for IT analysts or BAs. Out-of-sequence endorsements are available with configuration via developer tools, XML manipulation, or a scripting language.

Versioning and update management, change control functions, and auditability of rate versioning are standard functions. An application and forms library with standard and customizable applications and forms is standard.

Download to agency management systems and pre-integration to third-party data providers are available with configuration via developer tools, XML manipulation, or a scripting language.

ISO rates/rules support, NCCI/Bureau of Workers' Comp rates/rules support, and ISO-formatted statistical data are available with configuration via developer tools, XML manipulation, or a scripting language. The solution doesn't currently include ISO ERC integration.

Saving/storing an in-process or completed policy change transaction to allow issuance at a later date is standard. The ability to set insurer-specific defaults is available with configuration via IT analysts or BAs. The solution does not currently include multi-carrier comparison.

Product design and development tools are available with configuration via developer tools, XML manipulation, or a scripting language.

Import/export rating tables to/from spreadsheets (e.g., Excel), rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are standard. Maintaining rating algorithm definition and management separately from rate tables is available with configuration via tools for IT analysts or BAs. Rate table design and update management tools are available with configuration via developer tools, XML manipulation, or a scripting language.

Testing, modeling, and product analysis are standard. The solution does not currently include displacement testing (i.e., the ability to run existing books of business through proposed rate/product changes to determine impact).

#### **Underwriter Workbench Functions**

The Policy Process for New Business and Underwriting is integral to the suite and is also marketed as a stand-alone solution.

Currently, the solution does not include uploading/importing the submission data from a structured data feed or uploading/importing the submission information from documents (OCR-like functionality).

Support for new business transactions/underwriting, policy change transaction/underwriting, renewal transactions/underwriting, the non-renewal transaction, and cancellation transactions is available out of the box. Supporting underwriting multiple submissions as one work portfolio is available with configuration using developer tools, XML manipulation, or a scripting language.

The ability to combine individual quotes for different lines into a single proposal as well as capturing an underwriter's loss analysis are under development and should be available in less than six months.

Capturing underwriting analysis; underwriter checklists that can validate information completeness and process completeness; submission rating; pricing analysis and scheduled rating information; and providing a single current and historical view of the insured's account across the enterprise, lines of business, and policy systems are all standard functions.

Document creation (proposals, applications, correspondence) and document storage are available out of the box.

A rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); a rules engine that interfaces to order specific data conditionally; inline reports/dashboards on tasks/work/work status; and inline reports/dashboards to support underwriting analysis are standard.

Currently, the solution does not include displaying aggregate risk accumulations for an existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk), IM collaboration with other underwriters, proposal co-authoring with other underwriters, or screensharing with other underwriters.

Agent-facing capabilities are standard. Preconfigured interfaces with policy admin systems, preconfigured interfaces with agent portals, and preconfigured integration with business intelligence environments are standard. Preconfigured interfaces with third-party data services are available via out-of-the-box integration to a third-party system or service.

Currently, the solution does not include natively calculated predictive scores or preconfigured interfaces with external predictive scoring models.

Support for variable binding/approval authority by role and support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) are standard.

#### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents (e.g., statements) and ad hoc documents (e.g., correspondence, manuscripted policies). The solution includes pre-packaged, pre-built forms, libraries, and templates for ACORD.

The primary authoring environment is a custom environment, MS Word, or Adobe Creative Suite. Content, business rules, schema mapping, and data sources are all designed to be maintained by technical resources.

The solution supports print output channels. Managing preferences for print vs. electronic delivery is available with configuration using developer tools, XML manipulation, or a scripting language. Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools as well.

A content repository, content management tools, and archival capabilities for all generated documents are standard. The solution supports ACORD XML industry-standard schemas out of the box.

#### **Agent Portal Functions**

EbixASP is integral to the suite and is also marketed as a stand-alone solution.

New business entry/submission, account clearance, policy change entry/submission, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, and proposal creation are standard.

The solution does not currently include ACORD application creation. The solution does not currently include uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, integration and pre-fill with data services, or online payment, but the company reports these functions are under development and should be available in less than six months.

Underwriter view and/or tools and a rating engine are standard. Side-by-side quote comparison, agency management system upload, account or client view in addition to a policy view, and agent/underwriter collaboration are available with configuration via developer tools, XML manipulation, or a scripting language.

Document creation; file attachment support; scheduling, diary, and calendar functions; workflow and task management capabilities; and business intelligence and reporting are standard. Support for e-signature is available via out-of-the-box integration to a third-party system or service. The solution does not currently include a consumer portal, but the company reports that this capability is under development and should be available in less than six months.

#### **Reinsurance Functions**

Reinsurance is not pre-integrated as part of the suite.

## **Business Intelligence Functions**

Business intelligence functions are integral to the suite and are not marketed as a stand-alone solution. OneShield's Microsoft reporting solution is utilized for business intelligence, with many pre-built analyses and advanced reports. The solution includes a presentation/reporting component and has standard, predefined reports and predefined insurance dashboards. The solution supports data movement via batch ETL.

## **Billing Functions**

Billing is integral to the suite and is not marketed as a stand-alone solution. Payment and billing plan configurability are standard. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Currently not available, but could be available with a
	system enhancement
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Under development and will be available in less than 6
	months
Online payment:	Under development and will be available in less than 6
Out-of-the-box integration with	months Yes
banks/credit card companies for token-	165
based processing:	
Payroll deduction:	Currently not available, but could be available with a
r ayron deduction.	system enhancement
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Not available
reporting	
Pay-as-you-report for workers' comp:	Not available
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Billing for non-premium receivables (such	Available with configuration using simple tools targeted
as claims deductibles paid):	for IT analysts or BAs
Payment of non-refund payables (such as	Available out of the box with no configuration necessary
policy dividends or mutual dividends):	
Multi-currency support in a single instance	No
of the application:	

#### **Claims Functions**

EE Claims is integral to the suite and is also marketed as a stand-alone solution.

#### **Adjudication**

Automated coverage verification is standard. Aggregate tracking (erosion of policy limits) and deductible tracking are available with configuration via developer tools, XML manipulation, or a scripting language. Medical case management, injury detail maintenance (coding), and disability management capabilities are available via out-of-the-box integration to a third-party system or service.

#### Catastrophe

Catastrophe definition is standard. Mapping tools are available via out-of-the-box integration to a third-party system or service. The solution does not currently include automatic identification of catastrophe claims or attaching multiple LOBs and multiple causes of loss to a single catastrophe.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, OFAC checking, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) are standard.

#### **Documents**

Image and media management, a correspondence or forms library, document rendering, and a content repository and content management tools are standard. Multi-channel delivery and output of documents (PDF, email, web, and print) are available with configuration via tools for IT analysts or BAs. The solution does not currently include state-specific claims reporting templates.

#### **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; handling of FROI/SROI EDI reporting; custom question sets to prompt additional mandatory questions depending on given answers (branch scripting); claim characteristics scoring (to calculate alerts, trigger workflow, assign a claims handler, or otherwise segment the claim); claimant contact management data capture; checking for duplicate claims; and integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) come standard. The solution does not currently include scripting for claims intake with reflexive questioning. The company reports that mobile or smart device input is under development and should be available in less than six months.

#### **Fraud**

The solution does not currently include configurable business rules and tasks (specific to fraud and special investigations) or provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims.

#### Litigation

Litigation process tracking, including negotiation details and litigation costs, and the ability to create separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management come standard.

#### **Multi-Channel**

An agent portal with self-service and a policyholder portal with self-service are available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include e-signature, call center integration for FNOL via telephony, or call center integration for claims status check via telephony.

#### Reinsurance

The solution does not currently include identification of claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, or assignment to facultative arrangements.

### Reporting

Standard reporting of claims performance monitoring, including claims handling, and high-risk indicators such as fatality, large losses, and fraud; standard reporting of configurable metrics for claims reporting; ad hoc reports; and electronic reporting or automated state filings are standard. Dashboards are available with configuration via tools for IT analysts or BAs. The solution does not currently include reporting that includes jurisdiction-specific reports and forms.

## Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; subrogation billing and the production of correct GL entries; granular tracking reserves and payments; and direct, case, average, factor, and expense reserve types are standard. Automatic subrogation identification is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include automatic reserve calculations using business rules and risk characteristics or jurisdictional wage and rate calculations integrated for workers' comp.

### **Vendor Management**

Vendor management and processing required forms (including 1099s) are standard functions.

#### Workflow

Automated workflow/task generation; overriding automated processes and manually triggering workflow processes; generating notes, diaries, and reminders; and the inclusion of external documents (letters and pictures) in file notes are all standard functions. Automatic work assignment based on configurable rules is available with configuration via tools for IT analysts or BAs. The company reports that assigning multiple adjusters to a single claim and compliance with the Document Repository Interface (DRI) standards are under development and should be available in less than six months. The solution does not currently include OCR-triggered workflow, processing claim workflow trigger (CWT) files at insurer-defined intervals, or full integration with electronic court filings (ECF2).

### **Screenshots**

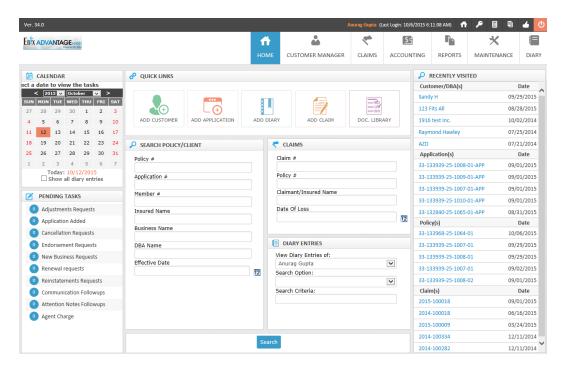
#### **Account Inquiry**



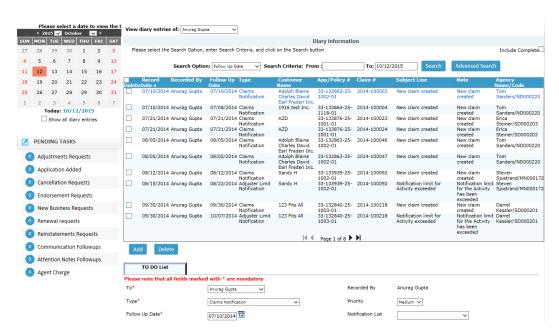
### **Policy Coverages**



### Dashboard



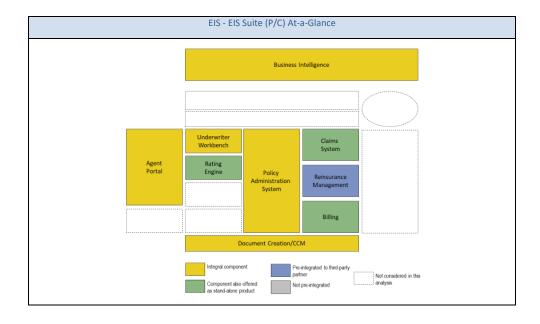
### To-Do List



# EIS - EIS Suite (P/C)

## **Executive Summary**

- EIS is a privately owned company that builds adaptable core insurance systems for insurers
  of all sizes. It has headquarters in San Francisco, CA and employs 1,000 people. The company
  declined to disclose annual revenue.
- EIS Suite (P/C) is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, billing, and claims components.
- It currently has nine live US/Canadian insurer clients using the suite for P/C lines, most of which are larger (over \$1B) companies using the solution to support personal lines with some commercial.
- Publicly announced clients include CSAA, AIG, Industrial Alliance (Canada), Tower Group (New Zealand), and Desjardins General Insurance Group (Canada).
- The solution is browser-based for all user interface functions. It is written in Java.
- Configuration for insurance products, screens, workflows, rules, and document authoring is
  via tools for BAs and non-IT staff. Configuration for integration to third-party service calls is
  via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's own resources or a partner. EIS deploys
  EIS Suite on-prem, hosted at a private data center, and hosted on AWS or MS Azure. The
  company offers a SaaS delivery model that includes hosting, license, maintenance and
  support, ongoing access to the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is nine months or less and that the average implementation cost is \$1M-\$2M.



# **Lines of Business Supported**

Personal auto:	Live clients offering this product in all 50 US states
Homeowners:	Live clients offering this product in all 50 US states
Personal umbrella:	Live clients offering this product in all 50 US states
Dwelling fire:	Live clients offering this product in 2-9 US states
Boatowners:	Live clients offering this product in 2-9 US states
Personal package:	Live clients offering this product in 2-9 US states
Commercial property:	Live clients offering this product in 2-9 US states
General liability:	Live clients offering this product in 2-9 US states
BOP:	Clients currently in implementation for this line/product
Commercial crime:	Clients currently in implementation for this line/product
Commercial auto:	Live clients offering this product in 2-9 US states
E&O/D&O:	Clients currently in implementation for this line/product
Inland marine:	Live clients offering this product in all 50 US states
Professional liability (including medical malpractice):	Clients currently in implementation for this line/product
Commercial package:	Clients currently in implementation for this line/product
Specialty:	Live clients offering this product in all 50 US states
Workers' comp:	Solution is designed to support, but no clients live or implementing
Surety:	Not currently supported
Other personal lines*:	Live clients offering this product in 10-49 US states
Other commercial lines†:	Solution is designed to support, but no clients live or implementing

<sup>\*</sup> Other personal lines include earthquake, extended warranty, and pet insurance.

EIS notes that it supports on-demand insurance such as auto.

### **Client Base**

Globally, EIS has 28 clients live on EIS Suite, all of which are insurer clients (i.e., not MGAs, self-insureds). 16 of these insurer clients are live in the US and Canada, nine of which are using the solution to support P/C clients. Most P/C insurer clients on the solution are larger (over \$1B) companies using the solution to support personal lines with some commercial.

Publicly announced clients include CSAA, AIG, Industrial Alliance (Canada), Tower Group (New Zealand), and Desjardins General Insurance Group (Canada).

<sup>†</sup>Other commercial lines include warranty.

## **Key Functions and Differentiators**

EIS cites the key functions of EIS Suite (P/C) as:

- Full-suit policy administration system to manage the full life cycle of a policy
- Real-time, 360-degree customer view across all lines of business and systems to drive product development, proactive life-stage offerings, and persona-based campaigns
- Customer-centric, persona-based applications to enable streamlined applications along the policy life cycle (agent, underwriter, claims, policyholder, and more)
- EIS ProductStudio enables quick, reusable, and easily configurable rules-based product development for iterative development and test-and-learn approaches
- EIS UI Builder tool allows insurers to bridge the gap between IT and business to develop new
  products and services in an Agile, test-and-learn environment to accelerate speed to market

The company cites as its key differentiators EIS Suite's microservices architecture that allows insurers to use each microservice in any combination; EIS CoreVelocity automates containerized releasese, eliminating the need for big bang upgrades and system maintenance; EIS Suite is a single platform for all lines of business, utilizing microservices to support specific product features; digital capabilities that enable a channel-less distribution experience; and EIS OpenAPI platform, which provides underwriting-agnostic capabilities that enable insurers to personalize underwriting approaches to individual customer needs while providing real-time results.

## **Solution Architecture and History**

EIS Suite (P/C) launched in 2008 and was re-architected in 2009. EIS notes that it has a continuous release schedule with updates every three weeks.

EIS reports that 70% of customers are on the latest version and 30% are on a version released in the last three years. Approximately 80% of customers have been through at least one upgrade.

The solution supports DB2/UDB, Oracle, and Microsoft SQL Server databases as well as any DBMS with a JDBC driver that supports JPA. The solution supports UNIX/Linux, Windows, AIX, and Virtual platforms. The solution is written in Java.

# **APIs and Integration**

The solution provides REST, SOAP, and other APIs. EIS reports that 100% of the system is exposed as APIs. There are over 10,000 APIs available for the core system as well as persona-based APIs from EIS. EIS DXP has over 1,100 open APIs.

# **Configurability and User Interface**

EIS Suite (P/C) is browser-based for all user interface functions.

Configuration for insurance products, screens, workflows, rules, and document authoring is via tools for BAs and non-IT staff. Configuration for integration to third-party service calls is via developer tools.

# **Deployment Options**

EIS offers the solution on-prem, hosted at a private data center, and hosted on AWS or MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades. The hosted solution is a single-tenant app server and database.

## **Average Implementation Length and Cost**

EIS implements the solution through the company's own resources or a partner. It reports that EIS Suite (P/C) can be ready for initial go-live in nine months or less and fully rolled out in an additional 12 months or less. The company reports that the average implementation cost is \$1M-\$2M.

## **Support**

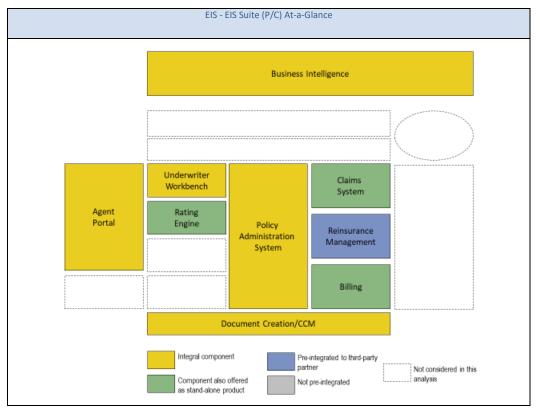
Of the 1,000 people employed at EIS, there are between 250 and 1,000 on the product design and engineering team, between 250 and 1,000 on the implementation (not counting partnerships) team, and between 50 and 100 people on the support team.

Support for the solution is provided out of EIS headquarters in San Francisco, CA as well as offices and development centers in Australia, Belarus, Canada, China, Ireland, Latvia, Lithuania, New Zealand, and Ukraine. EIS offers customer engagement activities such as online training, a customer advisory committee, a user event, and training seminars.

# **Systems Integrator and Other Partners**

Publicly announced technology partnerships include AWS, Microsoft Azure, Prevail, and Spraoi. Publicly announced SI partnerships include Cognizant, PwC, EPAM, Levio, and Everis.

# **Functionality**



### **Policy Administration Functions**

The solution includes policy issue, premium accounting, out-of-sequence endorsement, and forms management out of the box. Bordereaux import and manuscripted policies are available with configuration via tools for IT analysts or BAs.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

## **Rating Functions**

EIS Rater is integral to the suite and is also marketed as a stand-alone solution.

Core rating functions like quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are standard.

Versioning and update management, change control functions, and auditability of rate versioning are standard. An application and forms library with standard and customizable applications and forms is available with configuration via tools for IT analysts or BAs.

Integration capabilities including download to agency management systems and pre-integration to third-party data providers are available with configuration via tools for IT analysts or BAs.

ISO rates/rules support, ISO-formatted statistical data, and ISO ERC integration are standard. The solution does not currently include NCCI/Bureau of Workers' Comp rates/rules support.

Multi-carrier comparison and setting insurer-specific defaults are available with configuration via tools for IT analysts or BAs. Saving/storing an in-process or completed policy change transaction to allow issuance at a later date as well as product design and development tools are standard.

Rule definition and management functions including maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are standard.

Testing, modeling, and product analysis and displacement testing (the ability to run the existing book of business through proposed rate/product changes to determine impact) are standard functions.

#### **Underwriter Workbench Functions**

Underwriting functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing the submission information from documents (OCR-like functionality) is standard. Uploading/importing submission data from a structured data feed is available with configuration using developer tools, XML manipulation, or a scripting language.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, and cancellation transactions is standard. Support for underwriting multiple submissions as one work portfolio is available with configuration via tools for IT analysts or BAs.

The ability to combine individual quotes from different lines into a single proposal, capturing underwriting analysis, capturing underwriter loss analysis, and underwriter checklists that can validate information and process completeness are standard.

Submission rating; pricing analysis and scheduled rating information; single current and historical views of insured accounts across the enterprise, lines of business, and policy systems; document creation (proposals, applications, correspondence); document storage; a rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (e.g., inbox, predefined workflows by transaction/line of business, automatic task assignment, diaries); and a rules engine that interfaces to order specific data conditionally are standard functions.

Inline reports/dashboards on tasks/work/work status and inline reports/dashboards to support underwriting analysis are standard. Displaying aggregate risk accumulations for existing books at granular location level (i.e., geo-mashup of existing book and proposed risks) is available with configuration via tools for IT analysts or BAs.

Proposal co-authoring with other underwriters, screen sharing with other underwriters, and agent-facing capabilities are standard functions. IM collaboration with other underwriters is available with configuration using developer tools, XML manipulation, or a scripting language.

Preconfigured interfaces with agent portals, preconfigured integration with business intelligence environments, preconfigured interfaces with third-party data services, natively calculated predictive scores, and support for variable binding/approval authority by role are standard functions.

Preconfigured interfaces with external predictive scoring models are available with configuration via tools for IT analysts or BAs. Preconfigured interfaces with policy admin systems and support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) are available via out-of-the-box integration to a third-party system or service.

#### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution. EIS notes that it works with all viable document management vendors in the space and has successfully integrated with many of them.

The solution supports mass-produced documents, e.g., statements, (the most common use case) and ad hoc documents, e.g., correspondence and manuscripted policies (the less common use case).

The suite includes pre-packaged, pre-built forms, libraries, and templates from ACORD. The primary authoring environment is a non-Microsoft/non-Adobe platform. Content and business rules are designed to be managed by business analysts; schema mapping and data sources are designed to be maintained by technical resources.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is available with configuration via tools for IT analysts or BAs. Clients primarily use external tools for document authoring and content management workflow, but they have the option to use built-in tools.

A content repository and content management tools, as well as archival capabilities for all generated documents, are standard functions. The solution supports industry-standard schema like ACORD XML out of the box.

## **Agent Portal Functions**

EIS Agent/Broker App is integral to the suite and is not marketed as a stand-alone solution.

New business entry/submission, account clearance, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, integration and pre-fill with data services, policy change entry/submission, online payment, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, proposal creation, ACORD application creation, side-by-side quote comparison, account or client view and a policy view, underwriter view and/or tools, and a rating engine are standard.

Agency management system upload and agent/underwriter collaboration are available with configuration via tools for IT analysts or BAs.

Document creation; file attachment support; scheduling, diary, and calendar functions; workflow and task management capabilities; business intelligence and reporting; and a consumer portal are standard functions. E-signature is available via out-of-the-box integration to a third-party system or service.

#### **Reinsurance Functions**

EIS reports that EIS Suite is pre-integrated with Prevail Reinsurance System (PRS) for reinsurance; customers must license the functionality directly from Prevail.

### **Business Intelligence Functions**

Business intelligence functions are integral to the suite and are not marketed as a stand-alone solution.

The BI offering from EIS has three parts: operational control reports for transactional insight; analytical dashboards aggregated by time, business dimension, or user with drill-down capabilities for business and customer insight; and summarized business activity reports for process and user performance insight.

The solution includes a presentation/reporting component, standard predefined reports and predefined insurance dashboards, an ad hoc reporting tool, and data mining and analytics tools. The company also offers tools to support data governance, dictionaries, quality, and validation along with an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes as a secondary part of its offering.

The solution supports real-time streaming data movement (e.g., use of Kafka).

# **Billing Functions**

BillingCore is part of the suite and is also sold as a stand-alone billing component. Payment and billing plan configurability are standard. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available out of the box with no configuration necessary
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Currently not available, but could be available with a
	system enhancement
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Available out of the box with no configuration necessary
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Not available
reporting	
Pay-as-you-report for workers' comp:	Currently not available, but could be available with a
	system enhancement
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available via out-of-the-box integration to a third-party
	system or service
Billing for non-premium receivables (such	Available via out-of-the-box integration to a third-party
as claims deductibles paid):	system or service
Payment of non-refund payables (such as	Available with configuration using simple tools targeted
policy dividends or mutual dividends):	for IT analysts or BAs
Multi-currency support in a single instance	Yes
of the application:	

#### **Claims Functions**

ClaimCore is part of the suite and is also sold as a stand-alone claims component.

#### **Adjudication**

Injury detail maintenance (coding), disability management, automated coverage verification, and aggregate tracking (erosion of policy limits) are standard functions. Deductible tracking is available with configuration via tools for IT analysts or BAs. The solution does not currently include medical case management.

#### Catastrophe

Catastrophe definition and attachment of multiple LOBs and causes of loss to a single catastrophe are standard functions. Automatic identification of catastrophe claims is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include mapping tools, but the company reports they could be available with a system enhancement.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), and combining multiple pending payments for a single client into one disbursement are standard functions. Handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) is available with configuration via tools for IT analysts or BAs. The solution does not currently include OFAC checking, but the company reports it could be available via integration to another system or service.

#### **Documents**

Image and media management, a content repository, content management tools, and multi-channel delivery and output of documents (PDF, email, web, and print) are standard functions. A correspondence or forms library, state-specific claims reporting templates, and document rendering are available with configuration via tools for IT analysts or BAs.

### **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; mobile and smart device input; claim characteristics scoring (to calculate alerts, trigger workflow, assign a claims handler, or otherwise segment the claim); and claimant contact management data capture are standard. Handling FROI/SROI EDI reporting; scripting for claims intake with reflexive questioning; custom question sets to prompt mandatory additional questions depending on given answers (branch scripting); and checking for duplicate claims are available with configuration via tools for IT analysts or BAs. Integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) is available with configuration via developer tools, XML manipulation, or a scripting language.

### Fraud

The provision of multiple search and reporting criteria for fraud detection (via the ability to track common clients across multiple claims) is standard. Configurable business rules and tasks (specific to fraud and special investigations) are available with configuration via tools for IT analysts or BAs.

### Litigation

Litigation process tracking, including negotiation details and litigation costs, and creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management are available with configuration via tools for IT analysts or BAs.

#### Multi-Channel

An agent portal with self-service and a policyholder portal with self-service are available with configuration via tools for IT analysts or BAs. E-signature is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include call center integration for FNOL via telephony or call center integration for claims status check via telephony.

#### Reinsurance

The solution does not currently include reinsurance functionality.

#### Reporting

Standard reporting of claims performance monitoring, including claims handling, and high-risk indicators (e.g., fatality, large losses, fraud); standard reporting of configurable metrics for claims reporting; and dashboards are standard functions. Ad hoc reports, reporting that includes jurisdiction-specific reports and forms, and electronic reporting or automated state filings are available with configuration via simple tools for IT analysts or BAs.

#### Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; subrogation billing and the production of correct GL entries; and granular tracking reserves and payments are standard functions. Automatic subrogation identification; automatic reserve calculations using business rules and risk characteristics; and direct, case, average, factor, and expense reserve types are available with configuration via tools for IT analysts or BAs. The solution does not currently include jurisdictional wage and rate calculations integrated for workers' comp, but the company reports it could be available with a system enhancement.

## **Vendor Management**

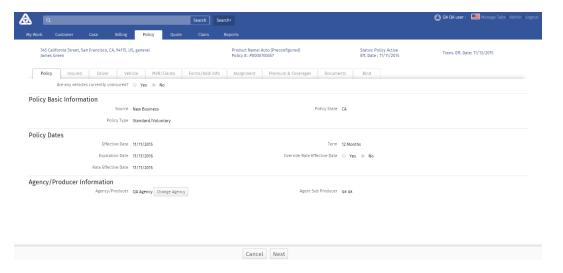
Vendor management functions are standard. Processing of required forms (including 1099s) is available with configuration via tools for IT analysts or BAs.

### Workflow

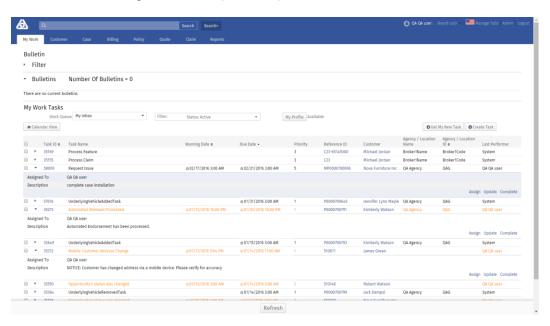
Automated workflow/task generation; generating notes, diaries, and reminders; the inclusion of external documents (letters and pictures) in file notes; and assigning multiple adjusters to a single claim are standard functions. OCR-triggered workflow, overriding automated processes and manually triggering workflow processes, automatic work assignment based on configurable rules, compliance with the Document Repository Interface (DRI) standards, and processing claim workflow trigger (CWT) files at insurer-defined intervals are available with configuration via tools for IT analysts or BAs. Full integration with electronic court filings (ECF2) is available with configuration via developer tools, XML manipulation, or a scripting language.

## **Screenshots**

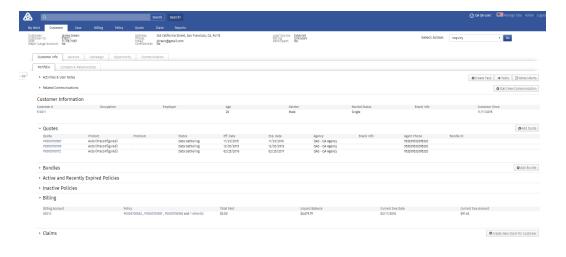
Policy Data Entry Screens



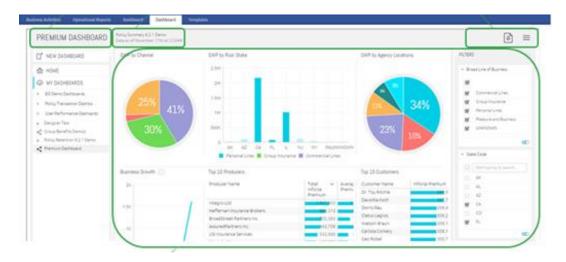
Business Process Management Screen (Workflow)



### Customer 360° Screen



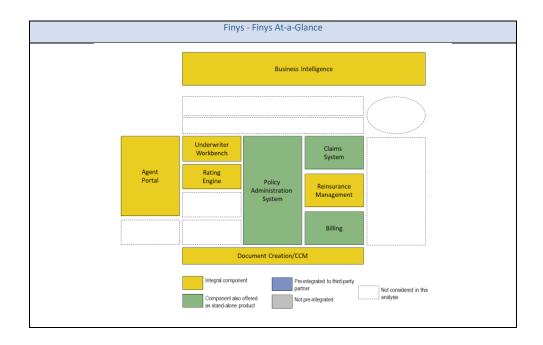
### **Dashboard Screens**



# **Finys - Finys**

## **Executive Summary**

- Finys is a privately held company with headquarters in Troy, MI that employs 85 people. The company's annual revenue is between \$10M-\$20M.
- Finys is a suite of solutions that includes core policy, rating, underwriter workbench, document creation, agent portal, reinsurance, BI, billing, and claims components.
- It currently has 31 live US/Canadian insurer clients using the suite, most of which are smaller companies (under \$1B) and some of which are larger companies (over \$1B) using the solution to support personal and commercial lines.
- Publicly announced clients include Virginia Farm Bureau, Conifer Insurance Group, Farmers Mutual Fire Insurance Company of Salem County, Wayne Insurance Group, and Kentucky FAIR Plan.
- The solution is browser-based for all user interface functions. It is written in .NET (C#/VB.NET).
- Configuration for insurance products, screens, workflows, rules, and document authoring is
  via tools for BAs and non-IT staff. Integration to third-party service calls is configurable via
  tools for IT analysts.
- Implementation is available through the company's resources, collaboration with customers,
  or with the assistance of certified system integration partners. Finys deploys the solution onprem, hosted at a private data center, and hosted on MS Azure. The company offers a SaaS
  delivery model that includes hosting, license, maintenance and support, ongoing access to
  the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is 180 days or less and that the average cost for the middle 50% of the client base is \$2M-\$5M.



# **Lines of Business Supported**

Personal auto:	Live clients offering this product in 2-9 US states
Homeowners:	Live clients offering this product in 10-49 US states
Personal umbrella:	Live clients offering this product in 2-9 US states
Dwelling fire:	Live clients offering this product in 10-49 US states
Boatowners:	Live clients offering this product in 2-9 US states
Personal package:	Live clients offering this product in 2-9 US states
Commercial property:	Live clients offering this product in 2-9 US states
General liability:	Live clients offering this product in 2-9 US states
BOP:	Live clients offering this product in 10-49 US states
Commercial crime:	Live clients offering this product in 2-9 US states
Commercial auto:	Live clients offering this product in 2-9 US states
E&O/D&O:	Live clients offering this product in 2-9 US states
Inland marine:	Live clients offering this product in 2-9 US states
Professional liability (including medical malpractice):	Live clients offering this product in 2-9 US states
Commercial package:	Live clients offering this product in 10-49 US states
Specialty:	Live clients offering this product in 2-9 US states
Workers' comp:	Live clients offering this product in 2-9 US states
Surety:	Clients currently in implementation for this line/product
Other personal lines*:	Live clients offering this product in 2-9 US states
Other commercial lines†:	Live clients offering this product in 2-9 US states

<sup>\*</sup> Other personal lines include farmowners.

The solution is designed to support personal auto and special events insurance on demand.

### **Client Base**

Globally, Finys has 33 live clients on its policy suite, 31 of which are insurer clients (i.e., not MGAs, self-insureds) in the US and Canada. Clients are mostly smaller companies (under \$1B), with some larger companies (over \$1B), using the solution to support personal and commercial lines.

Publicly announced clients include Virginia Farm Bureau, Conifer Insurance Group, Farmers Mutual Fire Insurance Company of Salem County, Wayne Insurance Group, and Kentucky FAIR Plan.

<sup>†</sup> Other commercial lines include artisan, special contractors, restaurants, and liquor liability.

## **Key Functions and Differentiators**

The company cites the key functions of Finys as:

- Straight-through processing built on a business rules engine that can easily be read, understood, and set up by standard business users
- Support for all P/C lines of business, with pre-built templates for the most common LOBs
- Insured portal with functionality to allow insureds to view coverages, print declaration pages, elect paperless options, make payments, enter FNOL, and request policy changes
- Out-of-sequence amendments, re-rating, and policy re-issuance
- Fixed-price engagements led by the Finys Project Risk Elimination Program, a series of meetings with customers to review all businesses, systems, and LOBs

The company cites as its key differentiators it artificial intelligence integration; its ability to support ISO, MSO, and AAIS rates and forms; its ability to support carrier-specific rates and forms; its straight-through processing capabilities; and its Design Studio toolset, used by a number of the company's customers, which helps design, configure, and maintain the system.

## **Solution Architecture and History**

Finys launched in 2001 and was re-architected in 2017. The most recent release date was in January 2021. Finys reports that 50% of the solution's customers are on the latest version, 40% are on an older version released in the last three years, and 10% are on a version older than three years. The company reports that approximately 60% of the solution's customers have gone through at least one upgrade.

The suite supports Oracle and Microsoft SQL Server databases and requires Windows platforms. The solution is written in .NET (C#/VB.NET).

# **APIs and Integration**

The solution provides REST and SOAP APIs along with microservices. The company notes that most integrations use pre-built and exposed APIs in Finys, like comparative raters, authentication, payments, inspections, etc., with new APIs added as needed.

### **Configurability and User Interface**

Finys is browser-based for all user interface functions.

Configuration for insurance products, screens, workflows, rules, and document authoring is via tools for BAs and non-IT staff. Integration to third-party service calls is configurable via tools for IT analysts.

### **Deployment Options**

Finys offers on-premise, hosted at a private data center, and hosted on MS Azure deployment options for the suite. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades. The hosted solution is a single-tenant app server and database.

# **Average Implementation Length and Cost**

Finys implements the solution through the company's own resources, collaboration with customers, or with the assistance of certified system integration partners. It reports that Finys can be ready for initial go-live in 180 days and fully rolled out in an additional 18 months or less. The company reports that average implementation cost is \$2M-\$5M.

## **Support**

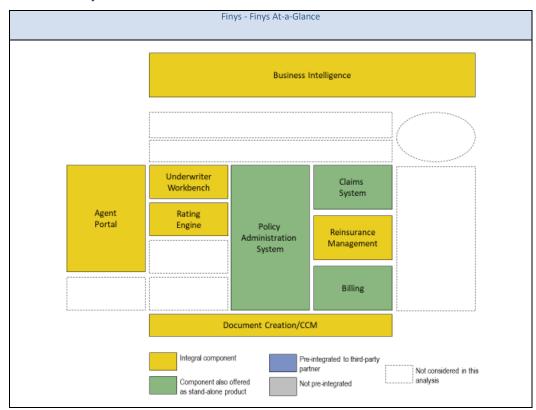
Of the 85 people employed at Finys, there are between ten and 50 on each of the product design and engineering, implementation (not counting partnerships), and customer support teams. In addition to local resources at the client site, support staff are located in offices in Troy, MI and Allen, TX.

Finys offers customer engagement activities such as an online community, online training, a customer advisory committee, and a user event.

# **Systems Integrator and Other Partners**

Publicly announced technology partnerships include Microsoft Gold Partner, ISO Strategic Alliance Partner, AAIS Partner, and MSO Partner. Publicly announced SI partnerships include Marias Technology.

## **Functionality**



#### **Policy Administration Functions**

The solution includes policy issue, premium accounting, and out-of-sequence endorsement out of the box. The solution includes bordereaux import, forms management, and manuscripted policies with configuration via tools for IT analysts or BAs.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

### **Rating Functions**

Rating functions are integral to the suite and are not marketed as a stand-alone solution.

A quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are standard functions.

Versioning and update management, change control functions, and auditability of rate versioning are standard functions. An application and forms library with standard and customizable applications and forms is available out of the box with no configuration necessary. Download to agency management systems and pre-integration to third-party data providers are standard.

NCCI/Bureau of Workers' Comp rates/rules support and ISO-formatted statistical data are available with configuration via tools for IT analysts or BAs. ISO rates/rules support is available with configuration using developer tools, XML manipulation, or a scripting language. The solution does not currently include ISO ERC integration.

Saving/storing an in-process or completed policy change transaction to allow issuance at a later date and product design and development tools are standard. Setting insurer-specific defaults is available with configuration via tools for IT analysts or BAs. Multi-carrier comparison is available via out-of-the-box integration to a third-party system or service.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), and date management capabilities are standard. Rating and rule definition and management (e.g., automatic driver assignment) are available with configuration using developer tools, XML manipulation, or a scripting language.

Displacement testing (i.e., the ability to run existing book of business through proposed rate/product changes to determine impact) and testing, modeling, and product analysis are standard.

#### **Underwriter Workbench Functions**

Underwriting functions are part of the suite and not sold as a stand-alone underwriting workbench.

Uploading/importing submission data from a structured data feed is a standard function. The solution does not currently include uploading/importing submission information from documents (OCR-like functionality).

Support for business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, cancellation transactions, and underwriting multiple submissions as one work portfolio are all standard.

Capturing underwriting analysis, capturing an underwriter's loss analysis, underwriter checklists that can validate information completeness and process completeness, submission rating, and pricing analysis and scheduled rating information are standard functions.

Providing a single current and historical view of insured accounts across the enterprise, lines of business, and policy systems is available with configuration using simple tools for IT analysts or BAs. Allowing individual quotes from different lines to be combined into a single proposal is available is available with configuration using developer tools, XML manipulation, or a scripting language. Document creation (proposals, applications, correspondence) and document storage are standard functions.

A rules engine that automatically applies underwriting, workflow, and general business rules; a rules engine that interfaces to conditionally order specific data; inline reports/dashboards on tasks/work/work status; and inline reports/dashboards to support underwriting analysis are standard functions. Workflow/task capabilities (inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries, etc.) are available with configuration using simple tools targeted for IT analysts or BAs. The solution does not currently include displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of the existing book and proposed risk).

Proposal co-authoring with other underwriters; agent-facing capabilities; preconfigured integration with business intelligence environments; and preconfigured interfaces with policy admin systems, agent portals, and third-party data services are standard. The solution does not currently include IM collaboration or screen sharing with other underwriters.

Support for variable binding/approval authority by role and support for email notification/ communication with agents and underwriters within the system (retaining a record of all emails) are standard functions. Natively calculated predictive scores and preconfigured interfaces with external predictive scoring models are available via out-of-the-box integration to a third-party system or service.

### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents, e.g., statements, (the most common use case) and ad hoc documents, e.g., correspondence and manuscripted policies, (the less common use case).

The suite includes pre-packaged, pre-built forms, libraries, and templates for ISO, AAIS, and MSO. The primary authoring environment is MS Word or a custom environment. Content, business rules, schema mapping, and data sources are designed to be managed by the average business user.

The solution supports print, e-delivery, and mobile output channels via the Finys insurer portal. Managing preferences for print vs. electronic delivery is available out of the box. Clients must use the solution's built-in toolset for document authoring and content management workflow.

A content repository, content management tools, and archival capabilities for all documents generated are standard. The solution supports industry-standard schemas from ACORD XML out of the box.

### **Agent Portal Functions**

Agent portal functions are integral to the suite and are not marketed as a stand-alone solution.

New business entry/submission, account clearance, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, integration and pre-fill with data services, policy change entry/submission, online payment, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, proposal creation, side-by-side quote comparison, underwriter view and/or tools, agent/underwriter collaboration, and a rating engine are available out of the box.

ACORD application creation, agency management system upload, and account or client view in addition to a policy view are available with configuration via tools for IT analysts or BAs.

Support for e-signature; document creation; file attachment support; scheduling, diary, and calendar functions; workflow and task management capabilities; business intelligence and reporting; and a consumer portal are available out of the box with no configuration necessary.

### **Reinsurance Functions**

Reinsurance is integral to the suite and is not marketed as a stand-alone solution.

Ceded reinsurance management functions like automated identification/calculation of accounts with applicable reinsurance are standard. Automated notifications if reserves reach a specific amount or treaties approach set limits are available with configuration via tools for IT analysts or BAs. Manual entry and tracking of cessions, reserves, and limits are not currently available.

Assumed reinsurance management functions like manual entry and tracking of assumed reinsurance contracts, automated assumed reinsurance calculations based on reinsured data feeds/connections, and retrocession reinsurance management are not currently available.

Treaty management; non-proportional/excess of loss; multiple basis types (e.g., risks attaching, losses occurring, claims made); and configuration of contract rules, formulas, and types are standard functions. Facultative management, proportional support, and retroactively processing late placements or midterm contract changes are available with configuration via developer tools, XML manipulation, or a scripting language.

An end-user interface for manual contract entry is standard. An end-user interface for manual flagging of premiums and claims subject to reinsurance is available with configuration via tools for IT analysts or BAs. The solution does not currently include an end-user interface for the review and approval of assumed policies as part of facultative contracts.

Batch file import/export for integration to other systems, real-time data intake from core systems (e.g., PAS, claims) via API or another mechanism, and real-time integration to an underwriting system (e.g., to display limits/reserves) are standard functions. Integration between other insurer or reinsurer systems is available via out-of-the-box integration to a third-party system or service.

A standard library of canned reports and ad hoc reporting are standard. Automated bordereau reporting is available with configuration via tools for IT analysts or BAs. Statutory and regulatory reporting and integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc. are available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include automated Schedule F reporting.

Automated recoverable claims identification is standard. Viewing the full history and status of claims and claim recovery is available with configuration via developer tools, XML manipulation, or a scripting language.

Tracking reinsurance payables and receivables, document management and storage of the actual contracts, and an audit trail for all transactions are standard. Entity management (CRM) is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include multi-language support or multi-currency support.

### **Business Intelligence Functions**

BI functionality is integral to the suite and is not sold as a stand-alone component.

Finys reports that its BI system consists of an ETL process that pulls data from its online transaction processing system and integrates it with data from non-Finys systems into a data warehouse. The data warehouse is fronted by a series of SQL Server Analysis Services cubes, both standardized and customized for clients.

The solution consists of a front-end system for interacting with the cubes as well as other data sources (e.g., Excel spreadsheets, other databases). This tool allows users to perform data exploration, analysis (e.g., trend analysis, correlation matrices, year-over-year analysis), and presentation tasks (e.g., dashboards, scorecards, print reports). The front end includes the ability to chart data in various chart types, annotate data, highlight and report on events (e.g., an upswing of losses), and message relevant parties on specific events.

The solution includes tools to support data governance, dictionaries, quality, and validation; an insurance data model and databases that insurers can use to replace existing EDW, ODS, and/or OLAP cubes; a presentation/reporting component; standard predefined reports and predefined insurance dashboards; an ad hoc reporting tool; and data mining and analytics tools.

The solution supports data movement via batch ETL.

# **Billing Functions**

Finys Billing is part of the suite and is also sold as a stand-alone billing component. Payment and billing plan configurability is available with configuration via tools for IT analysts or BAs. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available with configuration using developer tools, XML
	manipulation, or a scripting language
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available with configuration using developer tools, XML
	manipulation, or a scripting language
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available via out-of-the-box integration to a third-party
	system or service
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Not available
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Currently not available, but could be available with a
reporting:	system enhancement
Pay-as-you-report for workers' comp:	Currently not available, but could be available with a
	system enhancement
Invoice and correspondence:	A 11 11 1 C 11 1 11 C 11
Check generation/production:	Available out of the box with no configuration necessary
	Available out of the box with no configuration necessary  Available out of the box with no configuration necessary
Billing for non-premium receivables (such	
	Available out of the box with no configuration necessary
Billing for non-premium receivables (such	Available out of the box with no configuration necessary  Currently not available, but could be available with
Billing for non-premium receivables (such as claims deductibles paid):	Available out of the box with no configuration necessary  Currently not available, but could be available with integration to another system or service
Billing for non-premium receivables (such as claims deductibles paid): Payment of non-refund payables (such as	Available out of the box with no configuration necessary  Currently not available, but could be available with integration to another system or service  Currently not available, but could be available with a

#### **Claims Functions**

Finys Claims is part of the suite and is also sold as a stand-alone claims component.

#### **Adjudication**

Injury detail maintenance (coding), automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard functions. The solution does not currently include medical case management or disability management.

#### Catastrophe

Catastrophe definition, automatic identification of catastrophe claims, and attaching multiple LOBs and causes of loss to a single catastrophe are standard. Mapping tools are available via out-of-the-box integration to a third-party system or service.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, and OFAC checking are standard. Handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) is available with configuration via developer tools, XML manipulation, or a scripting language.

#### **Documents**

Image and media management, a correspondence or forms library, document rendering, a content repository and content management tools, and multi-channel delivery and output of documents (e.g., PDF, email, web, and print) are standard functions. State-specific claims reporting templates are available with configuration via developer tools, XML manipulation, or a scripting language.

### **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; mobile and smart device input; claimant contact management data capture; and checking for duplicate claims are standard functions. Scripting for claims intake with reflexive questioning and customized question sets to prompt mandatory additional questions depending on given answers (branch scripting) are available with configuration via tools for IT analysts or BAs.

Claim characteristics scoring (to calculate alerts, trigger workflow, assign a claims handler, or otherwise segment the claim) and integration with external vendors/services (e.g., car rental companies, repair shops) are available with configuration using developer tools, XML manipulation, or a scripting language. The solution does not currently include handling of FROI/SROI EDI reporting.

### Fraud

The provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims is standard. Configurable business rules and tasks (specific to fraud/special investigations) are available with configuration via tools for IT analysts or BAs.

## Litigation

Litigation process tracking, including negotiation details and litigation costs, is a standard function. The solution does not currently include creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management.

#### Multi-Channel

E-signature, an agent portal with self-service, and a policyholder portal with self-service are standard. The solution does not currently include call center integration for FNOL/claim status check via telephony.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location) and assignment to reinsurance treaties are standard. The solution does not currently include assignment to facultative arrangements.

#### Reporting

Standard reporting of claims performance monitoring (including claims handling and high-risk indicators, e.g., fatality, large losses, fraud), standard reporting of configurable metrics for claims reporting, and ad hoc reports are available out of the box. Reporting that includes jurisdiction-specific reports and forms is available with configuration via tools for IT analysts or BAs. Dashboards and electronic reporting or automated state filings are available with configuration via developer tools, XML manipulation, or a scripting language.

### Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; subrogation billing and the production of correct GL entries; granular tracking of reserves and payments; automatic reserve calculations using business rules and risk characteristics; and direct, case, average, factor, and expense reserve types are standard. Automatic subrogation identification is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include jurisdictional wage or rate calculations integrated for workers' comp.

#### **Vendor Management**

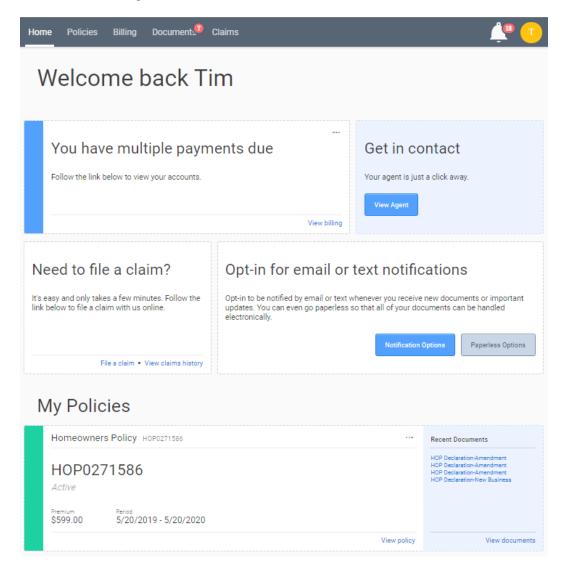
Vendor management functions and processing required forms (including 1099s) are standard.

### Workflow

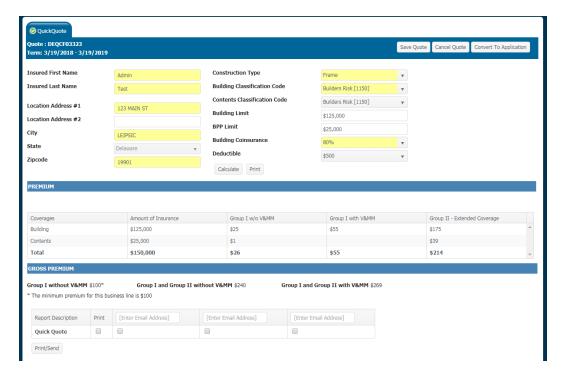
Automated workflow/task generation; overriding automated processes and triggering workflow processes manually; automatic work assignment based on configurable rules; the inclusion of external documents (e.g., letters, pictures) in file notes; assigning multiple adjusters to a single claim; and generating notes, diaries, and reminders are standard functions. The solution does not currently include OCR-triggered workflow, compliance with Document Repository Interface (DRI) standards, processing claim workflow trigger (CWT) files at insurer-defined intervals, or full integration with electronic court filings (ECF2).

### **Screenshots**

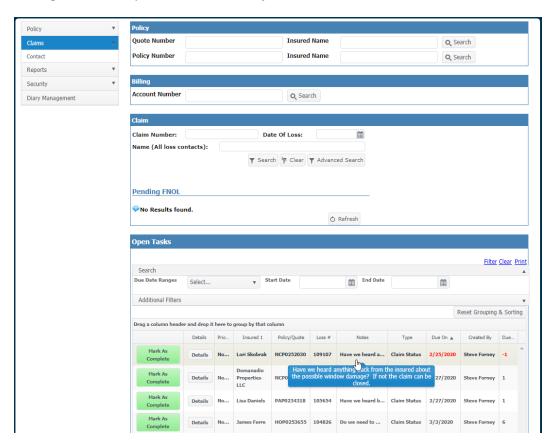
Insured Portal Landing Screen



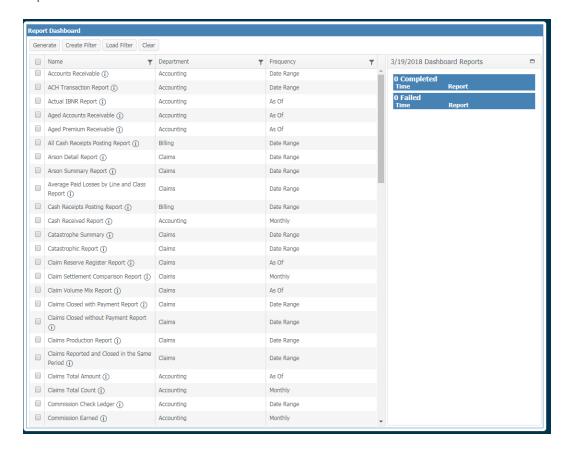
#### Quick Quote Screen



### Landing Screen with Open Tasks for Claims Adjuster



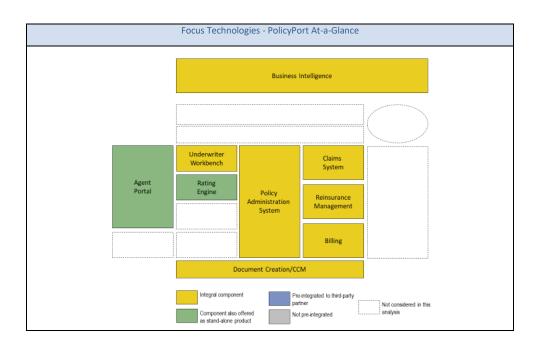
### Report Dashboard



# **Focus Technologies - PolicyPort**

## **Executive Summary**

- Focus Technologies is a privately held subsidiary of Team Focus Insurance Group. It is headquartered in Sunrise, FL and employs 300 people. The company declined to disclose annual revenue.
- PolicyPort is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has eight US/Canadian insurer clients, all of which are smaller companies (under \$1B), and most of which use the solution to support personal lines with some commercial.
- Publicly announced clients include Southern Oak Insurance Company, Spinnaker Insurance Company, Western World Insurance Company, Capacity Insurance Company, and ShoreOne Insurance.
- The solution is browser-based for all user interface functions. It is written primarily in Java, with some HTML5, AngularJS, and NodeJS.
- Configuration for insurance products, screens, workflow, rules, and document authoring is
  via tools for BAs and non-IT staff. Configuration for integration to third-party service calls is
  via tools for IT analysts.
- Implementation is available through the company's own resources. The solution is deployed
  on AWS, except for the BI component, which is hosted on MS Azure. The company offers a
  SaaS delivery model that includes hosting, license, maintenance and support, ongoing access
  to the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is 90 days or less. The company
  declined to disclose the average implementation cost.



# **Lines of Business Supported**

Personal auto:	Not currently supported
Homeowners:	Live clients offering this product in 10-49 US states
Personal umbrella:	Solution is designed to support, but no clients live or implementing
Dwelling fire:	Live clients offering this product in 2-9 US states
Boatowners:	Solution is designed to support, but no clients live or implementing
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Solution is designed to support, but no clients live or implementing
General liability:	Solution is designed to support, but no clients live or implementing
BOP:	Solution is designed to support, but no clients live or implementing
Commercial crime:	Not currently supported
Commercial auto:	Clients currently in implementation for this line/product
E&O/D&O:	Not currently supported
Inland marine:	Solution is designed to support, but no clients live or implementing
Professional liability (including medical malpractice):	Not currently supported
Commercial package:	Solution is designed to support, but no clients live or implementing
Specialty:	Solution is designed to support, but no clients live or implementing
Workers' comp:	Not currently supported
Surety:	Not currently supported
Other personal lines*:	Live clients offering this product in 2-9 US states
Other commercial lines:	Not currently supported

<sup>\*</sup> Other personal lines include farmowners.

### **Client Base**

Globally, Focus Technologies has eight clients live on PolicyPort, all of which are US/Canadian insurer clients (i.e., not MGAs, self-insureds). These clients are smaller companies (under \$1B), and most of them are using the solution to support personal lines with some commercial.

Publicly announced clients include Southern Oak Insurance Company, Spinnaker Insurance Company, Western World Insurance Company, Capacity Insurance Company, and ShoreOne Insurance.

# **Key Functions and Differentiators**

Focus Technologies cites the key functions of PolicyPort as:

- Quoting and issuance interface
- Integrated policy, claims, and billing functionality
- Client configuration capabilities (forms, rates, rules)
- Integrated, configurable, real-time exposure management capabilities
- Agency and consumer portals

The company cites as its key differentiators integrated, UI-based configuration management, integrated business intelligence and data warehouse, rules-based rating engine, rules-based and scriptable exposure engine, and third-party integrations.

## Solution Architecture and History

PolicyPort launched in 1999 and was re-architected in 2019. The latest release was in January 2020. Focus Technologies reports that 100% of the solution's customers are on the latest version and that 20% have been through at least one upgrade.

The solution supports DB2/UDB and Microsoft SQL Server databases as well as UNIX/Linux and Windows server platforms. (The company notes that, as a SaaS solution, no database or system installation is required.) The solution is written primarily in Java with some HTML5, AngularJS, and NodeJS.

## **APIs and Integration**

The solution provides REST and SOAP APIs. Focus Technologies reports that APIs are highly available except for scheduled maintenance windows.

## **Configurability and User Interface**

PolicyPort is browser-based for all user interface functions.

Configuration for insurance products, screens, workflow, rules, and document authoring is via tools for BAs and non-IT staff. Configuration for integration to third-party service calls is via tools for IT analysts.

## **Deployment Options**

The solution is hosted on AWS, except for the BI component, which is hosted on MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades. The solution is a multitenant app server and a single-tenant database.

### Average Implementation Length and Cost

Focus Technologies implements the solution through the company's own resources. It reports that PolicyPort can be ready for initial go-live in 90 days or less and fully rolled out in an additional 30 days or less. The company declined to disclose its average implementation cost.

### Support

Of the 300 people employed at Focus Technologies, there are between ten and 50 on each of the product design and engineering, implementation (not counting partnerships), and support teams.

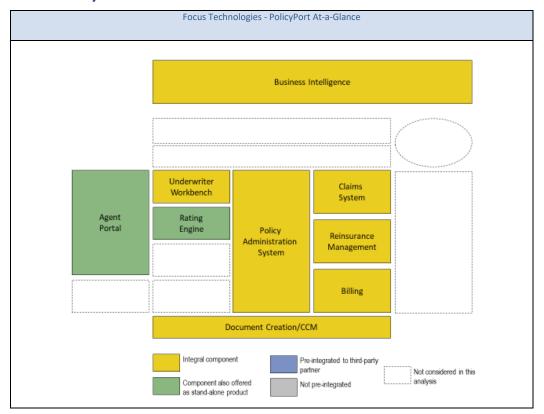
Support for the solution is provided out of offices in Sarasota and Sunrise, FL.

Focus Technologies offers customer engagement activities such as an online community, online training, a customer advisory committee, a user event, and training seminars.

## Systems Integrator and Other Partners

Publicly announced technology partnerships include MapRisk, ImageRight, CoreLogic, ISO, Cape Analytics.

## **Functionality**



### **Policy Administration Functions**

The solution includes policy issue, premium accounting, out-of-sequence endorsement, and forms management out of the box. Bordereaux import is available via configuration using developer tools, XML manipulation, or a scripting language. The solution does not currently include manuscripted policies, but the company notes that this function is under development and should be available in less than six months.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

### **Rating Functions**

RatingPort is integral to the suite and is also marketed as a stand-alone solution.

A quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; and multi-line, multi-state, and multi-location rating on a single policy are standard. Rating multiple coverage/quote alternatives is available with configuration via tools for IT analysts or BAs.

Versioning and update management, change control functions, and auditability of rate versioning are standard functions. An applications and forms library with standard and customizable applications and forms is available with configuration using simple tools targeted for IT analyst or BAs.

Download to agency management systems and pre-integration to third-party data providers are available via out-of-the-box integration to a third-party system or service. ISO-formatted statistical data is available with configuration via developer tools, XML manipulation, or a scripting language. ISO rates/rules support and ISO ERC integration are available via out-of-the-box integration to a third-party system or service. The solution does not currently include NCCI/Bureau of Workers' Comp rates/rules support.

Setting insurer-specific defaults is available with configuration via developer tools, XML manipulation, or a scripting language. Multi-carrier comparison is available via out-of-the-box integration to a third-party system or service. Product design and development tools are available with configuration via tools for IT analysts or BAs.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, and import/export rating tables to/from spreadsheets (e.g., Excel) are standard functions. Rating and rule definition and management (e.g., automatic driver assignment) and date management capabilities are available with configuration via tools for IT analysts and BAs.

Displacement testing (the ability to run existing book of business through proposed rate/product changes to determine impact) along with testing, modeling, and product analysis are available with configuration via tools for IT analysts or BAs.

### **Underwriter Workbench Functions**

Underwriting functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing the submission data from a structured data feed is available out of the box. The solution does not currently include uploading/importing the submission information from documents (OCR-like functionality), but the company notes it could be available with a system enhancement.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, cancellation transactions, and underwriting multiple submissions as one work portfolio is available out of the box.

Allowing individual quotes for different lines to be combined into a single proposal, capturing underwriting analysis, submission rating, and pricing analysis and scheduled rating information are standard functions. Capturing an underwriter's loss analysis; underwriter checklists that can validate information completeness and process completeness; and providing a single current and historical view of the insured's account across the enterprise, lines of business, and policy systems are available with configuration via tools for IT analysts or BAs.

Document storage and document creation (proposals, applications, correspondence) are standard functions.

Inline reports/dashboards to support underwriting analysis are available out of the box. A rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries, etc.); a rules engine that interfaces to conditionally order specific data; and inline reports/dashboards on tasks/work/work status are available with configuration via tools for IT analysts or BAs.

Displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) is a standard function.

Agent-facing capabilities are standard. IM collaboration with other underwriters is available via out-of-the-box integration to a third-party system or service. The solution does not currently include proposal co-authoring and screen sharing with other underwriters.

Support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) is a standard function. Support for variable binding/approval authority by role is available with configuration via tools for IT analysts or BAs.

Preconfigured interfaces with policy admin systems, preconfigured interfaces with agent portals, and preconfigured integration with business intelligence environments are standard. Preconfigured interfaces with third-party data services and natively calculated predictive scores are available via out-of-the-box integration to a third-party system or service. The solution does not currently include preconfigured interfaces with external predictive scoring models.

#### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents, e.g., statements (the most common use case) and ad hoc documents, e.g., correspondence and manuscripted policies (the less common use case).

The suite includes pre-packaged, pre-built forms, libraries, and templates from ISO/ACORD. The primary authoring environment is MS Word or Adobe Creative Suite. Content, business rules, schema mapping, and data sources are all designed to be managed by business analysts.

The solution is designed to support print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is a standard function. Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository, content management tools, and archival capabilities for all generated documents are available via out-of-the-box integration to a third-party system or service. The solution supports ACORD XML industry-standard schema out of the box.

#### **Agent Portal Functions**

ProducerPort is an integral part of the suite and is also sold as a stand-alone agent portal.

P/C portal functionality like new business entry/submission, quick quote, integration and pre-fill with data services, policy change entry/submission, online payment, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, proposal creation, ACORD application creation, underwriter view and/or tools, agent/underwriter collaboration, and a rating engine are standard functions.

Account clearance and uploading/importing data from Excel (e.g., locations, cars, drivers) are available with configuration via tools for IT analysts or BAs. Side-by-side quote comparison is available with configuration using developer tools, XML manipulation, or a scripting language. Agency management system upload is available via out-of-the-box integration to a third-party system or service. Currently, the solution doesn't include renewal quote entry/submission or account or client view in addition to a policy view.

Document creation, file attachment support, workflow and task management capabilities, business intelligence and reporting, and a consumer portal are standard. E-signature and scheduling, diary, and calendar functions are available via out-of-the-box integration to a third-party system or service.

#### **Reinsurance Functions**

Reinsurance is integral to the suite and is not marketed as a stand-alone solution.

The solution includes ceded reinsurance management functions like manual entry and tracking of cessions, reserves, and limits out of the box. Automated notification if a reserve reaches a specific amount or treaties approach set limits and automated identification/calculation of accounts with applicable reinsurance are available with configuration via developer tools, XML manipulation, or a scripting language.

Manual entry and tracking of assumed reinsurance contracts is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include automated assumed reinsurance calculations based on reinsured data feeds/connections or retrocession reinsurance management.

Contract management functions like treaty management; facultative management; proportional support; non-proportional/excess of loss; and configuration of contract rules, formulas, and types are all available with configuration via developer tools, XML manipulation, or a scripting language.

The solution does not currently include multiple basis types (risks attaching, losses occurring, and claims made) or retroactive processing of late placements or midterm contract changes.

End-user interfaces for manual entry of contracts, manual flagging of premiums and claims subject to reinsurance, and review and approval of assumed policies as part of facultative contracts are available with configuration via developer tools, XML manipulation, or a scripting language.

The solution includes batch file import/export for integration to other systems with configuration via developer tools, XML manipulation, or a scripting language. Integration between other insurer/reinsurer systems and real-time data intake from core systems (PAS, claims) via API or other mechanisms is available via out-of-the-box integration to a third-party system or service. Real-time integration to an underwriting system (e.g., to display limits/reserves) is available out of the box.

Reporting functions like statutory and regulatory reporting, a standard library of canned reports, and automated bordereau reporting are standard. Automated Schedule F reporting and ad hoc reporting are available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc.

Viewing full history and status of claim and claim recovery is standard. The solution does not currently include automated recoverable claims identification.

An audit trail for all transactions is standard. Document management and storage of the actual contracts are available via out-of-the-box integration to a third-party system or service. The solution does not currently include tracking reinsurance payables and receivables, entity management (CRM), multi-currency support, or multi-language support.

# **Business Intelligence Functions**

Business intelligence functions are integral to the suite and are not marketed as a stand-alone solution.

The solution encompasses standard reports, dashboards for primary user roles, self-service data extracts, drill-down reports, and customer report creation.

The solution's data functions include a presentation/reporting component, standard predefined reports and predefined insurance dashboards, an ad hoc reporting tool, and data mining and analytics tools. It also includes tools to support data governance, dictionaries, quality, and validation as a secondary part of the solution.

The solution supports data movement via batch ETL.

# **Billing Functions**

Billing is integral to the suite and is not marketed as a stand-alone solution. Payment and billing plan configurability is available with configuration via developer tools, XML manipulation, or a scripting language. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Under development and will be available in less than 6
0- 7	months
Account or list bill:	Currently not available, but could be available with a
	system enhancement
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Currently not available, but could be available with a
	system enhancement
Flexible and configurable payment plans:	Available out-of-the-box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available via out-of-the-box integration to a third-party
	system or service
Equity billing support:	Currently not available, but could be available with a
	system enhancement
Automated workflow and task	Available via out-of-the-box integration to a third-party
management:	system or service
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	Not available
Payroll deduction:	Not available
Billing dashboarding/reporting:	Available with configuration using simple tools targeted for IT analysts or BAs
Workers' compensation monthly self-	Not available
reporting	Not available
Pay-as-you-report for workers' comp:	Not available
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available out of the box with no configuration necessary
Billing for non-premium receivables (such	Currently not available, but could be available with
as claims deductibles paid):	integration to another system or service
Payment of non-refund payables (such as	Available with configuration using simple tools targeted
policy dividends or mutual dividends):	for IT analysts or BAs
Multi-currency support in a single instance	No.
of the application:	

#### **Claims Functions**

Claims is integral to the suite and is not marketed as a stand-alone solution.

## **Adjudication**

Aggregate tracking (erosion of policy limits) and deductible tracking are standard. Automated coverage verification is available with configuration via tools for IT analysts or BAs. The solution does not currently include medical case management, injury detail maintenance (coding), or disability management.

#### Catastrophe

Catastrophe definition and automatic identification of catastrophe claims are available out of the box. Mapping tools are available with configuration via tools for IT analysts or BAs. Capabilities for attaching multiple LOBs and causes of loss to a single catastrophe are available with configuration via developer tools, XML manipulation, or a scripting language.

#### **Disbursements**

Check processing and calculating partial or one-off payments are standard functions. Accommodating multiple pay parties (e.g., garnishments) is available with configuration via developer tools, XML manipulation, or a scripting language. OFAC checking is available via out-of-the-box integration to a third-party system or service. The solution does not currently include calculating and scheduling recurring payments, combining multiple pending payments for a single client into one disbursement, or handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support).

## **Documents**

A content repository, content management tools, and multi-channel delivery and output of documents (PDF, email, web, and print) are standard. Document rendering is available with configuration via tools for IT analysts or BAs. Image/media management, a correspondence/forms library, and state-specific claims reporting templates are available via out-of-the-box integration to a third-party system or service.

## **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; mobile and smart device input; claimant contact management data capture; and checking for duplicate claims are standard functions. Scripting for claims intake with reflexive questioning, custom question sets to prompt mandatory additional questions depending on given answers (branch scripting), and claim characteristics scoring (to calculate alerts, trigger workflow, assign a claims handler, or otherwise segment the claim) are available with configuration via developer tools, XML manipulation, or a scripting language. Integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) is available via out-of-the-box integration to a third-party system or service. The solution does not currently include handling of FROI/SROI EDI reporting.

#### **Fraud**

The solution does not currently include configurable business rules and tasks (specific to fraud and special investigations) or provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims.

## Litigation

The solution does not currently include litigation process tracking, including negotiation details and litigation costs, or creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management.

#### **Multi-Channel**

An agent portal with self-service, a policyholder portal with self-service, call center integration for FNOL via telephony, and call center integration for claims status check via telephony are available out of the box. E-signature is available via out-of-the-box integration to a third-party system or service.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, and assignment to facultative arrangements are available with configuration via developer tools, XML manipulation, or a scripting language.

#### Reporting

Standard reporting of claims performance monitoring (including claims handling and high-risk indicators, e.g., large losses, fraud) and dashboards are standard. Standard reporting of configurable metrics for claims reporting is available with configuration via tools for IT analysts or BAs. Ad hoc reports, reporting that includes jurisdiction-specific reports and forms, and electronic reporting or automated state filings are available with configuration via developer tools, XML manipulation, or a scripting language.

#### Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; subrogation billing and the production of correct GL entries; granular tracking of reserves and payments; automatic reserve calculations using business rules and risk characteristics; and direct, case, average, factor, and expense reserve types are standard. The solution does not currently include automatic subrogation identification or jurisdictional wage and rate calculations integrated for workers' compensation.

#### **Vendor Management**

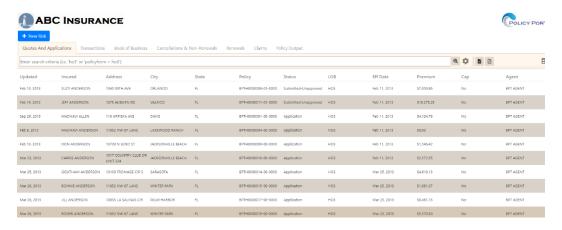
Vendor management functions and processing of required forms (including 1099s) are standard.

## Workflow

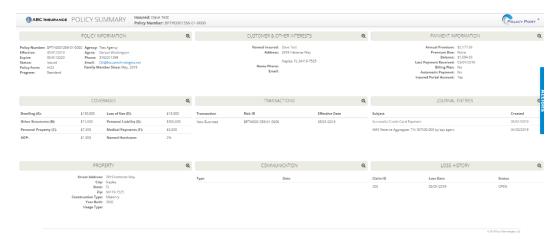
Overriding automated processes and manually triggering workflow processes are standard. Automated workflow/task generation and automatic work assignment based on configurable rules capabilities are available with configuration via tools for IT analysts or BAs. Inclusion of external documents (letters and pictures) in file notes is available via out-of-the-box integration to a third-party system or service. The solution does not currently include OCR-triggered workflow; assigning multiple adjusters to a single claim; compliance with the Document Repository Interface (DRI) standards; processing claim workflow trigger (CWT) files at insurer-defined intervals; or full integration with electronic court filings (ECF2). Focus Technologies reports that generating notes, diaries, and reminders is under development and should be available in less than six months.

## **Screenshots**

PolicyPort Underwriter Workbench



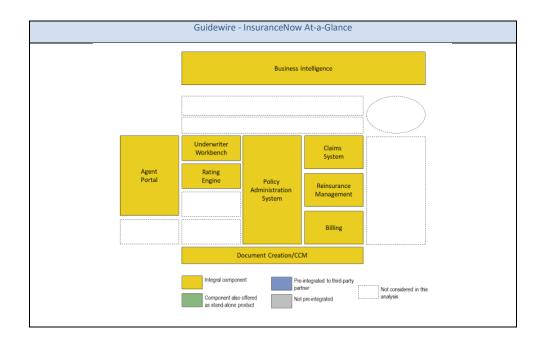
## PolicyPort Policy Summary



# **Guidewire Software - InsuranceNow**

# **Executive Summary**

- Guidewire Software (NYSE: GWRE) is a publicly held corporation with headquarters in San Mateo, CA. The company also has domestic offices in Birmingham, AL; San Jose, CA; Bedford, MA; Edina, MN; Exton, PA; and Columbia, SC. It also has international offices in Sao Paulo, Hong Kong, Kuala Lumpur, Copenhagen, Dublin, Milan, Madrid, London, Paris, Munich, Sydney, Tokyo, Toronto, Moscow, Krakow, and Chennai.
- Guidewire employs 2,690 people and has annual revenue in the range of \$500M-\$1B.
- InsuranceNow is a suite that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims.
- It currently has 35 live US/Canadian insurer clients using the suite, most of which are smaller companies (under \$1B) using the solution to support a mix of personal and commercial lines.
- Publicly announced clients include NCJUIA-NCIUA, The Philadelphia Contributionship,
   Nationwide Private Client, The Andover Companies, and Union Mutual of Vermont.
- The solution is browser-based for all user interface functions. It is written in Java.
- Configuration for insurance products, workflows, rules, and document authoring is via tools
  for BAs and non-IT staff. Configuration for screens and integration to third-party service calls
  is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's resources. Guidewire deploys
  InsuranceNow on AWS. The company offers a SaaS delivery model that includes hosting,
  license, maintenance and support, ongoing access to the latest version, and the
  implementation of upgrades.
- The company reports that the average time initial to go-live is 180 days or less and that the average implementation cost is \$1M-\$2M.



# **Lines of Business Supported**

Personal auto:	Live clients offering this product in 10-49 US states
Homeowners:	Live clients offering this product in 10-49 US states
Personal umbrella:	Live clients offering this product in 10-49 US states
Dwelling fire:	Live clients offering this product in 10-49 US states
Boatowners:	Live clients offering this product in 2-9 US states
Personal package:	Live clients offering this product in 2-9 US states
Commercial property:	Live clients offering this product in 10-49 US states
General liability:	Live clients offering this product in 10-49 US states
BOP:	Live clients offering this product in 10-49 US states
Commercial crime:	Live clients offering this product in 2-9 US states
Commercial auto:	Live clients offering this product in 10-49 US states
E&O/D&O:	Live clients offering this product in all 50 US states
Inland marine:	Live clients offering this product in 2-9 US states
Professional liability (including medical malpractice):	Live clients offering this product in 10-49 US states
Commercial package:	Live clients offering this product in 2-9 US states
Specialty:	Live clients offering this product in 2-9 US states
Workers' comp:	Live clients offering this product in 2-9 US states
Surety:	Live clients offering this product in 2-9 US states
Other personal lines*:	Live clients offering this product in 2-9 US states
Other commercial lines†:	Live clients offering this product in 10-49 US states

<sup>\*</sup> Other personal lines include farm, inland marine, liability, and pet.

## **Client Base**

Globally, Guidewire has 35 clients live on InsuranceNow, all of which are insurer clients (i.e., not MGAs, self-insureds) in the US and Canada. Most are smaller companies (under \$1B) using the solution to support a mix of personal and commercial lines.

Publicly announced clients include NCJUIA-NCIUA, The Philadelphia Contributionship, Nationwide Private Client, The Andover Companies, and Union Mutual of Vermont.

## **Key Functions and Differentiators**

Guidewire cites the key functions of InsuranceNow as:

- Complete core system supporting the full insurance life cycle (policy, claims, billing)
- Out-of-the-box document management and production
- Out-of-the-box enterprise rating, rules, and workflows
- Embedded business intelligence and predictive analytics
- Agent access and consumer self-service and sales portals available out of the box

<sup>†</sup> Other commercial lines include contractors, glass, and liquor liability.

The company cites as its key differentiators heavy investment in R&D at a price point suitable for startups as well as carriers; a full core solution out of the box that includes policy, claims, billing, document production/management, business intelligence, enterprise rating/rules/workflow, producer management, consumer portals, and an expanding set of RESTful APIs; nearly 20 years of experience engineering, implementing, operating, and upgrading insurance core systems in the cloud with a proven track record of success; and pre-packaged implementations built on a wealth of project experience to reduce delivery time frames and cost as well as enable faster time to value for customers in key lines of business; and a diverse, active, and referenceable community of 44 customers (from primary insurers to MGAs) across personal, commercial, and specialty lines ranging from startups to subsidiaries and affiliates of Tier 1 carriers.

# **Solution Architecture and History**

InsuranceNow launched in 1994 and was re-architected in 2004. The latest release was in November 2020. Guidewire Software reports that one of the solution's customers is on the newest version. 80% are on a version less than three years old, and 20% are on a version older than three years. 90% of the solution's customers have been through at least one upgrade.

The solution supports Oracle, Microsoft SQL Server, Amazon Aurora, and MySQL (development only) databases as well as UNIX/Linux and Windows server platforms. The solution is written in Java.

# **APIs and Integration**

Guidewire asserts that InsuranceNow comes pre-integrated with the most common third-party applications such as LexisNexis Current Carrier and Verisk VINMASTER. The InsuranceNow solution also includes starter integrations based on Guidewire's experience integrating InsuranceNow with external systems. In addition, Guidewire notes that Guidewire Marketplace gives InsuranceNow customers the ability to find new solutions from trusted providers.

Guidewire reports that InsuranceNow also supports a broad range of real-time and asynchronous integration patterns including web services, file exchange, nightly batch, and the use of InsuranceNow's comprehensive API, which is a set of RESTful system APIs that client applications can use to request data from or initiate action within the InsuranceNow application. The InsuranceNow API offers RESTful API access that exposes Create, Read, Update, and Delete (CRUD) operations on resources. The InsuranceNow API endpoints are available within the system through an interactive API interface, which uses the Swagger Open API specification to view the API endpoints and execute API requests.

## **Configurability and User Interface**

InsuranceNow is browser-based for all user interface functions.

Configuration for insurance products, workflows, rules, and document authoring is via tools intended for BAs and non-IT staff. Configuration for screens and integration to third-party service calls is via developer tools, XML manipulation, or a scripting language.

# **Deployment Options**

Guidewire hosts InsuranceNow on AWS. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades. The hosted solution is a single-tenant app server and database.

## **Average Implementation Length and Cost**

Guidewire implements the solution through the company's own resources. It reports that InsuranceNow can be ready for initial go-live in 180 days or less and fully rolled out in an additional 18 months or less. The company reports that the average implementation cost is \$1M-\$2M.

# **Support**

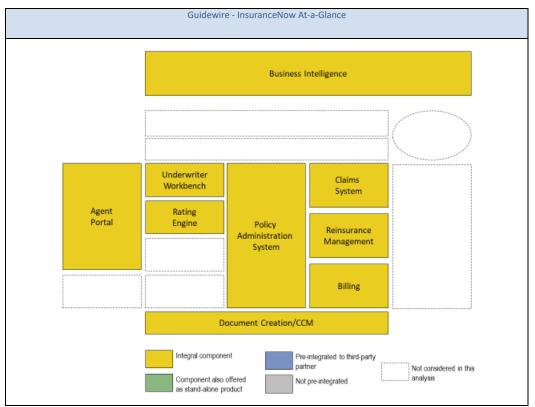
Of the 2,690 people employed at Guidewire Software, there are between 250 and 1,000 on each of the product design and engineering, implementation (not counting partner employees), and support teams.

Support for the solution is provided by the Guidewire helpdesk at the company's San Jose, CA and Birmingham, AL offices with development centers in San Mateo and San Jose, CA as well as Birmingham, AL. Guidewire offers customer engagement activities such as an online community, online training, a customer advisory committee, a user event, and training seminars.

# **Systems Integrator and Other Partners**

Publicly announced technology partnerships include AWS, Smart Communications, OneSpan (formerly Vasco), One Inc., and Cloverleaf Analytics.

# **Functionality**



## **Policy Administration Functions**

The solution includes policy issue, premium accounting, out-of-sequence endorsement, and forms management out of the box. Bordereaux import and manuscripted policies are available with configuration via developer tools, XML manipulation, or a scripting language.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

# **Rating Functions**

A rating engine is integral to the suite and is not marketed as a stand-alone solution.

Core rating functions like quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are standard. Compliance and change control functions like versioning and update management, change control functions, and auditability of rate versioning are also standard.

An applications and forms library with standard and customizable applications and forms is available out of the box. Download to agency management systems and pre-integration to third-party data providers are available via out-of-the-box integration to a third-party system or service.

ISO rates/rules support is available with configuration via tools for IT analysts or BAs. The solution includes NCCI/Bureau of Workers' Comp rates/rules support and ISO-formatted statistical data via out-of-the-box integration to a third-party system or service. The solution does not currently include ISO ERC integration, but the company reports it could be available with a system enhancement.

Setting insurer-specific defaults is available with configuration via tools for IT analysts or BAs. The solution includes multi-carrier comparison via out-of-the-box integration to a third-party system or service. Product design and development tools as well as saving/storing an in-process or completed policy change transaction to allow issuance at a later date are standard.

Rule definition and management functions like maintaining rating algorithm definition and management separately from rate tables; rate table design and update management tools; and the import/export of rating tables to/from spreadsheets (e.g., Excel) are standard. Rating and rule definition and management (e.g., automatic driver assignment) and date management capabilities are available with configuration via tools for IT analysts or BAs.

The solution does not currently include displacement testing (ability to run existing book of business through proposed rate/product changes to determine impact) or testing, modeling, and product analysis.

## **Underwriter Workbench Functions**

Underwriting functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing the submission data from a structured data feed and uploading/importing the submission information from documents (OCR-like functionality) are standard.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, cancellation transactions, and underwriting multiple submissions as one work portfolio is standard.

Capturing underwriting analysis; capturing underwriter loss analysis; submission rating; pricing analysis and scheduled rating information; and providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are standard.

The ability to combine individual quotes for different lines into a single proposal and underwriter checklists that can validate information completeness and process completeness are available with configuration using developer tools, XML manipulation, or a scripting language. Document creation (proposals, applications, correspondence) and document storage are standard functions.

A rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); a rules engine that interfaces to order specific data conditionally; inline reports/dashboards to support underwriting analysis; and inline reports/dashboards on tasks/work/work status are all standard functions. Displaying aggregate risk accumulations for existing books at granular location level (i.e., geo-mashup of existing book and proposed risk) is not currently available.

IM collaboration with other underwriters, proposal co-authoring with other underwriters, screen sharing with other underwriters, and agent-facing capabilities are standard.

Support for variable binding/approval authority by role and for email notification/ communication with agents and underwriters within the system (retaining a record of all emails) are standard functions.

Preconfigured interfaces with policy admin systems, agent portals, and third-party data services; preconfigured integration with business intelligence environments; and natively calculated predictive scores are standard. Preconfigured interfaces with external predictive scoring models are available with configuration using simple tools targeted for IT analysts or BAs.

#### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents (e.g., statements) and ad hoc documents (e.g., correspondence, manuscripted policies).

The suite includes pre-packaged, pre-built forms, libraries, and templates from ACORD. The primary authoring environment is a non-Microsoft/Adobe solution. Content and business rules are designed to be managed by business analysts; schema mapping and data sources are designed to be maintained by technical resources. The solution supports print, e-delivery, and mobile output channels.

Managing preferences for print vs. electronic delivery is a standard function. Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository and content management tools, as well as archival capabilities for all generated documents, are standard. The solution is designed to support industry-standard schemas like ACORD XML out of the box.

## **Agent Portal Functions**

Agent portal functions are integral to the suite and are not marketed as a stand-alone solution.

New business entry/submission, account clearance, quick quote, policy change entry/submission, online payment, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, proposal creation, ACORD application creation, side-by-side quote comparison, account or client view in addition to a policy view, underwriter view and/or tools, agent/underwriter collaboration, and a rating engine are standard.

Agency management system upload is available with configuration using developer tools, XML manipulation, or a scripting language. Integration and pre-fill with data services is available via out-of-the-box integration to a third-party system or service. The solution does not currently include uploading/importing data from Excel (e.g., locations, cars, drivers).

Document creation; file attachment support; scheduling, diary, and calendar functions; workflow and task management capabilities; business intelligence and reporting; and a consumer portal are standard functions. Support for e-signature is available via out-of-the-box integration to a third-party system or service.

## **Reinsurance Functions**

Reinsurance is integral to the suite and is not marketed as a stand-alone solution.

Ceded reinsurance management functions including manual entry and tracking of cessions, reserves, and limits as well as automated identification/calculation of accounts with applicable reinsurance are standard. Automated notification if a reserve reaches a specific amount or treaties approach set limits are available with configuration via developer tools, XML manipulation, or a scripting language.

Assumed reinsurance management functions including manual entry and tracking of assumed reinsurance contracts, automated assumed reinsurance calculations based on reinsured data feeds/connections, and retrocession reinsurance management are available with configuration via developer tools, XML manipulation, or a scripting language.

Treaty management, facultative management, proportional support, non-proportional/excess of loss, multiple basis types (e.g., risk attaching, losses occurring, and claims made), and retroactive processing of late placements or midterm contract changes are available out of the box. Configuration of contract rules, formulas, and types is available with configuration via developer tools, XML manipulation, or a scripting language.

End-user interfaces for manual entry of contracts and end-user interfaces for manual flagging of premiums and claims subject to reinsurance are standard. End-user interfaces for review and approval of assumed policies as part of facultative contracts are available with configuration using developer tools, XML manipulation, or a scripting language.

Real-time data intake from core systems (PAS, claims) via API or other mechanisms and real-time integration to an underwriting system (e.g., to display limits/reserves) are standard functions.

Integration between other insurer/reinsurer systems is available with configuration via developer tools, XML manipulation, or a scripting language. Batch file import/export for integration to other systems is available via out-of-the-box integration to a third-party system or service.

A standard library of canned reports and ad hoc reporting are standard. Automated bordereau reporting as well as integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc. are available with configuration via tools for IT analysts or BAs. Statutory and regulatory reporting is available via out-of-the-box integration to a third-party system or service. Currently, the solution does not include automated Schedule F reporting.

Automated recoverable claims identification and the ability to view the full history and status of claim and claim recovery are available out of the box.

Tracking reinsurance payables and receivables, document management and storage of the actual contracts, and audit trail for all transactions are available out of the box. Entity management (CRM) is available via out-of-the-box integration to a third-party system or service. The solution does not currently include multi-currency or multi-language support.

## **Business Intelligence Functions**

Business intelligence functions are integral to the suite and are not marketed as a stand-alone solution.

Guidewire reports that InsuranceNow is a ready-to-go core system which includes operational reporting and business intelligence capabilities that typically require the purchase of a separate data solution. The company notes that the solution enables insurers to make more data-driven business decisions.

InsuranceNow's data functions include an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes; a presentation/reporting component; standard predefined reports and predefined insurance dashboards; and an ad hoc reporting tool.

The solution also includes tools to support data governance, dictionaries, quality, and validation; a data lake to support schema on read and unstructured data (Guidewire Data Platform); and data mining and analytics tools as a secondary part of the offering.

The solution leverages a scalable, cloud-based MPP solution such as AWS Redshift, Google BigQuery, or Azure SQL Data Warehouse.

The solution supports real-time streaming data movement (e.g., use of Kafka).

# **Billing Functions**

Billing is integral to the suite and is not marketed as a stand-alone solution. Payment and billing plan configurability is standard. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available out of the box with no configuration necessary
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available with configuration using developer tools, XML
	manipulation, or a scripting language
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	Consent to set a sell-black of the sell-black of the
Payroll deduction:	Currently not available, but could be available with a
Dilling dealth and in a function.	system enhancement
Billing dashboarding/reporting: Workers' compensation monthly self-	Available out of the box with no configuration necessary
reporting	Currently not available, but could be available with a system enhancement
Pay-as-you-report for workers' comp:	Currently not available, but could be available with a
ray-as-you-report for workers comp.	system enhancement
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available out of the box with no configuration necessary
Billing for non-premium receivables (such	Available out of the box with no configuration necessary
as claims deductibles paid):	Available out of the box with no configuration necessary
Payment of non-refund payables (such as	Currently not available, but could be available with a
policy dividends or mutual dividends):	system enhancement
Multi-currency support in a single instance	No
of the application:	
o. t approation	

#### **Claims Functions**

Claims is integral to the suite and is not sold as a stand-alone solution.

## **Adjudication**

Injury detail maintenance (coding), disability management, automated coverage verification, and deductible tracking are standard. Aggregate tracking (erosion of policy limits) is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include medical case management.

## Catastrophe

Catastrophe definition, automatic identification of catastrophe claims, attaching multiple LOBs and causes of loss to a single catastrophe, and mapping tools are all standard.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) are standard functions. OFAC checking is available via out-of-the-box integration to a third-party system or service.

#### **Documents**

Image and media management, a correspondence or forms library, document rendering, a content repository and content management tools, and multi-channel delivery and output of documents (PDF, email, web, print) are standard functions. State-specific claims reporting templates are available with configuration using simple tools targeted for IT analysts or BAs.

#### **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; mobile and smart device input; claim characteristic scoring to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim; claimant contact management data capture; and claim checking duplication are standard functions. Scripting for claims intake with reflexive questioning and custom question sets to prompt additional, mandatory questions depending on given answers (branch scripting) are available with configuration via developer tools, XML manipulation, or a scripting language. Integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) is available via out-of-the-box integration to a third-party system or service. The solution does not currently include handling of FROI/SROI EDI reporting.

#### **Fraud**

The provision of multiple search and reporting criteria for fraud detection (via the ability to track common clients across multiple claims) is a standard function. Configurable business rules and tasks (specific to fraud and special investigations) are available with configuration via developer tools, XML manipulation, or a scripting language.

## Litigation

Litigation process tracking, including negotiation details and litigation costs, is standard. Creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management is available with configuration via developer tools, XML manipulation, or a scripting language.

#### **Multi-Channel**

An agent portal with self-service and a policyholder portal with self-service are standard. Esignature is available via out-of-the-box integration to a third-party system or service. The solution does not currently include call center integration for FNOL via telephony or call center integration for claims status check via telephony.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, and assignment to facultative arrangements are standard functions.

## Reporting

Standard reporting of claims performance monitoring, including claims handling and high-risk indicators (e.g., fatality, large losses, fraud); ad hoc reports; and dashboards are standard. Standard reporting of configurable metrics for claims reporting and reporting that includes jurisdiction-specific reports and forms are available with configuration via tools for IT analysts or BAs. Electronic reporting or automated state filings are available via out-of-the-box integration to a third-party system or service.

## Reserves, Recoveries, Subrogation

Capabilities like subrogation billing and the production of correct GL entries; the granular tracking of reserves and payments; automatic reserve calculations using business rules and risk characteristics; and direct, case, average, factor, and expense reserve types are standard. Jurisdictional wage and rate calculations integrated for workers' comp are available with configuration via tools for IT analysts or BAs. Creating separate tasks, workflow, diaries, and business rules for subrogated cases and automatic subrogation identification are available with configuration via developer tools, XML manipulation, or a scripting language.

#### **Vendor Management**

Vendor management functions are standard. Processing required forms (including 1099s) is available via out-of-the-box integration to a third-party system or service.

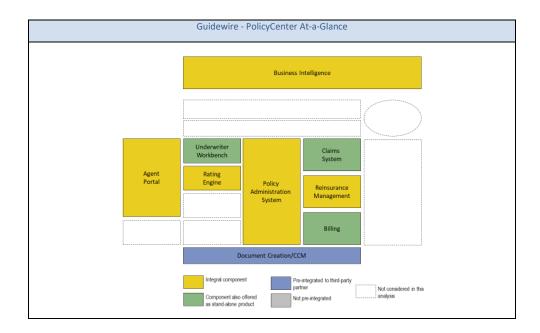
#### Workflow

Automated workflow/task generation; overriding automated processes and manually triggering workflow processes; automatic work assignment based on configurable rules; generating notes, diaries, and reminders; inclusion of external documents (letters and pictures) in file notes; and assigning multiple adjusters to a single claim are standard functions. OCR-triggered workflow, compliance with the Document Repository Interface (DRI) standards, and processing claim workflow trigger (CWT) files at insurer-defined intervals are available with configuration using developer tools, XML manipulation, or a scripting language. Currently, the solution does not include full integration with electronic court filings (ECF2).

# **Guidewire Software - PolicyCenter**

## **Executive Summary**

- Guidewire Software (NYSE: GWRE) is a publicly held corporation with headquarters in San Mateo, CA. The company also has domestic offices in Birmingham, AL; San Jose, CA; Bedford, MA; Edina, MN; Exton, PA; and Columbia, SC. It also has international offices in Sao Paulo, Hong Kong, Kuala Lumpur, Copenhagen, Dublin, Milan, Madrid, London, Paris, Munich, Sydney, Tokyo, Toronto, Moscow, Krakow, and Chennai.
- Guidewire employs 2,690 people and has annual revenue in the range of \$500M-\$1B.
- PolicyCenter is part of Guidewire InsuranceSuite, which includes core policy, rating, underwriter workbench, agent portal, reinsurance, business intelligence, billing, and claims.
- It currently has 92 live US/Canadian insurer clients, a mix of larger (over \$1B) and smaller (under \$1B) companies using the solution to support personal and commercial lines.
- Publicly announced clients include Nationwide, American Family, CNA, QBE, and Sentry.
- The solution is browser-based for all user interface functions. It is written in Java.
- Configuration for insurance products and rules is via tools for BAs and non-IT staff.
   Configuration for workflow and document authoring is via tools for IT analysts. Screens are configurable via developer tools, XML manipulation, or a scripting language. Integration to third-party service calls is configurable via code.
- Implementation is available through the company's resources or a partner. Guidewire
  deploys the solution on AWS. The company offers a SaaS delivery model that includes
  hosting, license, maintenance and support, ongoing access to the latest version, and
  implementation of the upgrades.
- The company reports that the average time to initial go-live is 18 months or less and that the average implementation cost is over \$5M.



# **Lines of Business Supported**

Personal auto:	Live clients offering this product in all 50 US states
Homeowners:	Live clients offering this product in all 50 US states
Personal umbrella:	Live clients offering this product in all 50 US states
Dwelling fire:	Live clients offering this product in 2-9 US states
Boatowners:	Live clients offering this product in 10-49 US states
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Live clients offering this product in all 50 US states
General liability:	Live clients offering this product in all 50 US states
BOP:	Live clients offering this product in all 50 US states
Commercial crime:	Live clients offering this product in 10-49 US states
Commercial auto:	Live clients offering this product in all 50 US states
E&O/D&O:	Live clients offering this product in 10-49 US states
Inland marine:	Live clients offering this product in 10-49 US states
Professional liability (including medical malpractice):	Live clients offering this product in 10-49 US states
Commercial package:	Live clients offering this product in 10-49 US states
Specialty:	Live clients offering this product in 10-49 US states
Workers' comp:	Live clients offering this product in all 50 US states
Surety:	Live clients offering this product in 2-9 US states
Other personal lines*:	Live clients offering this product in 2-9 US states
Other commercial lines†:	Live clients offering this product in all 50 US states

<sup>\*</sup> Other personal lines include jewelry.

Guidewire notes that it supports auto products on demand in 10-49 US states; for example, one customer writes a line of business called monthly reporters for transportation where customers pay based on actual miles driven.

## **Client Base**

Globally, Guidewire has 138 clients live on PolicyCenter, 130 of which are insurer clients (i.e., not MGAs, self-insureds). There are 92 live insurer clients in the US and Canada, split between larger (over \$1B) and smaller (under \$1B) companies using the solution to support personal and commercial lines. Publicly announced clients include Nationwide, American Family, CNA, QBE, and Sentry.

# **Key Functions and Differentiators**

Guidewire cites the key functions of PolicyCenter as:

- Interactive, codeless underwriting rules management for business analysts
- Seamless, out-of-sequence, and complex endorsement handling
- Holistic client view, providing summary dashboards for viewing loss ratios and earned/estimated premium calculations
- Accelerated, codeless product model management and rating management capabilities
- Streamlined underwriting referral processing

<sup>†</sup> Other commercial lines include umbrella and jewelry.

The company cites as its key differentiators a complete cloud platform that delivers omnichannel user experiences, embedded analytics, and full policy life-cycle support; low-code product design tool, Advanced Product Designer, for business users to determine product requirements, visualize the product in the UI, and deploy and make changes in response to market needs; streamlined data entry and role-based workflow to improve ease of policy life-cycle transactions; ISO ERC solution that enables compliance, adoption, and cadence while maintaining flexibility for product, forms, and rating independence; and embedded predictive analytics to improve accuracy, conversion, and profitability via automated rate adjustment, expected loss and profitability guidance, elevated attrition risk, and expense reduction.

# **Solution Architecture and History**

PolicyCenter launched in 2006 and was re-architected in June 2020. The latest release was in November 2020. Guidewire reports that 10% of customers are on the latest version, and about 90% are on a version older than three years. Approximately 30% of customers have been through at least one upgrade.

The solution supports Oracle and Microsoft SQL Server databases as well as UNIX/Linux and Windows platforms. It is written in Java.

# **APIs and Integration**

The solution provides REST and SOAP APIs. Guidewire notes that InsuranceSuite Cloud APIs expose fine-grained calls into InsuranceSuite and that Application Event APIs publish messages in reponse to business events.

# **Configurability and User Interface**

PolicyCenter is browser-based for all user interface functions. Guidewire notes that it supports the latest versions of all major browsers and that its applications are implemented as single-page applications and incorporate responsive web design techniques. For the best user experience, Guidewire recommends browsers that support HTML5 and CSS3 as well as Android and iOS mobile platforms.

Configuration for insurance products and rules is via tools for BAs and non-IT staff. Configuration for workflow and document authoring is via tools for IT analysts. Screens are configurable via developer tools, XML manipulation, or a scripting language. Integration to third-party service calls is configurable via code.

# **Deployment Options**

Guidewire deploys the solution on AWS. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades. The hosted solution is a single-tenant app server and database.

## **Average Implementation Length and Cost**

Guidewire implements the solution through its own resources or a partner. It reports that PolicyCenter can be ready for initial go-live in 18 months or less and fully rolled out in an additional 12 months or less. The company reports that the average implementation cost is over \$5M.

# **Support**

Of the 2,690 people employed at Guidewire Software, there are between 250 and 1,000 on each of the product design and engineering, implementation (not counting partner employees), and support teams.

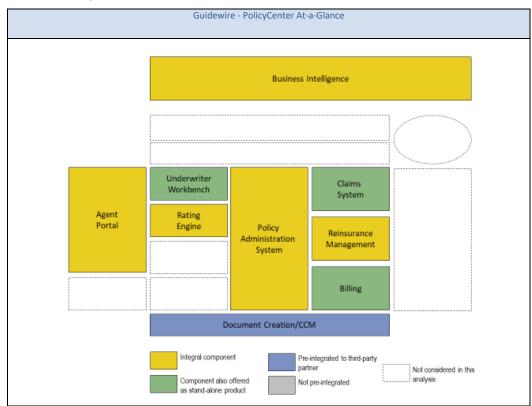
Support for the solution is provided by the Guidewire Helpdesk at the company's headquarters in San Mateo, CA, with development centers in Exton, PA; Columbia, SC; Bedford, MA; Toronto, Canada; Dublin, Ireland; Krakow, Poland; and Tokyo, Japan. Guidewire has also established regional support centers (RSCs) in Sydney, Dublin, London, Krakow, Toronto, Sao Paulo, Kuala Lumpur, and Tokyo.

Guidewire offers customer engagement activities such as an online community, online training, a customer advisory committee, a user event, and training seminars.

# **Systems Integrator and Other Partners**

Publicly announced technology partnerships include Verisk/ISO, Smart Communications, AWS, and Salesforce. Publicly announced SI partnerships include Cappemini, Cognizant, Deloitte, Ernst and Young, and PwC.

# **Functionality**



## **Policy Administration Functions**

The solution includes policy issue, premium accounting, out-of-sequence endorsement, and forms management out of the box. Manuscripted policies are available with configuration via tools for IT analysts or BAs. Bordereaux import is available with configuration via developer tools, XML manipulation, or a scripting language.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

## **Rating Functions**

Guidewire Rating Management is part of the Guidewire Insurance Suite and is designed to interface with PolicyCenter. It is not available as a stand-alone rating engine application for use with other policy solutions.

Core rating functions like quick quote option; support for after-inception policy rating for endorsements, cancellations, reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are standard.

Compliance and change control functions like versioning and update management, change control functions, and auditability of rate versioning are standard. An application and forms library with standard and customizable applications and forms is available via out-of-the-box integration to a third-party system or service.

Integration capabilities, including download to agency management systems, are available with configuration via developer tools, XML manipulation, or a scripting language. Pre-integration to third-party data providers is available via out-of-the-box integration to a third-party system or service.

ISO rates/rules support, NCCI/Bureau of Workers' Compensation rates/rules support, and ISO ERC integration are standard. ISO-formatted statistical data is available with configuration via tools for IT analysts or BAs.

Multi-carrier comparison is available with configuration via tools for IT analysts or BAs. Setting insurer-specific defaults is available via configuration using developer tools, XML manipulation, or a scripting language. Saving/storing an in-process or complete policy change transaction to allow issuance at a later date is standard. Product design and development tools are standard.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), and date management capabilities are standard. Rating and rule definition and management (e.g., automatic driver assignment) are available with configuration via tools for IT analysts and BAs.

Testing, modeling, product analysis, and displacement testing (ability to run existing book of business through proposed rate/product changes to determine impact) are standard.

#### **Underwriter Workbench Functions**

Guidewire's Underwriting Management and Core Systems (ClaimCenter, PolicyCenter, BillingCenter) are part of Guidewire's InsuranceSuite product family (and all are part of the Guidewire Insurance Platform), which can be licensed and implemented as a full suite or on a stand-alone basis. The company reports that Underwriting Management can also integrate with any policy administration system.

Uploading/importing the submission information from documents (OCR-like functionality) is available out of the box; Guidewire asserts that the AppReader feature for Underwriting Management does this automatically. Uploading/importing submission data from structured data feeds is available via out-of-the-box integration to a third-party system or service. Guidewire reports that Underwriting Management supports the ACORD Upload transaction.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, and cancellation transactions is standard. Support for underwriting multiple submissions as one work portfolio is standard.

The ability to combine individual quotes for different lines into single proposals and providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are standard. Capturing underwriting analysis, capturing underwriter loss analysis, and underwriter checklists that can validate information and process completeness are available with configuration via tools for IT analysts or BAs.

Submission rating as well as pricing analysis and scheduled rating information are available via out-of-the-box integration to a third-party system or service. Document creation (proposals, applications, correspondence) and document storage are available out of the box.

Workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries), inline reports/dashboards on tasks/work/work status, and inline reports/dashboards to support underwriting analysis are standard.

A rules engine that automatically applies underwriting, workflow, and general business rules is available with configuration via tools for IT analysts or BAs. A rules engine that interfaces to order specific data conditionally is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include the ability to display aggregate risk accumulations for the existing book at a granular location level (i.e., geomashup of existing book and proposed risk).

IM collaboration, proposal co-authoring, and screen sharing with other underwriters are standard functions. Agent-facing capabilities are standard. Support for variable binding/approval authority by role and support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) are standard.

Preconfigured interfaces with third-party data services are available with configuration via tools for IT analysts or BAs. Preconfigured interfaces with agent portals are standard. Preconfigured interfaces with policy admin systems and preconfigured integration with business intelligence environments are available with configuration via developer tools, XML manipulation, or a scripting language.

Natively calculated predictive scores are available via out-of-the-box integration to a third-party system or service. The solution does not currently include preconfigured interfaces with external predictive scoring models.

## **Document Functions**

PolicyCenter is pre-integrated with Smart Communications for document creation.

## **Agent Portal Functions**

Guidewire ProducerEngage is currently integral to PolicyCenter and not marketed as a standalone solution.

New business entry/submission; account clearance; uploading/importing data from Excel (e.g., locations, cars, drivers); quick quote; integration and pre-fill with data services; policy change entry/submission; online payment; renewal quote entry/submission; policy inquiry; policy transaction history inquiry; billing inquiry; claims inquiry; side-by-side quote comparison; account or client view in addition to a policy view; agent/underwriter collaboration; and a rating engine are standard.

Agency management system upload is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include proposal creation, ACORD application creation, or underwriter view and/or tools.

File attachment support; scheduling, diary, and calendar functions; workflow and task management capabilities; and a consumer portal are available out of the box.

Business intelligence and reporting are available via out-of-the-box integration to a third-party system or service. The solution does not currently include support for e-signature or document creation.

## **Reinsurance Functions**

Guidewire Reinsurance Management is integral to PolicyCenter and is not marketed as a standalone solution. Guidewire notes that this is an add-on module for the PolicyCenter solution.

Ceded reinsurance management functions like the manual entry and tracking of cessions, reserves, and limits; automated notification if a reserve reaches a specific amount or treaties approach set limits; and automated identification/calculation of accounts with applicable reinsurance are standard.

Assumed reinsurance management functions like the manual entry and tracking of assumed reinsurance contracts are available out of the box. Automated assumed reinsurance calculations based on reinsured data feeds/connections and retrocession reinsurance management are available with configuration via developer tools, XML manipulation, or a scripting language.

Contract management functions like treaty management, facultative management, proportional support, non-proportional/excess of loss, multiple basis types (risks attaching, losses occurring, and claims made), and retroactively processing late placements or midterm contract changes are standard. Configuration of contract rules, formulas, and types are available with configuration via tools for IT analysts or BAs.

End-user interfaces for manual entry of contracts and manual flagging of premiums and claims subject to reinsurance are available out of the box. An end-user interface for review and approval of assumed policies as part of facultative contracts is available with configuration via developer tools, XML manipulation, or a scripting language.

Real-time data intake from core systems (PAS, claims) via API or other mechanism and real-time integration to an underwriting system (e.g., to display limits/reserves) are standard.

Batch file import/export for integration to other systems and integration between other insurer/reinsurer systems are available with configuration via developer tools, XML manipulation, or a scripting language.

A standard library of canned reports and ad hoc reporting are standard. Statutory and reulgatory reporting; automated boredereau reporting; and integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc. are available with configuration via tools for IT analysts or BAs. The solution does not currently include automated Schedule F reporting.

Automated recoverable claims identification and the ability to view the full history and status of claims and claim recovery are standard functions. Tracking reinsurance payables and receivables, etntity management (CRM), document management and storage of the actual contracts, multicurrency support, multi-language support, and an audit trail for all transactions come standard.

# **Business Intelligence Functions**

Explore for Policy is pre-integrated with InsuranceSuite and is only available as part of a PolicyCenter Cloud subscription.

Guidewire's BI support includes the Guidewire Data Platform and Guidewire Explore. Guidewire Data Platform serves as an insurance-specific data foundation for Guidewire analytics solutions. Guidewire reports that as an enterprise platform, it delivers near-real-time data capture, data-lake storage, auto-curation, and delivery of both raw and curated data sets via RESTful APIs as well as cloud services. Guidewire Explore is a visual BI tool that leverages the Guidewire Data Platform. Designed for business users, it includes numerous dashboards and visualizations and is managed by simple drag-and-drop editing to provide a free-form universal search across the entire data set.

Data functions include tools to support data governance, dictionaries, quality, and validation; an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes; a data lake to support schema on read and unstructured data; a presentation/reporting component; standard predefined reports and predefined insurance dashboards; an ad hoc reporting tool; as well as data mining and analytics tools.

The solution leverages a scalable, cloud-based MPP solution such as AWS Redshift, Google BigQuery, or Azure SQL Data Warehouse.

The solution supports real-time data streaming data movement (e.g., use of Kafka).

# **Billing Functions**

Guidewire BillingCenter is part of InsuranceSuite and is also sold as a stand-alone billing component. Payment and billing plan configurability are standard functions. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available out of the box with no configuration necessary
Flexible and configurable payment plans:	Available out of the box with no configuration necessary  Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	Available out of the box with no configuration necessary
deduction):	
Automated rules for payment application	Available with configuration using simple tools targeted
and disbursements:	Available with configuration using simple tools targeted
	for IT analysts or BAs  Available out of the box with no configuration necessary
Real-time account and payment calculation,	Available out of the box with no configuration flecessary
scheduling, recalculation, and rescheduling:	Available out of the box with as configuration assessment
Commission calculation and payment: Collections activities and interfaces:	Available out of the box with no configuration necessary
Conections activities and interfaces:	Available with configuration using simple tools targeted
Equity hilling cupports	for IT analysts or BAs  Available out of the box with no configuration necessary
Equity billing support: Automated workflow and task	
	Available out of the box with no configuration necessary
management:	A settled to the first term of the second terms of the second term
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	No
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Available with configuration using simple tools targeted for IT analysts or BAs
Billing dashboarding/reporting:	Available via out-of-the-box integration to a third-party
	system or service
Workers' compensation monthly self-	Available with configuration using developer tools, XML
reporting	manipulation, or a scripting language
Pay-as-you-report for workers' comp:	Available with configuration using simple tools targeted for IT analysts or BAs
Invoice and correspondence:	Available via out-of-the-box integration to a third-party
	system or service
Check generation/production:	Currently not available, but could be available with
	integration to another system or service
Billing for non-premium receivables (such	Available via out-of-the-box integration to a third-party
as claims deductibles paid):	system or service
Payment of non-refund payables (such as	Available with configuration using developer tools, XML
policy dividends or mutual dividends):	manipulation, or a scripting language
· · · · · · · · · · · · · · · · · · ·	
Multi-currency support in a single instance	Yes

# **Claims Functions**

Guidewire ClaimCenter is part of InsuranceSuite and is also sold as a stand-alone claims component.

## **Adjudication**

Medical case management, disability management, automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard functions. Injury detail maintenance (coding) is available via out-of-the-box integration to a third-party system or service.

## Catastrophe

Catastrophe definition, automatic identification of catastrophe claims, attaching multiple LOBs and causes of loss to a single catastrophe, and mapping tools are standard functions.

#### **Disbursements**

Calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) are standard. Check processing and OFAC checking are available via out-of-the-box integration to a third-party system or service.

#### **Documents**

A correspondence or forms library, document rendering, and multi-channel delivery and output of documents (e.g., PDF, email, web, and print) are standard. State-specific claims reporting templates are available with configuration via developer tools, XML manipulation, or a scripting language. Image and media management, as well as a content repository and content management tools, are available via out-of-the-box integration to a third-party system or service.

#### **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; mobile and smart device input; scripting for claims intake with reflexive questioning; claim characteristics scoring (to calculate alerts, trigger workflow, assign a claims handler, or otherwise segment the claim); claimant contact management data capture; checking for duplicate claims; and integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) are standard functions. Custom question sets to prompt additional, mandatory questions depending on given answers (branch scripting) are available with configuration via tools for IT analysts or BAs. Handling of FROI/SROI EDI reporting is available via out-of-the-box integration to a third-party system or service.

#### **Fraud**

Configurable business rules and tasks (specific to fraud and special investigations) and the provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims are standard functions.

#### Litigation

Litigation process tracking, including negotiation details and litigation costs, and creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management are standard.

#### **Multi-Channel**

An agent portal with self-service and a policyholder portal with self-service are standard. Esignature, call center integration for FNOL via telephony, and call center integration for claims status check via telephony are available via out-of-the-box integration to a third-party system or service.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, and assignment to facultative arrangements are standard.

## Reporting

Standard reporting of claims performance monitoring (including claims handling and high-risk indicators, e.g., fatality, large losses, fraud) and dashboards are standard. Standard reporting of configurable metrics for claims reporting, ad hoc reports, and reporting that includes jurisdictional-specific reports and forms are available with configuration via tools for IT analysts or BAs. Electronic reporting or automated state filings are available via out-of-the-box integration to a third-party system or service.

## Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; subrogation billing and the production of correct GL entries; the granular tracking of reserves and payments; automatic reserve calculations using business rules and risk characteristics; and direct, case, average, factor, and expense reserve types are standard. Jurisdictional wage and rate calculations integrated for workers' comp are available with configuration via tools for IT analysts or BAs.

## **Vendor Management**

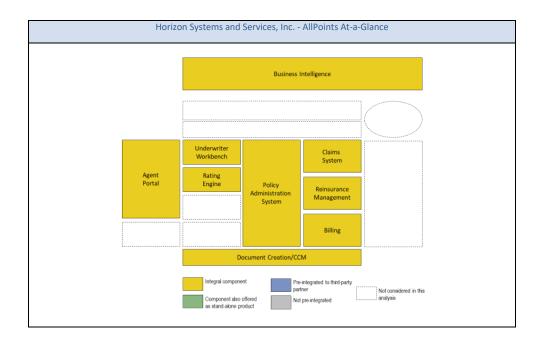
Vendor management functions are standard. Processing required forms (including 1099s) is available via out-of-the-box integration to a third-party system or service.

## Workflow

Automated workflow/task generation; overriding automated processes and manually triggering workflow processes; automatic work assignment based on configurable rules; generating notes, diaries, and reminders; inclusion of external documents (e.g., letters, pictures) in file notes; and assigning multiple adjusters to a single claim are standard functions. Compliance with the Document Repository Interface (DRI) standards, processing claim workflow trigger (CWT) files at insurer-defined intervals, and full integration with electronic court filings (ECF2) are available with configuration via developer tools, XML manipulation, or a scripting language. OCR-triggered workflow is available via out-of-the-box integration to a third-party system or service.

# **Horizon Systems and Services, Inc. - AllPoints Executive Summary**

- Horizon Systems and Services, Inc. is a privately owned IT company with a large number of stockholders. It offers property and casualty insurance services. Horizon has headquarters in Sheboygan, WI and employs 23 people. The company reports an annual revenue under \$5M.
- AllPoints is a suite of solutions that includes core policy, rating, underwriter workbench, agent portal, document creation, reinsurance, business intelligence, billing, and claims.
- It currently has 15 live US/Canadian insurer clients. The company notes there are also two US/Canadian insurer clients in implementation. All clients are smaller (under \$1B) companies using the solution to support personal and commercial lines.
- Publicly announced clients include Germantown Mutual.
- The solution is a Windows client for admin functions and browser-based for user interface functions. It is written in .NET (C#/VB.NET) and some JavaScript.
- Configuration for insurance products, workflows, rules, and document authoring is via simple tools targeted for BAs and non-IT staff. Configuration for screens and integration to third-party service calls is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's resources or a partner. Horizon deploys
  the solution on-prem, hosted at a private data center, and hosted on MS Azure. Horizon
  offers a SaaS delivery model that includes hosting, license, maintenance and support,
  ongoing access to the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is 180 days or less and that the average implementation cost is \$500K-\$1M.



# **Lines of Business Supported**

Personal auto:	Live clients offering this product in 2-9 US states	
Homeowners:	Live clients offering this product in 2-9 US states	
Personal umbrella:	Live clients offering this product in 2-9 US states	
Dwelling fire:	Live clients offering this product in 2-9 US states	
Boatowners:	Live clients offering this product in 2-9 US states	
Personal package:	Solution is designed to support, but no clients live or implementing	
Commercial property:	Live clients offering this product in 2-9 US states	
General liability:	Live clients offering this product in one US state	
BOP:	Live clients offering this product in 2-9 US states	
Commercial crime:	Clients currently in implementation for this line/product	
Commercial auto:	Live clients offering this product in 2-9 US states	
E&O/D&O:	Not currently supported	
Inland marine:	Live clients offering this product in 2-9 US states	
Professional liability (including medical malpractice):	Not currently supported	
Commercial package:	Live clients offering this product in one US state	
Specialty:	Not currently supported	
Workers' comp:	Clients currently in implementation for this line/product	
Surety:	Not currently supported	
Other personal lines:	Not currently supported	
Other commercial lines†:	Clients currently in implementation for this line/product	

<sup>&</sup>lt;sup>†</sup> Other commercial lines include general liability, commercial inland marine, and commercial umbrella.

## **Client Base**

Globally, Horizon has 15 clients live on AllPoints, all of which are insurer clients (i.e., not MGAs, self-insureds) in the US and Canada. The company notes there are also two US/Canadian insurer clients in implementation. All clients are smaller (under \$1B) companies using the solution to support personal and commercial lines.

Publicly announced clients include Germantown Mutual.

# **Key Functions and Differentiators**

Horizon cites the key functions of AllPoints as:

- Integrated business intelligence
- Rating, rules, and workflow engine
- Customer, agent, employee, and mobile portals
- Configurable setup and permissions
- Document production and storage

The company cites as its key differentiators its broad focus on Tier 1 through Tier 3 insurers, full end-to-end functionality managed by end users, that it is 100% Microsoft-based, cloud or on-prem deployment, as well as its 100% referenceable customer base.

# **Solution Architecture and History**

AllPoints launched in 2004 and was re-architected in 2011. The latest release was in December 2019.

Horizon reports that 70% of customers are on the latest version and that 30% are on a version older than three years. All customers have been through at least one upgrade. The solution requires Microsoft SQL Server databases and Windows server platforms. It is written in .NET (C#/VB.NET) and some JavaScript.

# **APIs and Integration**

Horizon notes that AllPoints communicates with multiple vendor systems which are not provided as part of the solution. These are client-specific requests.

# **Configurability and User Interface**

AllPoints is a Windows client for admin functions and browser-based for user interface functions.

Configuration for insurance products, workflow, rules, and document authoring is via tools for BAs and non-IT staff. Configuration for screens and integration to third-party service calls is via developer tools, XML manipulation, or a scripting language.

# **Deployment Options**

Horizon deploys the solution on-prem, hosted at a private data center, and hosted on MS Azure. Horizon offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades. The hosted solution is a multi-tenant app server and database. (Single-tenant options are also available.)

## Average Implementation Length and Cost

Horizon implements the solution through the company's resources or a partner. It reports that AllPoints can be ready for initial go-live in 180 days or less and fully rolled out in an additional nine months or less. The company reports that the average implementation cost is \$500K-\$1M.

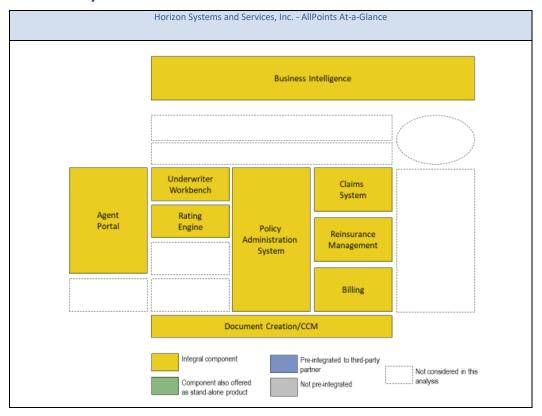
## Support

Of the 23 people employed at Horizon, there are between ten and 23 on the product design and engineering team, the implementation (not counting partner employees) team, and the support team, respectively. Horizon supports the solution from its home office in Sheboygan, WI. The company offers customer engagement activities such as online training.

## Systems Integrator and Other Partners

Publicly announced technology partnerships include InRule Technology, GhostDraft, AAIS, Rackspace, and Microsoft.

# **Functionality**



## **Policy Administration Functions**

The solution includes policy issue, premium accounting, out-of-sequence endorsement, and forms management out of the box. The solution does not currently include bordereaux import or manuscripted policies.

The following are independent objects in the solution's data model: policy and product.

# **Rating Functions**

Rating functions are integral to the suite and are not marketed as a stand-alone solution.

A quick quote option; rating multiple coverage/quote alternatives; and support for after-inception policy rating for endorsements, cancellations, reinstatements, and renewal processing are standard functions. Out-of-sequence-endorsements are available with configuration via tools for IT analysts or BAs. The solution does not currently include multi-line, multi-state, or multi-location rating on a single policy.

Versioning and update management, change control functions, and auditability of rate versioning are standard functions. An application and forms library with standard and customizable applications and forms is available out of the box. Download to agency management systems and pre-integration to third-party data providers are available via out-of-the-box integration to a third-party system or service.

ISO rates/rules support and ISO-formatted statistical data are available out of the box. ISO ERC integration is available out-of-the-box integration to a third-party system or service. The company reports that NCCI/Bureau of Workers' Comp rates/rules support is under development and should be available in less than six months.

Saving/storing an in-process or completed policy change transaction to allow issuance at a later date and product design and development tools are available out of the box. Setting insurer-specific defaults is available with configuration via tools for IT analysts or BAs. Multi-carrier comparison is available via out-of-the-box integration to a third-party system or service.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, import/export rating tables to/from spreadsheets (e.g., Excel), and date management capabilities are standard. Rating and rule definition and management (e.g., automatic driver assignment) are available with configuration via tools for IT analysts or BAs.

The solution does not currently include displacement testing (i.e., the ability to run the existing book of business through proposed rate/product changes to determine impact) or testing, modeling, and product analysis.

#### **Underwriter Workbench Functions**

Underwriter workbench functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing the submission data from a structured data feed is a standard function. The solution does not currently include uploading/importing the submission information from documents (OCR-like functionality).

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, and cancellation transactions are available out of the box. The solution does not currently include support for underwriting multiple submissions as one work portfolio or allowing individual quotes for different lines to be combined into a single proposal.

Capturing underwriting analysis and capturing underwriter loss analysis are standard.

Underwriter checklists that can validate information and process completeness are available with configuration via tools for IT analysts or BAs.

Submission rating; pricing analysis and scheduled rating information; providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems; and document storage are standard functions. Document creation (e.g., proposals, applications, correspondence); a rules engine that applies underwriting, workflow, and general business rules; workflow/task capabilities (inbox, predefined workflows by transaction or line of business, automatic task assignment, dairies, etc.); and a rules engine that interfaces to conditionally order specific data are available with configuration via tools for IT analysts or BAs.

Inline reports/dashboards on task/work/work status and inline reports/dashboards to support underwriting analysis are standard functions.

The solution does not currently include displaying aggregate risk accumulations for existing books at granular location levels (i.e., geo-mashup of the existing book and proposed risk).

Proposal co-authoring with other underwriters, screen sharing with other underwriters, agent-facing capabilities, and preconfigured interfaces with agent portals and third-party data services are standard functions. Natively calculated predictive scores are available with configuration via tools for IT analysts or BAs.

Preconfigured integration with business intelligence environments is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include IM collaboration with other underwriters, preconfigured interfaces with policy admin systems, or preconfigured interfaces with external predictive scoring models.

Support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) is standard. Support for variable binding/approval authority by role is available with configuration via tools for IT analysts or BAs.

#### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents, e.g., statements (most common use case) and ad hoc documents, e.g., correspondence or manuscripted policies (less common use case).

The solution includes pre-packaged, pre-built forms, libraries, and templates from ACORD and ISO. The primary authoring environment is MS Word. Content and business rules are managed by business analysts; schema mapping and data sources are managed by technical resources.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is available with configuration via tools for IT analysts or BAs. Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository, content management tools, and archival capabilities for all generated documents are available out of the box. The solution supports industry-standard schemas from ACORD XML out of the box.

# **Agent Portal Functions**

Agent portal functions are integral to the suite and are not marketed as a stand-alone solution.

New business entry/submission, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, policy change entry/submission, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, account or client view (in addition to a policy view), and a rating engine are available out of the box.

Account clearance, online payment, proposal creation, ACORD application creation, underwriter view and/or tools, and agent/underwriter collaboration are available with configuration via tools for IT analysts or BAs. Integration and pre-fill with data services and agency management system upload are available via out-of-the-box integration to a third-party system or service. The solution does not currently include side-by-side quote comparison.

File attachment support; workflow and task management capabilities; business intelligence and reporting; a consumer portal; and scheduling, diary, and calendar functions are standard. Esignature and document creation are available with configuration via tools for IT analysts or BAs.

#### **Reinsurance Functions**

Reinsurance functions are integral to the suite and are not marketed as a stand-alone solution.

Ceded reinsurance management functions like manual entry and tracking of cessions, reserves, and limits are standard. The solution does not currently include automated notification if reserves reach specific amounts or treaties approach set limits or automated identification/ calculations of accounts with applicable reinsurance.

Assumed reinsurance management functions like the manual entry and tracking of assumed reinsurance contracts are standard. The solution does not currently include automated assumed reinsurance calculations based on reinsured data feeds/connections or retrocession reinsurance management.

Treaty management and facultative management are standard functions. The solution does not currently include proportional support; non-proportional/excess of loss; multiple basis types (e.g., risks attaching, losses occurring, claims made); retroactively processing late placements or midterm contract changes; or configuration of contract rules, formulas, and types.

An end-user interface for review and approval of assumed policies as part of facultative contracts is available with configuration via tools for IT analysts or BAs. The solution does not currently include end-user interfaces for manual contract entry or for manual flagging of premiums and claims subject to reinsurance.

Real-time integration to an underwriting system (e.g., to display limits/reserves) is standard. The solution does not currently include batch file import/export for integration to other systems, real-time data intake from core systems (e.g., PAS, claims) via API or another mechanism, or integration between other insurer/reinsurer systems.

A standard library of canned reports, automated Schedule F reporting, automated bordereau reporting, and ad hoc reporting are standard functions. Statutory and regulatory reporting as well as integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profiles, etc. are available with configuration via tools for IT analysts or BAs.

Automated recoverable claims identification and viewing the full history and status of claims and claim recovery are standard. Tracking reinsurance payables and receivables, document management and storage of contracts, and an audit trail for all transactions are standard.

The solution does not currently include entity management (CRM), multi-currency support, or multi-language support.

## **Business Intelligence Functions**

BI functions are integral to the suite and are not marketed as a stand-alone solution. The solution includes tools to support data governance, dictionaries, quality, and validation; a presentation/reporting component; standard predefined reports and insurance dashboards; an ad hoc reporting tool; and data mining and analytics tools. The solution supports data movement via batch ETL.

## **Billing Functions**

Billing is an integral part of the suite and is not sold as a stand-alone billing component.

Payment and billing plan configurability is available via tools for IT analysts or BAs. The table below shows the availability of other billing functions.

Direct bill:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Agency bill:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Account or list bill:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Third-party (i.e., mortgagee) bill:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Split or multi-payer bill:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Flexible and configurable payment plans:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Support for flexible payment types (e.g.,	Available with configuration using simple tools targeted
payment card, check, EFT, payroll	for IT analysts or BAs
deduction):	
Automated rules for payment application	Available with configuration using simple tools targeted
and disbursements:	for IT analysts or BAs
Real-time account and payment calculation,	Available with configuration using simple tools targeted
scheduling, recalculation, and rescheduling:	for IT analysts or BAs
Commission calculation and payment:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Collections activities and interfaces:	Available via out-of-the-box integration to a third-party
	system or service
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available with configuration using simple tools targeted
management:	for IT analysts or BAs
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Consumer portal:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Online payment:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Out-of-the-box integration with	No
banks/credit card companies for token-	
based processing:	

Payroll deduction:	Available via out-of-the-box integration to a third-party system or service
Billing dashboarding/reporting:	Available out-of-the-box with no configuration necessary
Workers' compensation monthly self-	Under development and will be available in less than 6
reporting	months
Pay-as-you-report for workers' comp:	Under development and will be available in less than 6 months
Invoice and correspondence:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Check generation/production:	Available out-of-the-box with no configuration necessary
Billing for non-premium receivables (such	Currently not available, but could be available with a
as claims deductibles paid):	system enhancement
Payment of non-refund payables (such as	Currently not available, but could be available with a
policy dividends or mutual dividends):	system enhancement
Multi-currency support in a single instance	No
of the application:	

#### **Claims Functions**

Claims functions are integral to the suite and are not sold as a stand-alone solution.

#### **Adjudication**

Automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard functions. The solution does not currently include medical case management, injury detail maintenance (coding), or disability management.

### Catastrophe

Attaching multiple LOBs and causes of loss to a single catastrophe is a standard function. Catastrophe definition and automatic identification of catastrophe claims are available with configuration via tools for IT analysts or BAs. Mapping tools are available via out-of-the-box integration to a third-party system or service.

#### **Disbursements**

Check processing, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, and OFAC checking are standard functions.

Calculating and scheduling recurring payments is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support).

#### **Documents**

Image and media management, a correspondence or forms library, document rendering, a content repository, and content management tools are standard functions. Multi-channel delivery and output of documents (e.g., PDF, email, web, print) are available with configuration via tools for IT analysts or BAs. State-specific claims reporting templates are available via out-of-the-box integration to a third-party system or service.

#### **FNOL**

Mobile and smart device input, claimant contact management data capture, and checking for duplicate claims are standard functions. Custom question sets to prompt additional, mandatory questions based on given answers (branch scripting) are available with configuration via developer tools, XML manipulation, or a scripting language.

The solution does not currently include FROI/SROI EDI reporting, scripting for claims intake with reflexive questioning, claim characteristic scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim), or integration with external vendors and services (e.g., car rental companies, car/equipment repair shops). Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry is under development and should be available in less than six months.

#### **Fraud**

The solution does not currently include configurable business rules and tasks specific to fraud and special investigations or the provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims.

#### Litigation

The solution does not currently include litigation process tracking, including negotiation details and litigation costs, or the creation of separate tasks, workflow, diaries, or business rules for litigated cases to allow legal case management.

#### **Multi-Channel**

An agent portal with self-service and a policyholder portal with self-service are available out of the box. E-signature is available with configuration via tools for IT analysts or BAs. The solution does not currently include call center integration for FNOL or claim status check.

### Reinsurance

Assignment to reinsurance treaties and facultative arrangements are available with configuration via tools for IT analysts or BAs. The solution does not currently include identification of claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location).

#### Reporting

Standard reporting of configurable metrics for claims reporting and ad hoc reports are standard. Reporting that includes jurisdiction-specific reports and forms and standard reporting of claims performance monitoring, including claims handling and high-risk indicators (e.g., fatality, large losses, fraud), are available with configuration via tools for IT analysts or BAs.

Dashboards are available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include electronic reporting or automated state filings.

### Reserves, Recoveries, Subrogation

Granular tracking of reserves and payments is standard. Creating separate tasks, workflow, diaries, and business rules for subrogated cases is available with configuration via tools for IT analysts or BAs.

Subrogation billing and the production of correct GL entries as well as automatic reserve calculations using business rules and risk characteristics are available via out-of-the-box integration to a third-party system or service. The solution does not currently include automatic subrogation identification or direct, case, average, factor, or expense reserve types.

Jurisdictional wage and rate calculations integrated for workers' comp are under development and should be available in less than six months.

#### **Vendor Management**

Vendor management functions and processing required forms (including 1099s) are standard.

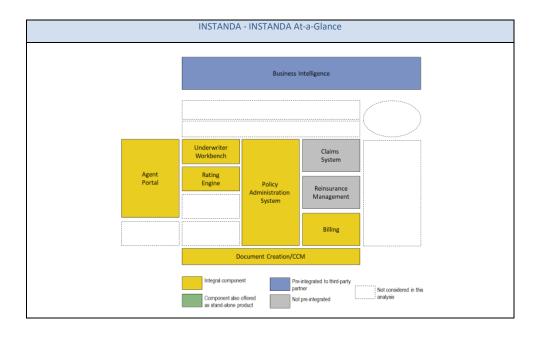
### Workflow

Automated workflow/task generation; overriding automated processes and triggering workflow processes manually; the inclusion of external documents (e.g., letters, pictures) in file notes; assigning multiple adjusters to a single claim; and generating notes, diaries, and reminders are standard functions. Automatic work assignment based on configurable rules is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include OCR-triggered workflow, compliance with the Document Repository Interface (DRI) standards, processing claim workflow trigger (CWT) files at insurer-defined intervals, or full integration with electronic court filings (ECF2).

# **INSTANDA - INSTANDA**

# **Executive Summary**

- INSTANDA is a privately held company that offers a configurable policy administration system with integrated web portals. It has headquarters in London, UK and employs 113 people. INSTANDA declined to disclose annual revenue.
- INSTANDA is a suite of solutions that offers core policy, rating, underwriter workbench, agent portal, document creation, and billing components.
- It currently has five live US/Canadian insurer clients, a mix of larger (over \$1B) and smaller (under \$1B) companies using the solution to support personal and commercial lines.
- Publicly announced clients include Markel, SGI, National General (Syndeste), AXA XL, and Great American Insurance Group.
- Live lines of business include some of the personal and commercial lines queried by Novarica, with clients in implementation for several more.
- The solution is browser-based for all user interface functions. It is written in .NET (C#/VB.NET).
- Configuration for insurance products, screens, workflow, rules, integration to third-party service calls, and document authoring is via simple tools for BAs and non-IT staff.
- Implementation is available through the company's resources or a partner. INSTANDA hosts
  the solution on MS Azure. The company offers a SaaS delivery model that includes hosting,
  license, maintenance and support, ongoing access to the latest version, and the
  implementation of upgrades.
- The company reports that the average time to initial go-live is 90 days or less and that the average implementation cost is \$100K-\$500K.



# **Lines of Business Supported**

Personal auto:	Solution is designed to support, but no clients live or implementing
Homeowners:	Clients currently in implementation for this line/product
Personal umbrella:	Solution is designed to support, but no clients live or implementing
Dwelling fire:	Solution is designed to support, but no clients live or implementing
Boatowners:	Solution is designed to support, but no clients live or implementing
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Live clients offering this product in 10-49 US states
General liability:	Live clients offering this product in 10-49 US states
BOP:	Solution is designed to support, but no clients live or implementing
Commercial crime:	Clients currently in implementation for this line/product
Commercial auto:	Clients currently in implementation for this line/product
E&O/D&O:	Live clients offering this product in 10-49 US states
Inland marine:	Solution is designed to support, but no clients live or implementing
Professional liability (including medical malpractice):	Live clients offering this product in 10-49 US states
Commercial package:	Live clients offering this product in 10-49 US states
Specialty:	Live clients offering this product in all 50 US states
Workers' comp:	Not currently supported
Surety:	Clients currently in implementation for this line/product
Other personal lines*:	Clients currently in implementation for this line/product
Other commercial lines†:	Live clients offering this product in all 50 US states

<sup>\*</sup> Other personal lines include flood.

The company notes that INSTANDA is not line-of-business specific, so most types of on-demand insurance can be configured. It asserts that microinsurance, continuous underwriting, or gig economy models could all be configured if the right data is provided for ingestion at the right time.

### **Client Base**

Globally, there are 40 clients live on INSTANDA, 27 of which are insurer clients (i.e., not MGAs, self-insureds, etc.). There are five live insurer clients in the US and Canada, larger (over \$1B) and smaller (under \$1B) companies using the solution to support personal and commercial lines.

Publicly announced clients include Markel, SGI, National General (Syndeste), AXA XL, and Great American Insurance Group.

# **Key Functions and Differentiators**

INSTANDA cites the key functions of INSTANDA as:

- Policy administration system
- Agent/broker portal
- Customer portal
- Document production
- Configurable product definition and rating

<sup>†</sup> Other commercial lines include contingency.

The company cites as its key differentiators its speed to market for new insurance products and implementation measured in weeks; that it is all configuration with no coding required; its portals, which are auto-generated from insurance product definition, with many-to-many product distribution channel mapping; that it offers multi-tenant cloud hosting with automatic upgrades and no client instances, so all clients are on the latest version; and its low-cost implementation.

# **Solution Architecture and History**

INSTANDA launched in 2015. The latest release was in December 2020. INSTANDA reports that all of the solution's customers are on the latest version and that clients receive the latest code by default. The solution supports Microsoft SQL Server databases as well as Windows and MS Azure server platforms. The company notes that, as a SaaS solution, clients do not have the option to use their own technologies. The solution is written in .NET (C#/VB.NET).

## **APIs and Integration**

The solution provides REST APIs. Availability and uptime of the APIs is the same as the MS Azure stack: 24/7.

# **Configurability and User Interface**

INSTANDA is browser-based for all user interface functions.

Configuration for insurance products, screens, workflow, rules, integration to third-party service calls, and document authoring is via simple tools targeted for BAs and non-IT staff.

# **Deployment Options**

INSTANDA deploys the solution on MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades. The solution is multi-tenant with available single-tenant options.

## **Average Implementation Length and Cost**

INSTANDA implements the solution through the company's resources or a partner. It reports that INSTANDA can be ready for initial go-live in 90 days or less and fully rolled out in an additional 30 days or less. The company reports that the average implementation cost is \$100K-\$500K.

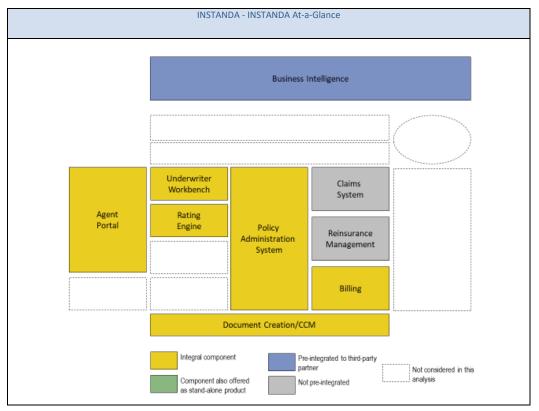
## Support

Of the 113 people employed at INSTANDA, there are between 50 and 100 on the product design and engineering team, between ten and 50 on the implementation (not counting partner employees) team, and between ten and 50 on the support team. Resources are located in the UK, the US, Australia, and Canada. INSTANDA offers customer engagement activities such as online training, a customer advisory committee, a user event, and training seminars.

### **Systems Integrator and Other Partners**

Publicly announced technology partnerships include Microsoft, Hyperscience, Cyclr, and Shuttle (payments). Publicly announced SI partnerships include Deloitte and Ernst & Young.

# **Functionality**



### **Policy Administration Functions**

The solution includes policy issue and out-of-sequence endorsement out of the box. Bordereaux import, forms management, and manuscripted policies are available with configuration via tools for IT analysts or BAs. Premium accounting isnot currently available but could be with integration to another system of service.

The following are independent objects in the solution's data model: policy, product, policyholder, distributor, and insured.

#### **Rating Functions**

Rating functions are integral to the suite and are not marketed as a stand-alone solution.

Out-of-sequence endorsements are standard. Quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are available with configuration via tools for IT analysts or BAs.

The solution does not currently include compliance and change control functions like versioning and update management, change control functions, or auditability of rate versioning. An applications and forms library with standard and customizable applications and forms is available with configuration via tools for IT analysts or BAs.

Integration capabilities, including download to agency management systems and pre-integration to third-party data providers, are available with configuration via tools for IT analysts or BAs.

The solution does not currently include ISO rates/rules support, NCCI/Bureau of Workers' Comprates/rules support, ISO-formatted statistical data, or ISO ERC integration.

Multi-carrier comparison and setting insurer-specific defaults are not currently available. Saving/storing an in-process or complete policy change transaction to allow issuance at a later date is a standard function. Product design and development tools are standard.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), and rating and rule definition and management (e.g., automatic driver assignment) are available out of the box. The solution does not currently include date management capabilities.

Displacement testing (ability to run existing book of business through proposed rate/product changes to determine impact) is standard. The solution does not currently include testing, modeling, and product analysis.

#### **Underwriter Workbench Functions**

Underwriting is integral to the suite and is not marketed as a stand-alone solution.

Uploading/importing submission data from a structured data feed is a standard function. Uploading/importing submission information from documents (OCR-like functionality) is available via out-of-the-box integration to a third-party system or service.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, and cancellation transactions is standard. The solution does not currently support underwriting multiple submissions as one work portfolio.

Providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems is available out of the box. Combining individual quotes for different lines into single proposals is available with configuration via tools for IT analysts or BAs.

Capturing underwriting analysis, capturing underwriter loss analysis, underwriter checklists that can validate information completeness and process completeness, and pricing analysis and scheduled rating information are available with configuration via tools for IT analysts or BAs. The solution does not currently include submission rating.

Document storage is available out of the box. Document creation (proposals, applications, correspondence) is available with configuration via tools for IT analysts or BAs. Inline reports/dashboards to support underwriting analysis are available via out-of-the-box integration to a third-party system or service. The solution does not currently include workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment) or inline reports/dashboards on tasks/work/work status.

Rules engines that automatically apply underwriting, workflow, and general business rules and rules engines that interface to order specific data conditionally are available with configuration via tools for IT analysts or BAs.

Displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) is available via out-of-the-box integration to a third-party system or service.

Agent-facing capabilities are standard. Screen sharing with other underwriters and IM collaboration with other underwriters is available via out-of-the-box integration to a third-party system or service. The solution does not currently include proposal co-authoring with other underwriters.

Support for variable binding/approval authority by role is available via configuration via tools for IT analysts or BAs. The solution does not currently include support for email notification/communication with agents and underwriters within the system (retaining a record of all emails).

Preconfigured interfaces with agent portals and third-party data services are available with configuration via tools for IT analysts or BAs. Preconfigured integration with business intelligence environments is also available with configuration using simple tools for IT analysts or BAs. The solution does not currently include preconfigured interfaces with policy admin systems, external predictive scoring models, or natively calculated predictive scores.

#### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents, e.g., statements (the most common use case), and ad hoc documents, e.g., correspondence and manuscripted policies (the less common use case).

The suite does not include any pre-packaged, pre-built forms, libraries, and templates from ISO or ACORD. The primary authoring environment is a custom environment. Content, business rules, schema mapping, and data sources are designed to be managed by business analysts. The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery available with configuration via tools for IT analysts or BAs.

Clients must use the solution's built-in toolset for document authoring and content management workflow. A content repository, content management tools, and archival capabilities for all documents generated are standard. The solution does not currently include out-of-the-box support for industry-standard schemas (e.g., ACORD XML, ebXML, XBRL).

#### **Agent Portal Functions**

An agent portal is integral to INSTANDA and is not marketed as a stand-alone solution.

P/C portal functionality like new business entry/submission; uploading/importing data from Excel (e.g., locations, cars, drivers); quick quote; integration and pre-fill with data services; policy change entry/submission; online payment; renewal quote entry/submission; policy inquiry; policy transaction history inquiry; claims inquiry; proposal creation; ACORD application creation;

side-by-side quote comparison; agency management system upload; account or client view in addition to a policy view; underwriter view and/or tools; agent/underwriter collaboration; and a rating engine are available with configuration via simple tools for IT analysts or BAs.

Account clearance is available via out-of-the-box integration to a third-party system or service. The solution does not currently include billing inquiry, but the company asserts this function is under development and should be available in less than six months.

Support for e-signature, document creation, file attachment support, and a consumer portal are available with configuration via simple tools for IT analysts or BAs. Business intelligence and reporting is available via out-of-the-box integration to a third-party system or service. The solution does not currently include scheduling, diary, and calendar functions or workflow and task management capabilities.

#### **Reinsurance Functions**

Reinsurance functions are not pre-integrated as part of the suite.

### **Business Intelligence Functions**

INSTANDA does not have a BI offering pre-integrated as part of the suite, but the company provides an ODS that can be consumed by third-party BI tools.

## **Billing Functions**

Billing functions are integral to the suite and are not sold as a stand-alone billing component. Payment and billing plan configurability is available with configuration via tools for IT analysts or BAs. The table on the following page shows the availability of other billing functions.

Direct bill:	Available with configuration using simple tools targeted for IT analysts or BAs
Agency bill:	Currently not available, but could be available with a system enhancement
Account or list bill:	Currently not available, but could be available with a system enhancement
Third-party (i.e., mortgagee) bill:	Currently not available, but could be available with integration to another system or service
Split or multi-payer bill:	Available with configuration using simple tools targeted for IT analysts or BAs
Flexible and configurable payment plans:	Available with configuration using simple tools targeted for IT analysts or BAs
Support for flexible payment types (e.g., payment card, check, EFT, payroll deduction):	Available with configuration using simple tools targeted for IT analysts or BAs
Automated rules for payment application and disbursements:	Available with configuration using simple tools targeted for IT analysts or BAs
Real-time account and payment calculation, scheduling, recalculation, and rescheduling:	Available with configuration using simple tools targeted for IT analysts or BAs
Commission calculation and payment:	Currently not available, but could be available with integration to another system or service
Collections activities and interfaces: Equity billing support:	Available out of the box with no configuration necessary  Available with configuration using simple tools targeted for IT analysts or BAs
Automated workflow and task	Currently not available, but could be available with
management:	integration to another system or service
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with banks/credit card companies for token-based processing:	Yes
Payroll deduction:	Currently not available, but could be available with integration to another system or service
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self- reporting:	Not available
Pay-as-you-report for workers' comp:	Currently not available, but could be available with integration to another system or service
Invoice and correspondence:	Available with configuration using simple tools targeted for IT analysts or BAs
Check generation/production:	Currently not available, but could be available with integration to another system or service
Billing for non-premium receivables (such as claims deductibles paid):	Not available
Payment of non-refund payables (such as policy dividends or mutual dividends):	Not available
Multi-currency support in a single instance of the application:	Yes

#### **Claims Functions**

INSTANDA's claims P/C solution currently contains FNOL and a rules engine for reserving, coverage verification, and simple adjudication. The company asserts that additional claim adjusting functionality will be added over the next 12 months.

#### **FNOL**

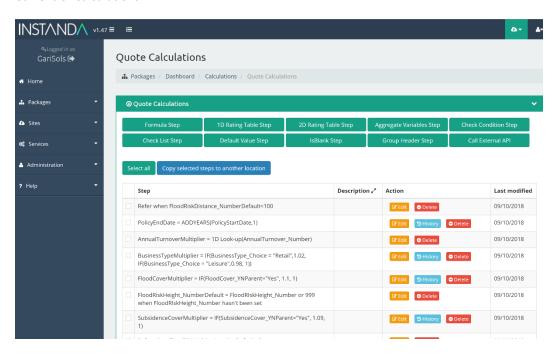
Mobile and smart device input come standard. Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; scripting for claims intake with reflexive questioning; custom question sets to prompt mandatory additional questions depending on the answers given (branch scripting); and claimant contact management data capture are available with configuration using simple tools targeted for IT analysts or BAs. Currently, the solution does not include handling of FROI/SROI EDI reporting, claim characteristics scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim), claim checking duplication, or integration with external vendors and services (e.g., car rental companies or repair shops).

### Reserves/Recoveries/Subrogation

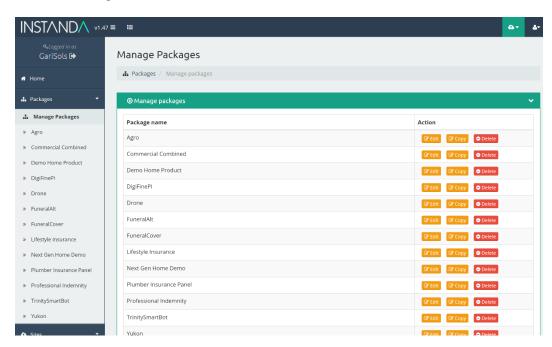
Automatic reserve calculations using business rules and risk characteristics along with direct, case, average, factor, and expense reserve types are available with configuration using simple tools targeted for IT analysts or BAs. Currently, the solution does not include creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; subrogation billing and the production of correct GL entries; granular tracking reserves and payments; or jurisdictional wage and rate calculations integrated for workers' comp.

### **Screenshots**

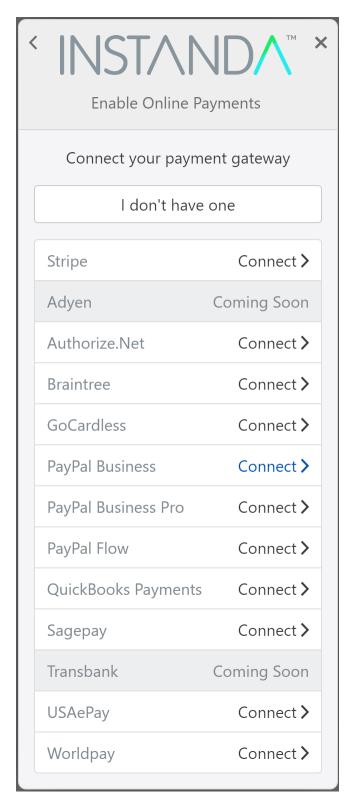
**Current UI Calculations** 



### **Current UI Packages**



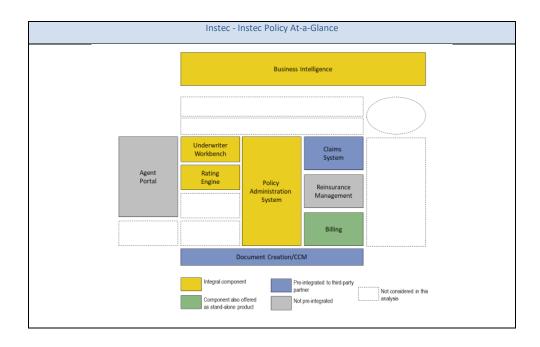
### **Current UI Payments**



# **Instec - Instec Policy**

# **Executive Summary**

- Instec is now 100% owned by Insurity. It is headquartered in Naperville, IL and employs 155 people. The company's annual revenue is in the range of \$20M-\$50M.
- Instec Policy is a suite of solutions that includes core policy features, rating, underwriting workbench, business intelligence, and billing components.
- It currently has 19 live US/Canadian insurer clients using the suite, most of which are smaller companies (under \$1B) using the solution to support commercial lines with some personal.
- Publicly announced clients include Markel Corporation, Meadowbrook Insurance Company,
   Pennsylvania and Indiana Lumbermens, Argo Group, and Church Mutual Insurance Co.
- The solution is a Microsoft WPF Rich Internet Application. It is written primarily in .NET (C#/VB.NET), with some Instec domain-specific language and a small amount of C++.
- Configuration for insurance products, screens, workflows, rules, and document authoring is
  via simple tools targeted for BAs and non-IT staff. Configuration for integration to third-party
  service calls is not available; changes are done by the vendor.
- Implementation is available through the company's resources. Instec deploys the solution
  on-prem and hosted on MS Azure. The company offers a SaaS delivery model that includes
  hosting, license, maintenance and support, ongoing access to the latest version, and the
  implementation of the upgrades.
- The company reports that the average time to initial go-live is 90 days or less and that the
  average implementation cost (excluding maintenance and conversion after deployment) is
  \$100K-\$500K.



# **Lines of Business Supported**

Personal auto:	Solution is designed to support, but no clients live or implementing
Homeowners:	Live clients offering this product in 2-9 US states
Personal umbrella:	Solution is designed to support, but no clients live or implementing
Dwelling fire:	Live clients offering this product in one US state
Boatowners:	Solution is designed to support, but no clients live or implementing
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Live clients offering this product in all 50 US states
General liability:	Live clients offering this product in all 50 US states
BOP:	Live clients offering this product in all 50 US states
Commercial crime:	Live clients offering this product in all 50 US states
Commercial auto:	Live clients offering this product in all 50 US states
E&O/D&O:	Live clients offering this product in all 50 US states
Inland marine:	Live clients offering this product in all 50 US states
Professional liability (including medical malpractice):	Live clients offering this product in all 50 US states
Commercial package:	Live clients offering this product in all 50 US states
Specialty:	Live clients offering this product in all 50 US states
Workers' comp:	Live clients offering this product in all 50 US states
Surety:	Solution is designed to support, but no clients live or implementing
Other personal lines:	Solution is designed to support, but no clients live or implementing
Other commercial lines†:	Live clients offering this product in all 50 US states

<sup>&</sup>lt;sup>†</sup> Other commercial lines include excess liability, management portfolio, and commercial umbrella.

Instec reports that it has supported telematics-based commercial auto on demand with Aon Affinity; re-rating is available monthly. The product is sold in all states except NY, AK, and HI.

### **Client Base**

Globally, Instec has 42 clients live on Instec Policy, all of which are US-based. Nineteen of these clients are insurers (i.e., not MGAs, self-insureds), most of which are smaller companies (under \$1B) using the solution to support commercial lines with some personal lines.

Publicly announced clients include Markel Corporation, Meadowbrook Insurance Company, Pennsylvania and Indiana Lumbermens, Argo Group, and Church Mutual Insurance Co.

# **Key Functions and Differentiators**

Instec cites the key functions of Instec Policy as:

- Built-in, configurable bureau content
- Rating for the policy life cycle
- Forms generation and customization
- Cloud-based deployment in Microsoft Azure
- A fully accessible and documented policy data store

The company cites as key differentiators its bureau content, with updates available 90-120 days before effective date; user-configured custom coverages, forms, and programs; a fully functional system in production in fewer than eight weeks; an accessible policy data set that facilitates integration; as well as a working test system provided before contract.

## **Solution Architecture and History**

Instec Policy launched in 1992 and was re-architected in 2011. The latest release was in December 2020. Instec reports that 80% of the solution's customers are on the latest version and 20% are on an older version released in the last three years. Approximately 80% of customers have been through at least one upgrade.

The solution requires Microsoft SQL Server databases and Windows server platforms. The solution is written primarily in .NET (C#/VB.NET) and some Instec domain-specific language plus a small amount of C++.

# **APIs and Integration**

The solution provides REST and SOAP APIs.

# **Configurability and User Interface**

Instec Policy is a Microsoft WPF Rich Internet Application.

Configuration for insurance products, screens, workflows, rules, and document authoring is via tools intended for BAs or non-IT staff. Configuration for integration to third-party service calls is not available; changes are done by the vendor.

### **Deployment Options**

Instec offers the solution on-prem and hosted on MS Azure deployment options. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of the upgrades. The hosted solution is a single-tenant app and database.

### Average Implementation Length and Cost

Instec implements the solution through its own resources. It reports that Instec Policy can be ready for initial go-live in 90 days or less and fully rolled out in an additional 90 days or less. The company reports that the all-in cost of license plus implementation costs (excluding maintenance and conversion after deployment) for an average client is \$100K-\$500K.

### Support

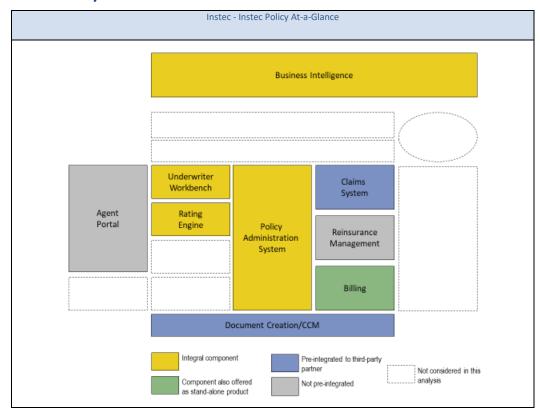
Of the 155 people employed at Instec, there are between 50 and 100 on the product design and engineering team, fewer than ten on the implementation (not including partnerships) team, and between 50 and 100 on the support team.

Instec provides its customers with support at customer sites and its corporate offices in Naperville, IL. Instec offers customer engagement activities such as online training, a user event, and training seminars.

# **Systems Integrator and Other Partners**

Publicly announced technology partnerships include Microsoft (Azure, Power BI, machine learning), Martin & Company, GhostDraft (documents), Verisk Insurance Solutions (ISO), and Madison Consulting.

## **Functionality**



### **Policy Administration Functions**

The solution includes policy issue, premium accounting, out-of-sequence endorsement, and manuscripted policies out of the box. The solution includes forms management with configuration via tools for IT analysts or BA. Bordereaux import is available with configuration via developer tools, XML manipulation, or a scripting language.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

### **Rating Functions**

Rating functions are part of the suite and are not sold as a stand-alone rating engine.

Core rating functions like support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are standard. Quick quote is available via out-of-the-box integration to a third-party system or service.

Compliance and change control functions like auditability of rate versioning are standard. Versioning and update management and change control functions are available with configuration via tools for IT analysts or BAs. An application and forms library with standard and customizable applications and forms is a standard function.

Integration capabilities like pre-integration to third-party data providers are available with configuration via developer tools, XML manipulation, or a scripting language. Download to agency management systems is available via out-of-the-box integration to a third-party system or service. ISO rates/rules support, NCCI/Bureau of Workers' Comp rates/rules support, and ISO-formatted statistical data are standard. The solution does not include ISO ERC integration.

Setting insurer-specific defaults is available with configuration via tools for IT analysts or BAs. Multi-carrier comparison is available via out-of-the-box integration to a third-party system or service. Saving/storing an in-process or completed policy change transaction to allow issuance at a later date is standard. Product design and development tools are available with configuration via tools for IT analysts or BAs.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are available with configuration via tools for IT analysts or BAs. The solution does not currently include the import/export of rating tables to/from spreadsheets (e.g., Excel).

Displacement testing (ability to run existing book of business through proposed rate/product changes to determine impact) and testing, modeling, and product analysis are available via out-of-the-box integration to a third-party system or service.

### **Underwriter Workbench Functions**

Instec Underwriting is integral to the suite and is also marketed as a stand-alone solution. Uploading/importing the submission data from a structured data feed is available with configuration via tools for IT analysts or BAs. The solution does not currently include uploading/importing the submission information from documents (OCR-like functionality).

Support for cancellation transactions is standard. Support for new business transactions/ underwriting, policy change transactions/underwriting, renewal transactions/underwriting, and non-renewal transaction are available with configuration using simple tools targeted for IT analysts or BAs. Instec notes that supporting underwriting multiple submissions as one work portfolio is under development and should be available in less than six months.

Allowing individual quotes for different lines to be combined into a single proposal; underwriter checklists that can validate information and process completeness; and providing a single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are standard functions.

Capturing underwriting analysis, capturing an underwriter's loss analysis, submission rating, and pricing analysis and scheduled rating information are available with configuration via tools for IT analysts or BAs.

Document storage is available out of the box. Document creation (proposals, applications, correspondence) is available via out-of-the-box integration to a third-party system or service. A rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries, etc.); a rules engine that interfaces to conditionally order specific data; and inline reports/dashboards on tasks/work/work status are standard.

Instec asserts that inline reports/dashboards to support underwriting analysis, displaying aggregate risk accumulations for an existing book at granular location level (i.e., geo-mashup of existing book and proposed risk), and IM collaboration with other underwriters are under development and should be available in less than six months.

The solution does not currently include proposal co-authoring with other underwriters or screensharing with other underwriters. Agent-facing capabilities are available with configuration using simple tools targeted for IT analysts or BAs.

Support for variable binding/approval authority by role and support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) are standard.

Preconfigured interfaces with policy admin systems are standard. Preconfigured integration with business intelligence environments, preconfigured interfaces with third-party data services, natively calculated predictive scores, and preconfigured interfaces with external predictive scoring models are available with configuration via tools for IT analysts or BAs. Preconfigured interfaces with agent portals are available via developer tools, XML manipulation, or a scripting language.

### **Document Functions**

Instec provides document functionality through pre-integration with GhostDraft's platform.

#### **Agent Portal Functions**

Agent portal functions are not pre-integrated as part of the suite.

#### **Reinsurance Functions**

Reinsurance is not pre-integrated as part of the suite.

### **Business Intelligence Functions**

Business intelligence functions are integral to the suite and are not marketed as a stand-alone solution.

The company reports that its series of fact and dimension tables are integrated with Microsoft Power BI for reports and ad hoc queries and can be fed to Microsoft Machine Learning for predictive analytics.

Data functions include a presentation/reporting component, standard predefined reports and predefined insurance dashboards, an ad hoc reporting tool, and data mining and analytics tools. The solution supports data movement via batch ETL.

# **Billing Functions**

Instec Billing is part of the suite and is also sold as a stand-alone billing component. Payment and billing plan configurability is available via developer tools, XML manipulation, or a scripting language. The table on the following page shows the availability of other billing functions.

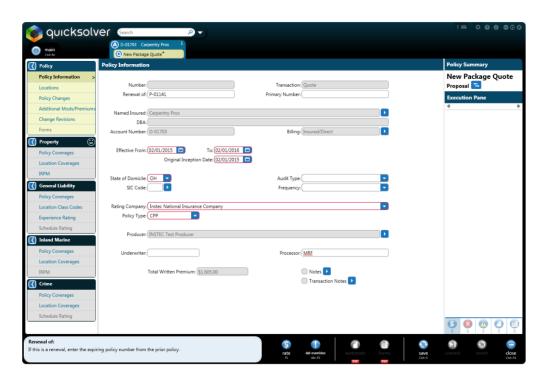
Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Not available
Split or multi-payer bill:	Not available
Flexible and configurable payment plans:	Available with configuration using simple tools targeted for IT analysts or BAs
Support for flexible payment types (e.g.,	Available via out-of-the-box integration to a third-party
payment card, check, EFT, payroll deduction):	system or service
Automated rules for payment application and disbursements:	Available with configuration using simple tools targeted for IT analysts or BAs
Real-time account and payment calculation,	Available with configuration using simple tools targeted
scheduling, recalculation, and rescheduling:	for IT analysts or BAs
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Under development and will be available in less than 6 months
Equity billing support:	Not available
Automated workflow and task	Not available
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Not available
Consumer portal:	Available via out-of-the-box integration to a third-party
	system or service
Online payment:	Available via out-of-the-box integration to a third-party
	system or service
Out-of-the-box integration with	No
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Not available
Billing dashboarding/reporting:	Available via out-of-the-box integration to a third-party system or service
Workers' compensation monthly self-	Currently not available, but could be available with a
reporting	system enhancement
Pay-as-you-report for workers' comp:	Not available
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available via out-of-the-box integration to a third-party
	system or service
Billing for non-premium receivables (such	Available out of the box with no configuration necessary
as claims deductibles paid):	
Payment of non-refund payables (such as policy dividends or mutual dividends):	Not available
Multi-currency support in a single instance of the application:	No

# **Claims Functions**

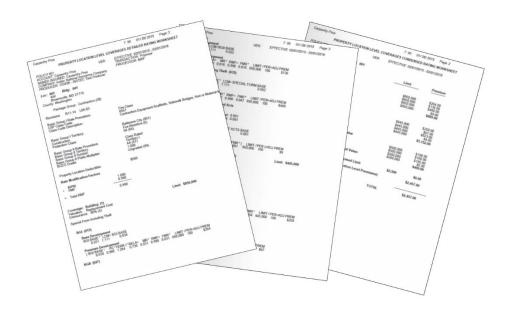
Claims functions are provided via pre-integration to the KLJ claims system claimsHQ.

### **Screenshots**

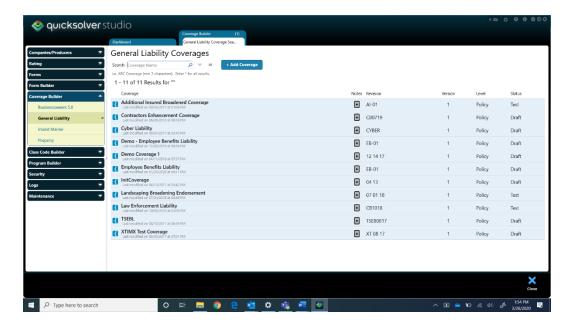
User Interface



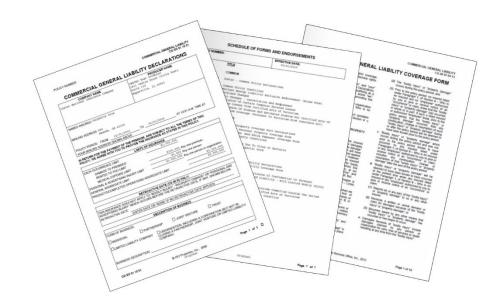
# **Rating Worksheets**



### **Custom Coverages**



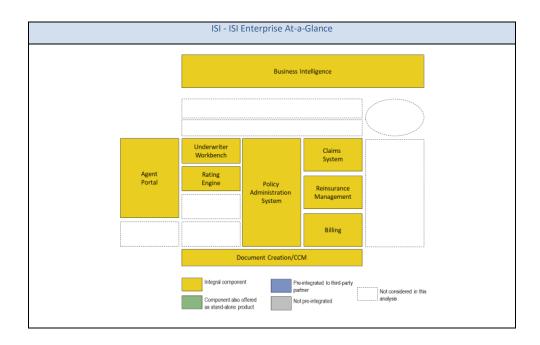
#### **Bureau Forms**



# **Insurance Systems Inc. - ISI Enterprise**

# **Executive Summary**

- Insurance Systems Inc. is privately owned and operated by its active partners.
- ISI has headquarters in Toronto, Canada, and employs 60 people. The company's annual revenue is in the range of \$10M-\$20M.
- ISI Enterprise is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, billing, and claims components.
- It currently has 12 live US/Canadian insurer clients using the suite, all of which are smaller companies (under \$1B) using the solution to support commercial lines; some are also using it to support personal lines.
- Publicly announced clients include Lawyers Mutual Liability Insurance Company of North Carolina, Trisura Guarantee Insurance Company, Ecclesiastical Insurance Organization, Integris Group, and Lawyers Mutual Insurance Company.
- The solution is browser-based for all user interface functions. It is written in XML and some .NET (C#/VB.NET).
- Configuration for insurance products, screens, workflows, and document authoring is via tools for BAs and non-IT staff. Configuration for rules and integration to third-party service calls is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's own resources. ISI deploys the solution on-prem and hosted on AWS. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is 12 months or less and that the average implementation cost is \$1M-\$2M.



# **Lines of Business Supported**

Personal auto:	Live clients offering this product in one US state
Homeowners:	Live clients offering this product in 2-9 US states
Personal umbrella:	Solution is designed to support, but no clients live or implementing
Dwelling fire:	Live clients offering this product in 2-9 US states
Boatowners:	Solution is designed to support, but no clients live or implementing
Personal package:	Live clients offering this product in one US state
Commercial property:	Live clients offering this product in 2-9 US states
General liability:	Live clients offering this product in 2-9 US states
BOP:	Live clients offering this product in 2-9 US states
Commercial crime:	Live clients offering this product in 2-9 US states
Commercial auto:	Live clients offering this product in 2-9 US states
E&O/D&O:	Live clients offering this product in 2-9 US states
Inland marine:	Solution is designed to support, but no clients live or implementing
Professional liability (including medical malpractice):	Live clients offering this product in 2-9 US states
Commercial package:	Live clients offering this product in 2-9 US states
Specialty:	Live clients offering this product in 2-9 US states
Workers' comp:	Solution is designed to support, but no clients live or implementing
Surety:	Live clients offering this product in 2-9 US states
Other personal lines:	Solution is designed to support, but no clients live or implementing
Other commercial lines:	Solution is designed to support, but no clients live or implementing

### **Client Base**

Globally, ISI has 12 clients live on ISI Enterprise, all of which are insurer clients (i.e., not MGAs, self-insureds) live in the US and Canada. They are all smaller companies (under \$1B) using the solution to support commercial lines; some are also using it to support personal lines.

Publicly announced clients include Lawyers Mutual Liability Insurance Company of North Carolina, Trisura Guarantee Insurance Company, Ecclesiastical Insurance Organization, Integris Group, and Lawyers Mutual Insurance Company.

### **Key Functions and Differentiators**

ISI cites the key functions of ISI Enterprise as:

- Configurable workflows for electronic approvals
- Automated renewal setup and renewal management dashboard and tools
- Configurable reinsurance functionality for underwriting, claims, and accounting
- PCI-compliant customer billing portal for invoice presentment and payment
- Self-service report creation for business intelligence

The company cites as its key differentiators a tightly integrated solution with all core insurance company functions (underwriting, billing, claims, accounting, reinsurance); a professional services team with insurance expertise; scalable, cloud-based deployment at AWS; the flexibility to support all lines of P/C business on a single platform; and a common code base among all clients to provide a clear upgrade path.

## **Solution Architecture and History**

ISI Enterprise launched in 1999 and was re-architected in 2009. The latest release was in February 2019. ISI notes that it offers clients the option to take releases monthly. ISI reports that 90% of the solution's customers are on the latest version, while 10% are on a version older than three years. 90% of customers have been through at least one upgrade.

The solution supports PostgreSQL databases and UNIX/Linux and Windows server platforms. The solution is written in XML with some .NET (C#/VB.NET).

## **APIs and Integration**

ISI reports that it provides a fully documented API delivered through RESTful web services. The API provides contact (e.g., client address), underwriting, and messaging functions.

# **Configurability and User Interface**

ISI Enterprise is browser-based for all user interface functions.

Configuration for insurance products, screens, workflows, and document authoring is via tools for BAs and non-IT staff. Configuration for rules and integration to third-party service calls is via developer tools, XML manipulation, or a scripting language.

# **Deployment Options**

ISI deploys the solution on-prem and hosted on AWS. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades. The hosted solution is a single-tenant app server and database.

## **Average Implementation Length and Cost**

ISI implements the solution through the company's own resources. It reports that ISI Enterprise can be ready for initial go-live in 12 months or less and fully rolled out in an additional 90 days or less. The company reports that the average implementation cost is \$1M-\$2M.

### Support

Of the 60 people employed at ISI, there are between ten and 50 on each of the product design and engineering, implementation (not counting partnerships), and support teams.

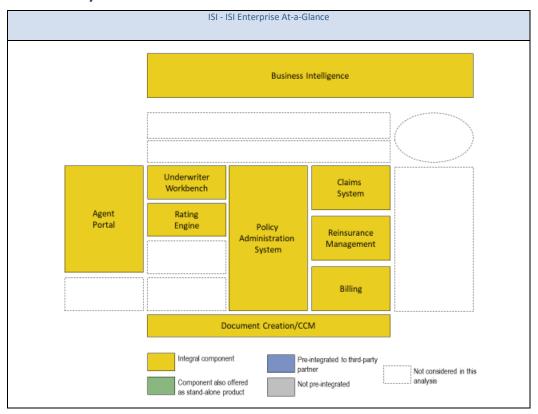
In addition to local resources at the client site, support staff are provided out of Insurance Systems Inc.'s headquarters in Toronto, Canada as well as from Detroit, MI and Macedonia.

ISI offers customer engagement activities such as a customer advisory committee, a user event, and training seminars.

# **Systems Integrator and Other Partners**

Publicly announced technology partnerships include Invoice Cloud, Izenda (BI), Risk Control Technologies, and Paymentus (payment processing).

# **Functionality**



### **Policy Administration Functions**

The solution includes policy issue, premium accounting, out-of-sequence endorsement, and forms management out of the box. Bordereaux import and manuscripted policies are available with configuration via tools for IT analysts or BAs.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

### **Rating Functions**

A rating engine is integral to the suite and is not marketed as a stand-alone solution.

Support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; and rating multiple coverage/quote alternatives are standard functions. Quick quote and multi-line, multi-state, and multi-location rating on a single policy are available with configuration via tools for IT analysts or BA.

Versioning and update management, change control functions, and auditability of rate versioning are standard.

An application and forms library with standard and customizable applications and forms is a standard function. Pre-integration to third-party data providers and download to agency management systems are available with configuration using developer tools, XML manipulation, or a scripting language.

Currently, the solution does not include ISO rates/rules support, ISO-formatted statistical data, NCCI/Bureau of Workers' Comp rates/rules support, or ISO ERC integration.

Multi-carrier comparison and setting insurer-specific defaults are available with configuration via developer tools, XML manipulation, or a scripting language. Saving/storing in-process or completed policy change transactions to allow issuance at a later date and product design and development tools are standard.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are standard. Displacement testing (i.e., the ability to run the existing book of business through proposed rate/product changes to determine impact) as well as testing, modeling, and product analysis are available with configuration via developer tools, XML manipulation, or a scripting language.

### **Underwriter Workbench Functions**

Underwriting functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing submission data from a structured data feed is available with configuration using simple tools targeted for IT analysts or BAs. Uploading/importing the submission information from documents (OCR-like functionality) is available with configuration using developer tools, XML manipulation, or a scripting language.

The solution supports new business transactions/underwriting, policy change transactions/ underwriting, renewal transactions/underwriting, the non-renewal transaction, cancellation transactions, and underwriting multiple submissions as one work portfolio out of the box.

The solution includes capturing underwriting analysis and capturing underwriter loss analysis out of the box. The ability to combine individual quotes for different lines into a single proposal and underwriter checklists that can validate information and process completeness are available with configuration via tools for IT analysts or BAs.

The solution provides single current and historical views of insured accounts across the enterprise, lines, of business, and policy systems out of the box. Submission rating, pricing analysis, and scheduled rating information are available with configuration via tools for IT analysts or BAs.

Document storage; a rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); a rules engine that interfaces to order specific data conditionally; inline reports/dashboards to tasks/work/work status; and inline reports/dashboards to support underwriting analysis are standard functions.

Document creation (proposals, applications, correspondence) is available with configuration via tools for IT analysts or BAs.

Agent-facing capabilities, preconfigured interfaces with agency portals, preconfigured integration with BI environments, and support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) are standard.

Displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of the existing book and proposed risk), proposal co-authoring with other underwriters, and support for variable binding/approval authority by role are available with configuration via tools for IT analysts or BAs.

Preconfigured interfaces with third-party data services are available with configuration via developer tools, XML manipulation, or a scripting language.

The solution does not currently include IM collaboration with other underwriters, screen sharing with other underwriters, preconfigured interfaces with policy admin systems, natively calculated predictive scores, or preconfigured interfaces with external predictive scoring models.

#### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents (e.g., statements) and ad hoc documents (e.g., correspondence or manuscripted policies).

The suite does not include pre-packaged, pre-built forms, libraries, and templates from ISO or ACORD. The primary authoring environment is MS Word. Content is managed by business analysts. Business rules, schema mapping, and data sources are maintained by technical resources.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is a standard function.

Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository, content management tools, and archival capabilities for all generated documents are standard. The solution supports industry-standard schemas from ACORD XML out of the box.

#### **Agent Portal Functions**

Agent portal functions are integral to the suite and are not marketed as a stand-alone solution.

Online payment, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, account or client view (in addition to policy view), underwriter view and/or tools, a rating engine, and agent/underwriter collaboration are standard.

New business entry/submission, account clearance, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, policy change entry/submission, proposal creation, ACORD application creation, side-by-side quote comparison, and agency management system upload are available with configuration via tools for IT analysts or BAs.

Integration and pre-fill with data services are available with configuration via developer tools, XML manipulation, or a scripting language.

Document creation and file attachment support are standard. Workflow and task management capabilities as well as scheduling, diary, and calendar functions are available with configuration via tools for IT analysts or BAs. A consumer portal and business intelligence and reporting are available via out-of-the-box integration to a third-party system or service. The solution does not currently include support for e-signature.

#### **Reinsurance Functions**

Reinsurance is integral to the suite and is not marketed as a stand-alone solution.

Ceded reinsurance management functions like the manual entry and tracking of cessions, reserves, and limits and automated identification/calculation of accounts with applicable reinsurance are standard. Automated notifications if reserves reach specific amounts or treaties approach set limits are available with configuration via tools for IT analysts or BAs.

Assumed reinsurance management functions like the manual entry and tracking of assumed reinsurance contracts as well as automated assumed reinsurance calculations based on reinsured data feeds/connections are standard. The solution does not currently include retrocession reinsurance management.

Treaty management; facultative management; proportional support; non-proportional/excess of loss; multiple basis types (risks attaching, losses occurring, and claims made); retroactively processing late placements or midterm contract changes; and configuration of contract rules, formulas, and types are standard.

End-user interfaces for manual contract entry and manual flagging of premiums and claims subject to reinsurance are standard. An end-user interface for review and approval of assumed policies as part of facultative contracts is available with configuration via tools for IT analysts or BAs.

Real-time integration to an underwriting system (e.g., to display limits, reserves) is standard. Batch file import/export for integration to other systems is available with configuration via tools for IT analysts or BAs.

Real-time data intake from core systems (e.g., PAS, claims) via API or another mechanism and real-time integration between other insurer/reinsurer systems are available with configuration via developer tools, XML manipulation, or a scripting language.

Statutory and regulatory reporting, a standard library of canned reports, and ad hoc reporting are standard. Automated bordereau reporting is available with configuration via tools for IT analysts or BAs. The solution does not currently include automated Schedule F reporting or integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc.

Automated recoverable claims identification and viewing the full history/status of claims and claim recovery are available out of the box. Tracking reinsurance payables and receivables, entity management (CRM), document management and storage of the actual contracts, and an audit trail for all transactions are standard.

Multi-currency and multi-language support are available with configuration via tools for IT analysts or BAs.

# **Business Intelligence Functions**

ISI offers business intelligence functionality through pre-integration with Izenda.

ISI Enterprise offers an embedded BI solution that empowers users to create reports based on summary data from all functional departments. Users can also modify base templates to meet their business need. ISI BI provides users with the ability to export, schedule, and send reports as well as build multiple reports into a single dashboard.

The solution includes an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes; a presentation/reporting component; standard predefined reports and predefined insurance dashboards; and an ad hoc reporting tool.

The solution supports data movement via batch ETL.

# **Billing Functions**

Billing is integral to the suite and is not marketed as a stand-alone solution. Payment and billing plan configurability is standard. The table below shows the availability of other billing functions.

Direct bill:	Available and of the barrowith as saudinoustics assessed
	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available with configuration using developer tools, XML
	manipulation, or a scripting language
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available with configuration using developer tools, XML
	manipulation, or a scripting language
Consumer portal:	Available with configuration using developer tools, XML
	manipulation, or a scripting language
Online payment:	Available via out-of-the-box integration to a third-party
	system or service
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Not available
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Not applicable
reporting:	N. C. P. II.
Pay-as-you-report for workers' comp:	Not applicable
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Billing for non-premium receivables (such	Available out of the box with no configuration necessary
as claims deductibles paid):	
Payment of non-refund payables (such as	Available with configuration using simple tools targeted
policy dividends or mutual dividends):	for IT analysts or BAs
Multi-currency support in a single instance	Yes
of the application:	

#### **Claims Functions**

Claims is integral to the suite and is not marketed as a stand-alone solution.

### **Adjudication**

Automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard. Medical case management and injury detail maintenance (coding) are available with configuration via tools for IT analysts or BAs. Disability management is available with configuration via developer tools, XML manipulation, or a scripting language.

#### Catastrophe

Catastrophe definition, attaching multiple LOBs and multiple causes of loss to a single catastrophe, and mapping tools are standard. Automatic identification of catastrophe claims is available with configuration using simple tools targeted for IT analysts or BAs.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, accommodating multiple pay parties (e.g., garnishments), and combining multiple pending payments for a single client into one disbursement are standard. Calculating partial or one-off payments and OFAC checking are available with configuration via tools for IT analysts or BAs. The solution does not currently include handling multiple offsets and deductions against benefits (e.g., wage garnishments).

#### **Documents**

Image and media management, a correspondence or forms library, document rendering, a content repository, and content management tools are standard. State-specific claims reporting templates and multi-channel delivery and output of documents (e.g., PDF, email, web, and print) are available with configuration via tools for IT analysts or BAs.

### **FNOL**

Scripting for claims intake with reflexive questioning and claimant contact management data capture are standard. Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; custom question sets to prompt additional, mandatory questions depending on given answers (branch scripting); and checking for duplicate claims are available with configuration via tools for IT analysts or BAs. Claim characteristics scoring (to calculate alerts, trigger workflow, assign a claims handler, or otherwise segment the claim) is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include FROI/SROI EDI reporting or integration with external vendors and services (e.g., car rental companies, car/equipment repair shops). ISI notes that it provides an API for insurance companies to build custom portals rather than traditional mobile and smartphone support.

### Fraud

The provision of multiple search and reporting criteria for fraud detection (via the ability to track common clients across claims) is available with configuration via tools for IT analysts or BAs. Configurable business rules and tasks specific to fraud and special investigations are available with configuration via developer tools, XML manipulation, or a scripting language.

#### Litigation

Litigation process tracking, including negotiation details and litigation costs, and creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management are available out of the box with no configuration necessary.

#### Multi-Channel

E-signature is available with configuration using simple tools targeted for IT analysts or BAs. An agent portal with self-service and a policyholder portal with self-service are supported through APIs. The solution does not currently include call center integration for FNOL or call center integration for claim status check via telephony.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., claim type, limit, location), assignment to reinsurance treaties, and assignment to facultative arrangements are standard.

#### Reporting

Standard reporting of configurable metrics for claims reporting, ad hoc reports, and dashboards are standard functions. Reporting that includes jurisdiction-specific reports and forms as well as electronic reporting or automated state filings are available with configuration via tools for IT analysts or BAs. Standard reporting of claims performance monitoring, including claims handling and high-risk indicators (e.g., fatality, large losses, fraud), is available with configuration via developer tools, XML manipulation, or a scripting language.

#### Reserves, Recoveries, Subrogation

Granular tracking reserves and payments are standard. Subrogation billing and the production of correct GL entries are available with configuration via tools for IT analysts or BAs. Creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; automatic reserve calculations using business rules and risk characteristics; and direct, case, average, factor, and expense reserve types are available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include jurisdictional wage and rate calculations integrated for workers' comp.

### **Vendor Management**

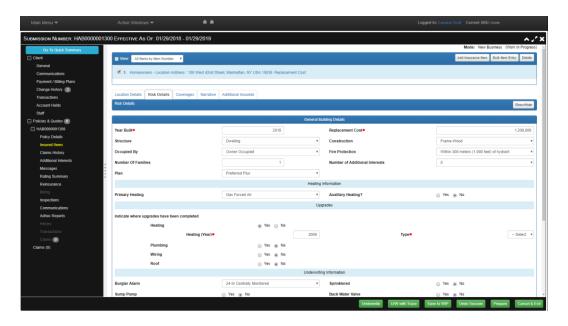
Vendor management functions are standard. Processing required forms (including 1099s) is available via out-of-the-box integration to a third-party system or service.

#### Workflow

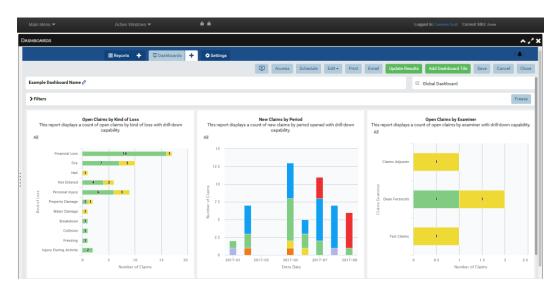
Automatic work assignment based on configurable rules; generating notes, diaries, and reminders; inclusion of external documents (e.g., letters, pictures) in file notes; and assigning multiple adjusters to single claims are standard functions. Automated workflow/task generation and overriding automated processes and triggering workflow processes manually are available with configuration via tools for IT analysts or BAs. Processing claim workflow trigger (CWT) files at insurer-defined intervals is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include OCR-triggered workflow, compliance with the Document Repository Interface (DRI) standards, or full integration with electronic court filings (ECF2).

# **Screenshots**

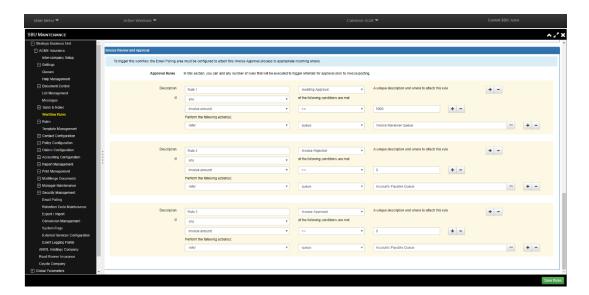
**New Business Submission** 



### Claims Dashboard



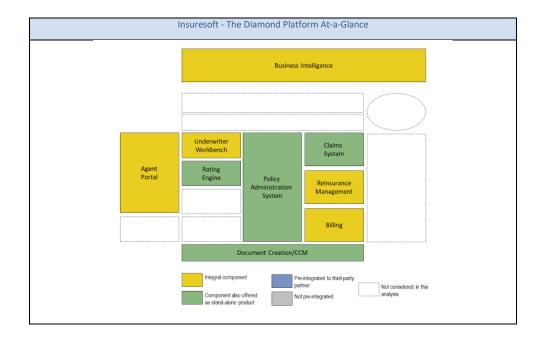
### Workflow Builder



## **Insuresoft - The Diamond Platform**

## **Executive Summary**

- Insuresoft was acquired by the Volaris Group, a division of Constellation Software (TSX: CSU), in November 2019. The company has headquarters in Tuscaloosa, AL and employs 135 people. The company's annual revenue is in the range of \$20M-\$50M.
- The Diamond Platform is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has 38 live US/Canadian insurer clients using the suite, most of which are smaller companies (under \$1B) using the solution to support personal lines with some commercial.
- Publicly announced clients include California Earthquake Authority, Aon (National Flood Services), Buckeye Insurance Group, Indiana Farmers Mutual Insurance, and Lighthouse Property Insurance Company.
- The solution is browser-based for all user interface functions. It is written in .NET (C#/VB.NET).
- Configuration for rules is via tools for BAs and non-IT staff. Configuration for insurance products and document authoring is via tools for IT analysts. Screens, workflow, and integration to third-party service calls are configurable via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's resources or a partner. Insuresoft
  deploys the solution on-prem, hosted at a private data center, and hosted on MS Azure. The
  company offers a SaaS delivery model that includes hosting, license, maintenance and
  support, ongoing access to the latest version, and the implementation of upgrades.
- The company reports that the average time to initial go-live is 180 days or less and that the average implementation cost is \$1M-\$2M.



## **Lines of Business Supported**

Personal auto:	Live clients offering this product in all 50 US states
Homeowners:	Live clients offering this product in 10-49 US states
Personal umbrella:	Live clients offering this product in 10-49 US states
Dwelling fire:	Live clients offering this product in 10-49 US states
Boatowners:	Live clients offering this product in 10-49 US states
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Live clients offering this product in 2-9 US states
General liability:	Live clients offering this product in 2-9 US states
BOP:	Live clients offering this product in 2-9 US states
Commercial crime:	Live clients offering this product in one US state
Commercial auto:	Live clients offering this product in 2-9 US states
E&O/D&O:	Not currently supported
Inland marine:	Live clients offering this product in 2-9 US states
Professional liability (including medical malpractice):	Not currently supported
Commercial package:	Live clients offering this product in 2-9 US states
Specialty:	Live clients offering this product in all 50 US states
Workers' comp:	Live clients offering this product in 2-9 US states
Surety:	Not currently supported
Other personal lines*:	Live clients offering this product in 10-49 US states
Other commercial lines†:	Live clients offering this product in one US state

<sup>\*</sup> Other personal lines include farm and flood.

### **Client Base**

Globally, Insuresoft has 46 clients live on The Diamond Platform (all in North America), 38 of which are insurer clients (i.e., not MGAs, self-insureds). Most clients are smaller companies (under \$1B) using the solution to support personal lines with some commercial.

Publicly announced clients include California Earthquake Authority, Aon (National Flood Services), Buckeye Insurance Group, Indiana Farmers Mutual Insurance, and Lighthouse Property Insurance Company.

<sup>†</sup> Other commercial lines include commercial umbrella and commercial farm. Insuresoft is also live with pet health insurance in all 50 states.

## **Key Functions and Differentiators**

Insuresoft cites the key functions of The Diamond Platform as:

- End-to-end policy management, including quoting, rating, underwriting, policy generation, and statistical reporting
- Business intelligence and operational analytics, including pre-built dashboards, reports, and KPIs
- Out-of-the-box agent and customer portals that provide sales, self-service functions, and agent analytics from any device
- Integration accelerators to extend the core platform via public-facing partner APIs and over
   100 pre-integrated third parties to extend additional capabilities and data sources
- · Flexible deployment options, including on-prem and cloud-based with integrated IT services

The company cites as its key differentiators its integrated policy, billing, and claims platform supported by digital capabilities; low-code configuration tool to manage rates, rules, forms, and workflow; comprehensive, out-of-the-box APIs; a bi-monthly release process to bring new technology enhancements to clients quickly; and preconfigured line-of-business framework that includes workflow and integrations to increase speed to market.

## **Solution Architecture and History**

The Diamond Platform launched in 1993 and was re-architected in 2008. The latest release was in April 2021. The company notes that it releases bi-monthly core product updates. Insuresoft reports that 100% of the solution's customers are on the latest version and have been through at least one upgrade.

The solution requires Microsoft SQL Server databases and Windows platforms. The solution is written in .NET (C#/VB.NET).

### **APIs and Integration**

The solution provides REST and SOAP APIs. Insuresoft notes that Diamond offers a fully open and comprehensive set of APIs.

## **Configurability and User Interface**

The Diamond Platform is browser-based for all user interface functions.

Configuration for rules is via tools for BAs and non-IT staff. Configuration for insurance products and document authoring is via tools for IT analysts. Screens, workflow, and integration to third-party service calls are configurable via developer tools, XML manipulation, or a scripting language.

## **Deployment Options**

Insuresoft deploys the solution on-prem, hosted at a private data center, and hosted on MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades. The hosted solution is a single-tenant app server and database. The company notes that a lower-cost, multitenant option is also available.

## **Average Implementation Length and Cost**

Insuresoft implements the solution through the company's own resources or a partner. It reports that The Diamond Platform can be ready for initial go-live in an average 180 days or less and fully rolled out in an additional 12 months or less. The company asserts that the typical time to implement a personal line is about six months, while the average time to implement a commercial line is about 9-12 months. The company reports that the average implementation cost is \$1M-\$2M.

## Support

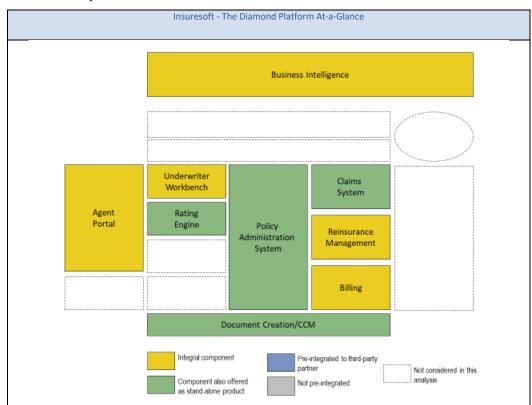
Of the 135 people employed at Insuresoft, about 35% are on the product design and engineering team, about 30% are on the implementation (not counting partnerships) team, and about 20% are on the support team.

Support is provided primarily out of Tuscaloosa, AL as well as from strategic resources located throughout North America. Insuresoft offers customer engagement activities such as online training, a customer advisory committee, a user event, and training seminars.

## **System Integrator and Other Partners**

Publicly announced technology partnerships include Microsoft, ISO/Verisk, LexisNexis, Looker, and Covenir. Publicly announced SI partnerships include Red Hawk Insurance Services.

## **Functionality**



#### **Policy Administration Functions**

The solution includes policy issue, premium accounting, out-of-sequence endorsement, forms management, and manuscripted policies out of the box. Bordereaux import is available with configuration via simple tools targeted for IT analysts or BAs.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

### **Rating Functions**

Diamond Rating is integral to the suite and is also marketed as a stand-alone solution.

Core rating functions like quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are standard.

Compliance and change control functions like versioning and update management, change control functions, and auditability of rate versioning are standard. An applications and forms library with standard and customizable applications and forms is available out of the box. Download to agency management systems and pre-integration to third-party data providers are standard.

ISO-formatted statistical data is standard. ISO rates/rules support and NCCI/Bureau of Workers' Comp rates/rules support are available with configuration via tools for IT analysts or BAs. The solution does not currently include ISO ERC.

Setting insurer-specific defaults is available out of the box. The solution does not currently include multi-carrier comparison. Product design and development tools are standard.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are available with configuration via tools for IT analysts or BAs.

Displacement testing (ability to run existing book of business through proposed rate/product changes to determine impact) and testing, modeling, and product analysis are standard functions.

#### **Underwriter Workbench Functions**

Underwriting functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing the submission data from a structured data feed is a standard function. Uploading/importing the submission information from documents (OCR-like functionality) is available via out-of-the-box integration to a third-party system or service.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, cancellation transactions, and underwriting multiple submissions as one work portfolio are standard functions.

The ability to combine individual quotes for different lines into a single proposal; capturing underwriting analysis; capturing an underwriter's loss analysis; underwriter checklists that can validate information and process completeness; submission rating; and providing a single current and historical view of an insured's account across the enterprise, lines of business, and policy systems are all standard.

Document creation (proposals, applications, correspondence) and document storage are available out of the box. The solution does not currently include pricing analysis and scheduled rating.

A rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); inline reports/dashboards on tasks/work/work status; inline reports/dashboards to support underwriting analysis; and a rules engine that interfaces to conditionally order specific data are standard functions.

Displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) is available with configuration via tools for IT analysts or BAs.

Proposal co-authoring with other underwriters and agent-facing capabilities are standard functions. Support for variable binding/approval authority by role and support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) are standard. The solution does not currently include IM collaboration with other underwriters, but the company asserts that this is under development and should be available in less than six months. The solution does not currently include screen sharing with other underwriters.

Preconfigured interfaces with agent portals, preconfigured integration with business intelligence environments, and preconfigured interfaces with third-party data services are standard. The solution does not currently include preconfigured interfaces with policy admin systems, natively calculated predictive scores, or preconfigured interfaces with external predictive scoring models.

### **Document Functions**

Publisher is integral to the suite and is also marketed as a stand-alone solution.

The solution support mass-produced documents, e.g., statements (the most common use case) and ad hoc documents, e.g., correspondence, manuscripted policies (the less common use case).

The solution includes pre-built forms from ISO and ACORD. The primary authoring environment is MS Word. Content and business rules are designed to be managed by business analysts; schema mapping and data sources are maintained by technical resources.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is a standard function. Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository and content management tools are standard, as are archival capabilities for all generated documents. The solution is designed to support industry-standard schemas like ACORD XML out of the box.

### **Agent Portal Functions**

Agent portal functions are integral to the suite and are not marketed as a stand-alone solution.

P/C portal functionality like new business entry/submission, account clearance, quick quote, integration and pre-fill with data services, policy change entry/submission, online payment, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, proposal creation, ACORD application creation, account or client view in addition to a policy view, underwriter view and/or tools, agent/underwriter collaboration, and a rating engine are standard.

The solution does not currently include uploading/importing data from Excel (e.g., locations, cars, drivers). Side-by-side quote comparison is available with configuration via tools for IT analysts or BAs. Agency management system upload is available via out-of-the-box integration to a third-party system or service.

E-signature; document creation; file attachment support; scheduling, diary, and calendar functions; workflow and task management capabilities; business intelligence and reporting; and a consumer portal are all standard functions.

#### **Reinsurance Functions**

Reinsurance is integral to the suite and is not marketed as a stand-alone solution.

Ceded reinsurance management capabilities like manual entry and tracking of cessions, reserves, and limits; automated notification if a reserve reaches a specific amount or treaties approach set limits; and automated identification/calculation of accounts with applicable reinsurance are available out of the box.

Assumed reinsurance management capabilities like manual entry and tracking of assumed reinsurance contracts are standard. The solution does not currently include automated assumed reinsurance calculations based on reinsured data feeds/connections or retrocession reinsurance management.

Treaty management, facultative management, non-proportional/excess of loss, multiple basis types (risks attaching, losses occurring, and claims made), and retroactively processing late placements or midterm contract changes are available out of the box. The solution does not currently include proportional support or configuration of contract rules, formulas, and types.

End-user interfaces for manual entry of contracts and manual flagging of premiums and claims subject to reinsurance are available out of the box. The solution does not currently include an end-user interface for review and approval of assumed policies as part of facultative contracts.

Insuresoft notes that for pre-integrated systems, such as ISO, that require a batch file, this is pre-determined and mapped. For any other interface that is new, the file can be created with simple tools for BAs. The solution does not currently include real-time data intake from core systems (PAS, claims) via API or other mechanisms, real-time integration to an underwriting system (e.g., to display limits/reserves), or integration between other insurer/reinsurer systems.

A standard library of canned reports, automated bordereau reporting, and ad hoc reporting are standard functions. Integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc., are available with configuration via tools for IT analysts or BAs. The solution does not currently include statutory and regulatory reporting or automated Schedule F reporting.

Automated recoverable claims identification and viewing the full history and status of claim and claim recovery are standard. The solution does not currently include tracking reinsurance payables and receivables; entity management (CRM); document management and storage of the actual contracts; multi-currency support, multi-language support; and audit trails for all transactions.

### **Business Intelligence Functions**

Business intelligence functions are integral to the suite and are not marketed as a stand-alone solution. Insuresoft's BI tool is developed by a third party, Looker, but the entire transactional model has been configured in the BI tool. Insuresoft notes that insurers can access and visualize data across the three functional areas of their business (policy, billing, and claims).

The solution includes a presentation/reporting component, predefined reports and predefined insurance dashboards, an ad hoc reporting tool, and data mining and analytics tools.

The solution supports data movement via batch ETL.

## **Billing Functions**

Diamond Billing is part of the suite and is also sold as a stand-alone billing component. Payment and billing plan configurability are standard. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Currently not available, but could be available with a
	system enhancement
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction	Available out of the box with no configuration necessary
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Currently not available, but could be available with a
reporting	system enhancement
Pay-as-you-report for workers' comp:	Currently not available, but could be available with a
Invaine and sourcemendance	system enhancement
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available with configuration using simple tools targeted for IT analysts or BAs
Billing for non-premium receivables (such	Not available
as claims deductibles paid):	NOT AVAILABLE
Payment of non-refund payables (such as	Available with configuration using developer tools, XML
policy dividends or mutual dividends):	manipulation, or a scripting language
Multi-currency support in a single instance	Yes
of the application:	103
or the application.	

#### **Claims Functions**

Diamond Claims is part of the suite and is also sold as a stand-alone claims component.

#### **Adjudication**

Medical case management, injury detail maintenance (coding), disability management, automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard functions.

#### Catastrophe

Catastrophe definition and attaching multiple LOBs and causes of loss to a single catastrophe are standard. The solution does not currently include automatic identification of catastrophe claims or mapping tools.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support, etc.) are standard functions. OFAC checking is available via out-of-the-box integration to a third-party system or service.

#### **Documents**

Image and media management, a correspondence or forms library, state-specific claims reporting templates, document rendering, a content repository and content management tools, and multi-channel document delivery and output (e.g., PDF, email, web, and print) are standard.

#### **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; handling of FROI/SROI EDI reporting; mobile and smart device input; claim characteristics scoring (to calculate alerts, trigger workflow, assign a claims handler, or otherwise segment the claim); claimant contact management data capture; and checking for duplicate claims are standard functions. Integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) is available via out-of-the-box integration to a third-party system or service. The solution does not currently include scripting for claims intake with reflexive questioning or custom question sets to prompt additional, mandatory questions depending on given answers (branch scripting).

#### Fraud

Configurable business rules and tasks (specific to fraud and special investigations) and the provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims are available out of the box.

### Litigation

Litigation process tracking, including negotiation details and litigation costs, and creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management are standard.

#### **Multi-Channel**

An agent portal with self-service, a policyholder portal with self-service, call center integration for FNOL via telephony, and call center integration for claims status check via telephony are standard. The solution includes e-signature via out-of-the-box integration to a third-party system or service.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location) is a standard function. Assignment to reinsurance treaties and assignment to facultative arrangements are available with configuration via tools for IT analysts or BAs.

### Reporting

Standard reporting of claims performance monitoring, including claims handling, and high-risk indicators, e.g., fatality, large losses, fraud; standard reporting of configurable metrics for claims reporting; ad hoc reports; dashboards; and reporting that includes jurisdiction-specific reports and forms are standard functions. Electronic reporting or automated state filings are available via out-of-the-box integration to a third-party system or service.

### Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; subrogation billing and the production of correct GL entries; the granular tracking of reserves and payments; automatic reserve calculations using business rules and risk characteristics; direct, case, average, factor, and expense reserve types; and jurisdictional wage and rate calculations integrated for workers' comp are standard functions.

### **Vendor Management**

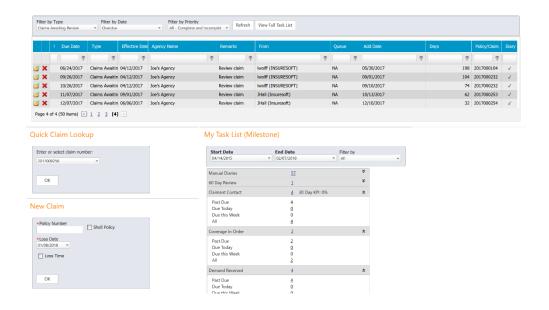
Vendor management and processing required forms (including 1099s) are standard functions.

### Workflow

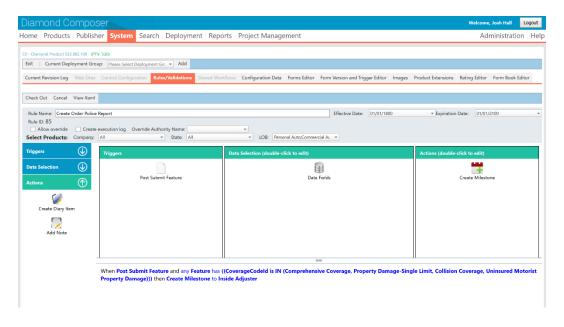
Automated workflow/task generation; overriding automated processes and manually triggering workflow processes; automatic work assignment based on configurable rules; generating notes, diaries, and reminders; inclusion of external documents (letters and pictures) in file notes; assigning multiple adjusters to a single claim; and processing claim workflow trigger (CWT) files at insurer-defined intervals are standard functions. OCR-triggered workflow is available via out-of-the-box integration to a third-party system or service. The solution does not currently include compliance with the Document Repository Interface (DRI) standards or full integration with electronic court filings (ECF2).

## **Screenshots**

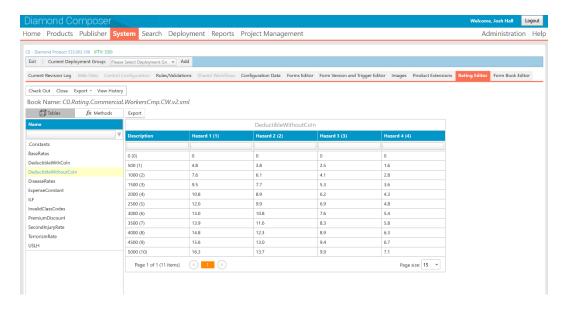
Claims Dashboard



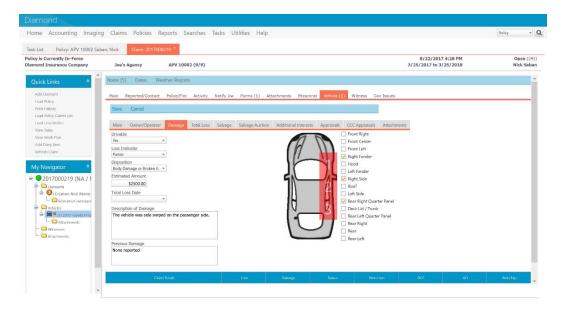
## **Composer Rule Creation**



### **Composer Rate Modification**



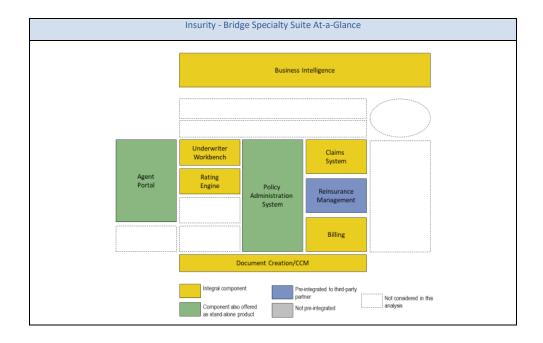
### Vehicle Screen for a Claim



# **Insurity - Bridge Specialty Suite**

## **Executive Summary**

- Insurity is a private company that provides cloud-based solutions and data analytics for large global insurers, brokers, and MGAs. The company reports that it is trusted by 15 of the top 25 P/C insurance carriers in the US and that it empowers clients to focus on their core businesses, optimize their operations, and deliver superior customer experiences.
- Insurity declined to disclose employee headcount or revenue information.
- Bridge Specialty Suite (Bridge) includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components. The company notes that the suite also includes built-in dashboard and data visualization technology as well as a digital platform.
- It currently has 20 live US/Canadian insurer clients using the suite, most of which are smaller (under \$1B) companies. Most clients use the solution to support specialty lines with some commercial and personal.
- Publicly announced clients include AIG, Chubb, Everest, HCC, and Sirius.
- The solution is browser-based for all user interface functions. It is written primarily in .NET (C#/VB.NET) with some Java.
- Configuration for insurance products, screens, workflows, rules, integration to third-party service calls, and document authoring is via tools for BAs and non-IT staff.
- Implementation is available through the company's resources or a partner. Insurity deploys
  Bridge hosted at a private data center or hosted on MS Azure. The company offers a SaaS
  delivery model that includes hosting, license, maintenance and support, ongoing access to
  the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is 180 days or less. Insurity did not disclose implementation costs.



## **Lines of Business Supported**

Personal auto:	Solution is designed to support, but no clients live or implementing
Homeowners:	Live clients offering this product in 10-49 US states
Personal umbrella:	Solution is designed to support, but no clients live or implementing
Dwelling fire:	Solution is designed to support, but no clients live or implementing
Boatowners:	Live clients offering this product in all 50 US states
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Live clients offering this product in all 50 US states
General liability:	Live clients offering this product in all 50 US states
BOP:	Live clients offering this product in all 50 US states
Commercial crime:	Clients currently in implementation for this line/product
Commercial auto:	Live clients offering this product in Canada
E&O/D&O:	Live clients offering this product in all 50 US states
Inland marine:	Live clients offering this product in all 50 US states
Professional liability (including medical malpractice):	Live clients offering this product in 2-9 US states
Commercial package:	Live clients offering this product in all 50 US states
Specialty:	Live clients offering this product in all 50 US states
Workers' comp:	Live clients offering this product in one US state
Surety:	Live clients offering this product in all 50 US states
Other personal lines*:	Live clients offering this product in 10-49 US states
Other commercial lines†:	Live clients offering this product in all 50 US states

<sup>\*</sup> Other personal lines include yacht/pleasure craft, hurricane, wind, and hail.

## **Client Base**

Globally, Insurity has 33 clients live on Bridge, 28 of which are insurer clients (i.e., not MGAs, self-insureds). There are 20 insurer clients live in the US/Canada, most of which are smaller (under \$1B) companies using the solution to support specialty lines with some commercial and personal.

Publicly announced clients include AIG, Chubb, Everest, HCC, and Sirius.

<sup>†</sup> Other commercial lines include film and entertainment, sports and leisure, special events, restaurant recovery, cyber risk, lawyer's professional liability, educator's professional liability, trade credit insurance, products contamination, marine cargo, marine hull, marine liabilities, management liability, builders risk, homebuilders, environmental, energy, kidnap and ransom, and terrorism.

## **Key Functions and Differentiators**

Insurity cites the key functions of Bridge as:

- Automated and exception-based underwriting capabilities
- Fully integrated suite, including portal, underwriter workstation, analytics, and visualization dashboards
- Out-of-the-box templates (including pre-built user interface, workflow, and business rule configurations) and accelerators to speed up implementations
- UX optimized for all interactions and user types, including insurer, broker, policyholder, and MGA/MGU users
- Out-of-the-box interfaces with third-party data and service providers for address validation, compliance scanning, risk assessment and underwriting, payment processing, e-signature, SSO, and rating

The company cites as its key differentiators Enhanced Bridge UI that allows clients to shape their UI to fit their needs, leveraging Insurity's digital API platform with the ability to configure multiple role-based portals within the same instance of Bridge; end-user configuration with no coding/scripting necessary to speed up implementation; a flexible solution to meet clients' needs as a portal, underwriter workbench, and/or end-to-end PAS; leadership in SaaS delivery with multi-tenant architecture; as well as that it supports many currencies and languages.

## **Solution Architecture and History**

Bridge launched in 2012 and was re-architected in 2018. The latest release was in March 2021. Insurity reports that 90% of the solution's customers are on the latest version and 10% are on a version less than three years old. All customers have been through at least one upgrade.

The solution supports Microsoft SQL Server databases and Windows server platforms. The solution is written primarily in .NET (C#/VB.NET) with some Java.

## **APIs and Integration**

Insurity provides REST, SOAP, and other APIs as part of the solution. The company notes that these other APIs include file-based, queued with BizTalk orchestration, JSON web API, WS-Security, and ACORD XML.

The company notes that mapping the API XML to a new third-party would require a developer, but once it's in there, the tools to utilize that API are for BAs. Insurity also reports that it offers a digital platform of APIs for all of its applications that offers clients documentation, sample code, and direct access to all Insurity APIs and third-party APIs using a standard RESTful structure.

## **Configurability and User Interface**

Bridge is browser-based for all user interface functions.

Configuration for insurance products, screens, workflows, rules, integration to third-party service calls, and document authoring is via tools for BAs and non-IT staff.

Insurity reports that the Bridge Specialty Suite offers out-of-the-box templates and accelerators to speed up implementations.

## **Deployment Options**

Insurity deploys Bridge hosted at a private data center and hosted on MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades.

The hosted solution is a multi-tenant app server and a single-tenant database.

## **Average Implementation Length and Cost**

Insurity implements the solution through its own resources or a partner. It reports that Bridge can be ready for initial go-live in 180 days or less and fully rolled out in an additional 12 months or less. The company did not disclose implementation costs.

## Support

Insurity did not disclose employee team count specifics.

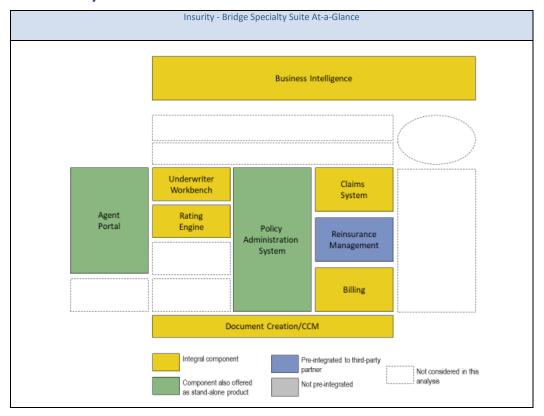
It has headquarters in Hartford, CT and has several additional US offices and remote staff across the US, as well as international offices in Montreal, Canada and London, England. Staff positions supporting Bridge are primarily in Montreal, with additional employees throughout the US and in London, along with support personnel in Germany, South America, and Asia.

Insurity offers customer engagement activities such as an online community, online training, a customer advisory committee, a user event, and training seminars.

## **Systems Integrator and Other Partners**

Publicly announced technology partnerships include LexisNexis, Google, Cybersource, VMWare, and Appulate. Publicly announced SI partnerships include Ernst and Young and LTI.

## **Functionality**



### **Policy Administration Functions**

The solution includes out-of-sequence endorsement, forms management, and manuscripted policies out of the box. Policy issue, premium accounting, and bordereaux import are available with configuration via tools for IT analysts or BAs.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

## **Rating Functions**

Rating functions are integral to the suite and are not marketed as a stand-alone rating engine.

Out-of-sequence endorsements and rating multiple coverage/quote alternatives are standard. Quick quote; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; and multi-line, multi-state, multi-location rating on a single policy are available with configuration via tools for IT analysts or BAs.

Versioning and update management, change control functions, and auditability of rate versioning are standard functions. An application and forms library with standard and customizable applications and forms is available with configuration via tools for IT analysts or BAs.

Saving/storing an in-process or completed policy change transaction to allow issuance at a later date and product design and development tools are standard functions.

Download to agency management systems and pre-integration to third-party data providers are available with configuration via tools for IT analysts or BAs. Multi-carrier comparison and setting insurer-specific defaults are also available with configuration via tools for IT analysts or BAs.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), and date management capabilities are standard functions. Rating and rule definition and management (e.g., automatic driver assignment) are available with configuration via tools for IT analysts or BAs.

Displacement testing (i.e., the ability to run existing books of business through proposed rate/product changes to determine impact) and testing, modeling, and product analysis are available out of the box.

### **Underwriter Workbench Functions**

Underwriter workbench functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing the submission data from a structured data feed is available with configuration via developer tools, XML manipulation, or a scripting language. Uploading/importing the submission information from documents (i.e., OCR-like functionality) is available via out-of-the-box integration to a third-party system or service.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, cancellation transactions, and underwriting multiple submissions as one work portfolio is standard.

Capturing underwriter analysis; capturing underwriter loss analysis; underwriter checklists that can validate information and process completeness; submission rating; pricing analysis and scheduled rating information; and providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are available with configuration via tools for IT analysts or BAs. The ability to combine individual quotes for different lines into a single proposal is available with configuration via developer tools, XML manipulation, or a scripting language.

Document storage is a standard function. Document creation (proposals, applications, correspondence) is available with configuration via tools for IT analysts or BAs.

A rules engine that applies underwriting, workflow, and general business rules automatically; workflow/task capabilities, e.g., inbox, predefined workflows by transaction/line of business, automatic task assignment, diaries; a rules engine that interfaces to order specific data conditionally; inline reports/dashboards on task/work/work status; and inline reports/dashboards to support underwriting analysis are available out of the box.

Displaying aggregate risk accumulations for an existing book at a granular location level (e.g., geo-mashup of existing book and proposed risk) is available with configuration using simple tools targeted for IT analysts or BAs.

Screen sharing with other underwriters and preconfigured integration with business intelligence environments are standard functions. IM collaboration with other underwriters, proposal coauthoring with other underwriters, agent-facing capabilities, preconfigured interfaces with agent portals, preconfigured interfaces with external predictive scoring models, support for variable binding/approval authority by role, and support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) are available with configuration via tools for IT analysts or BAs.

Preconfigured interfaces with policy admin systems, preconfigured interfaces with third-party data services, and natively calculated predictive scores are available via out-of-the-box integration to a third-party system or service.

#### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents, e.g., statements, (the less common use case) and ad hoc documents, e.g., correspondence and manuscripted policies (the most common use case).

The suite does not include forms from ACORD or ISO. The primary authoring environment is MS Word. Content and business rules are managed by average business users; schema mapping and data sources are managed by business analysts.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is available with configuration via tools for IT analysts or BAs. Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository, content management tools, and archival capabilities for all generated documents are standard. The solution supports industry-standard schemas from ACORD XML out of the box.

#### **Agent Portal Functions**

Bridge Specialty Suite is part of the suite and is also sold as a stand-alone agent portal.

New business entry/submission, uploading/importing data from Excel (e.g., locations, cars, drivers), policy change entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, side-by-side quote comparison, account or client view (in addition to a policy view), underwriter view and/or tools, and agent/underwriter collaboration are standard.

Account clearance, quick quote, online payment, renewal quote entry/submission, proposal creation, ACORD application creation, and a rating engine are available with configuration via tools for IT analysts or BAs. Integration and pre-fill with data services and agency management system upload are available with configuration via developer tools, XML manipulation, or a scripting language.

File attachment support; workflow and task management capabilities; business intelligence and reporting; and scheduling, diary, and calendar functions are available out of the box.

Document creation and a customer portal are available with configuration via tools for IT analysts or BAs. Support for e-signature is available via out-of-the-box integration to a third-party system or service.

#### **Reinsurance Functions**

Insurity supports integration with third-party reinsurance solutions.

### **Business Intelligence Functions**

Business intelligence functionality is part of the suite and is not sold as a stand-alone component.

Insurity reports that Cognos is integrated and automatically included with standard reports. Daily ETL is automatically updated to reflect configuration changes. Cognos Report Designer (browserbased) license is available for clients to create and maintain custom reports.

The solution includes tools to support data governance, dictionaries, quality, and validation; an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes; a presentation/reporting component; predefined reports and predefined insurance dashboards; an ad hoc reporting tool; and data mining and analytics tools.

The solution supports data movement via batch ETL.

### **Billing Functions**

Billing functionality is part of the suite and is not sold as a stand-alone billing component. Payment and billing plan configurability is standard. The table on the following page shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available out of the box with no configuration necessary
Flexible and configurable payment plans:	Available with configuration using simple tools targeted
Support for florible payment types (c.	for IT analysts or BAs
Support for flexible payment types (e.g.,	Available via out-of-the-box integration to a third-party
payment card, check, EFT, payroll	system or service
deduction):	Aveilable and of the harmith as application assessment
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	Compared to see a control of the con
Real-time account and payment calculation,	Currently not available, but could be available with a
scheduling, recalculation, and rescheduling:	system enhancement
Commission calculation and payment:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Currently not available, but could be available with a
Automotodomod (I	system enhancement
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Consumer portal:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Online payment:	Available via out-of-the-box integration to a third-party
	system or service
Out-of-the-box integration with	No
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Currently not available, but could be available with
	integration to another system or service
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Available with configuration using simple tools targeted
reporting:	for IT analysts or BAs
Pay-as-you-report for workers' comp:	Currently not available, but could be available with a
	system enhancement
Invoice and correspondence:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Check generation/production:	Currently not available, but could be available with
	integration to another system or service
Billing for non-premium receivables (such	Available with configuration using simple tools targeted
as claims deductibles paid):	for IT analysts or BAs
Payment of non-refund payables (such as	Available with configuration using simple tools targeted
policy dividends or mutual dividends):	for IT analysts or BAs
Multi-currency support in a single instance	Yes
of the application:	

#### **Claims Functions**

Claims functionality is part of the suite and is not sold as a stand-alone claims component.

#### **Adjudication**

The solution does not currently include adjudication functionality. The company reports that data capture and workflow to support adjudication is configurable via UI tools as part of the implementation of the claims workflow.

#### Catastrophe

Catastrophe definition, automatic identification of catastrophe claims, and attaching multiple LOBs and causes of loss to a single catastrophe are available with configuration via tools for IT analysts or BAs. The solution does not currently include mapping tools.

#### **Disbursements**

OFAC checking is standard. Calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), and combining multiple pending payments for a single client into one disbursement are available with configuration via tools for IT analysts or BAs. Check processing is available via out-of-the-box integration to a third-party system or service. The solution does not currently include calculating and scheduling partial or one-off payments or handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support).

#### **Documents**

Image and media management, a content repository, content management tools, and multichannel delivery and output of documents (e.g., PDF, email, web, and print) are standard. Document rendering, a correspondence or forms library, and state-specific claims reporting templates are available with configuration via tools for IT analysts or BAs.

#### **FNOL**

Mobile and smart device input and claimant contact management data capture are standard. FROI/SROI EDI reporting; scripting for claims intake with reflexive questioning; custom question sets to prompt additional mandatory questions depending on given answers (branch scripting); claim characteristic scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim); and recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry are available with configuration via tools for IT analysts or BAs. The solution does not currently include claim checking duplication or integration with external vendors and services (e.g., car rental companies, car/equipment repair shops).

#### Fraud

Configurable business rules and tasks (specific to fraud and special investigations) and the provision of multiple search and reporting criteria for fraud detection (via the ability to track common clients across multiple claims) are available with configuration via tools for IT analysts or BAs.

## Litigation

The solution does not currently include litigation management capabilities. The company reports that data capture and workflow to support litigation is configurable via UI tools as part of the implementation of the claims workflow.

#### Multi-Channel

An agent portal with self-service and a policyholder portal with self-service are standard. The solution does not currently include e-signature or call center integration for FNOL/claim status checks via telephony.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location, etc.), assignment to reinsurance treaties, and assignment to facultative arrangements are available with configuration using simple tools targeted for IT analysts or BAs.

#### Reporting

Ad hoc reports and dashboards are standard. The standard reporting of configurable metrics for claims reporting; reporting that includes jurisdiction-specific reports and forms; and the standard reporting of claims performance monitoring, including claims handling and high-risk indicators, e.g., fatality, large losses, fraud, are available with configuration via tools for IT analysts or BAs. Electronic reporting or automated state filings are available with configuration via developer tools, XML manipulation, or a scripting language. The company asserts that claims data is also available in the Cognos data warehouse and BI environment provided with the suite.

#### Reserves, Recoveries, Subrogation

Subrogation billing and the production of correct GL entries; granular tracking reserves and payments; and creating separate tasks, workflow, diaries, and business rules for subrogated cases are standard functions. Automatic subrogation identification and automatic reserve calculations using business rules and risk characteristics are available with configuration via tools for IT analysts or BAs. The solution does not currently include jurisdictional wage and rate calculations integrated for workers' comp or direct, case, average, factor, or expense reserve types.

### **Vendor Management**

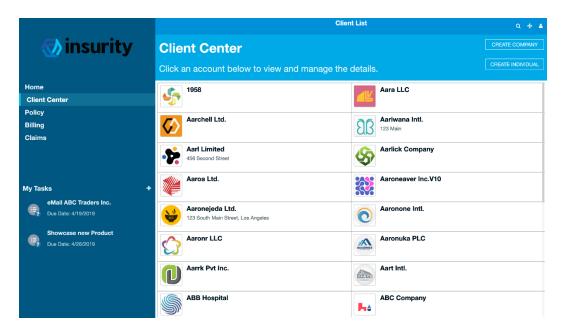
Vendor management functions are standard. The solution does not include the processing of required forms (e.g., 1099s).

#### Workflow

Overriding automated processes and triggering workflow processes manually; automatic work assignment based on configurable rules; the inclusion of external documents (e.g., letters, pictures) in file notes; and generating notes, diaries, and reminders are standard functions. Automated workflow/task generation and assigning multiple adjusters to a single claim are available with configuration via tools for IT analysts or BAs. The solution does not currently include OCR-triggered workflow, compliance with the Document Repository Interface (DRI) standards, processing claim workflow trigger (CWT) files at insurer-defined intervals, or full integration with electronic court filings (ECF2).

## **Screenshots**

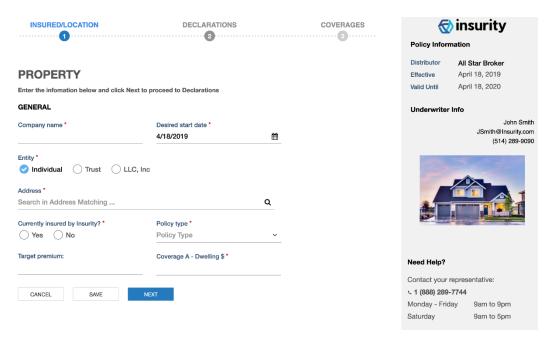
Client Center



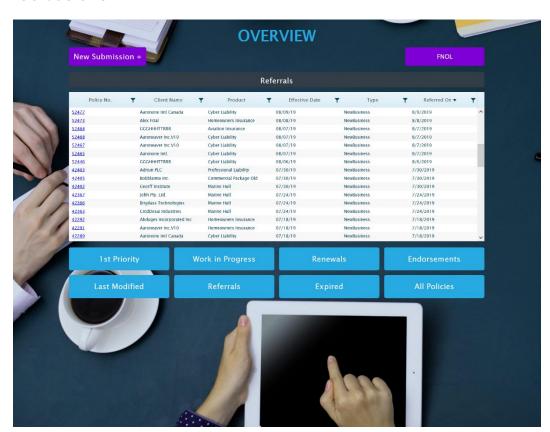
## **Policy Count**



### Policy Workflow



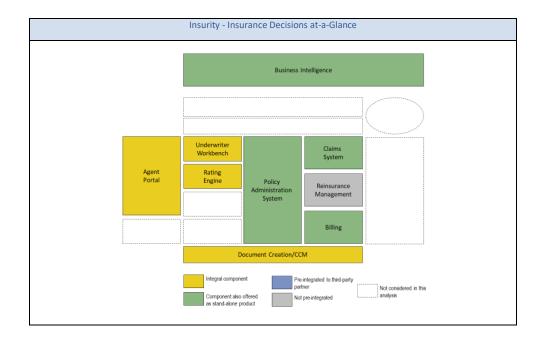
#### Referrals Overview



# **Insurity - Insurance Decisions Suite**

## **Executive Summary**

- Insurity is a private company that provides cloud-based solutions and data analytics for large global insurers, brokers, and MGAs. The company reports that it is trusted by 15 of the top 25 P/C insurance carriers in the US and that it empowers clients to focus on their core businesses, optimize their operations, and deliver superior customer experiences.
- Insurity declined to disclose employee headcount or revenue information.
- Insurance Decisions is a suite of solutions that includes core policy features, rating, underwriting features, document creation, agent portal (role-based views), business intelligence, billing, and claims components.
- It currently has over 70 live US/Canadian insurer clients using the suite, most of which are
  insurers with between \$250M and \$1B in written premium using the solution to support
  commercial lines with some personal.
- Publicly announced clients include Zurich, Allstate, Travelers, Hanover, and Arch.
- The solution is browser-based for all user interface functions. It is written primarily in .NET (C#/VB.NET).
- Configuration for insurance products, screens, workflows, rules, integration to third-party service calls, and document authoring is via tools for IT analysts.
- Insurity has an internal implementation staff that typically works with an SI partner or a
  client's internal team. Insurity deploys the suite on-prem, hosted at a private data center,
  and hosted on MS Azure. The company offers a SaaS delivery model that includes hosting,
  license, maintenance and support, ongoing access to the latest version, and implementation
  of the upgrades.
- The company reports that the average time to initial go-live is 12 months or less. Insurity
  declined to disclose average implementation costs.



## **Lines of Business Supported**

Personal auto:	Live clients offering this product in 10-49 US states
Homeowners:	Live clients offering this product in all 50 US states
Personal umbrella:	Live clients offering this product in all 50 US states
Dwelling fire:	Live clients offering this product in all 50 US states
Boatowners:	Live clients offering this product in 10-49 US states
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Live clients offering this product in all 50 US states
General liability:	Live clients offering this product in all 50 US states
BOP:	Live clients offering this product in all 50 US states
Commercial crime:	Live clients offering this product in all 50 US states
Commercial auto:	Live clients offering this product in all 50 US states
E&O/D&O:	Live clients offering this product in all 50 US states
Inland marine:	Live clients offering this product in all 50 US states
Professional liability (including medical malpractice):	Live clients offering this product in all 50 US states
Commercial package:	Live clients offering this product in all 50 US states
Specialty:	Live clients offering this product in all 50 US states
Workers' comp:	Live clients offering this product in all 50 US states
Surety:	Solution is designed to support, but no clients live or implementing
Other personal lines*:	Live clients offering this product in all 50 US states
Other commercial lines†:	Live clients offering this product in all 50 US states

<sup>\*</sup> Other personal lines include mobile homeowners.

## **Client Base**

Globally, Insurity has 74 clients live on Insurance Decisions, 70 of which are insurer clients (i.e., not MGAs, self-insureds) in the US and Canada. Most of these are insurers are between \$250M and \$1B in written premium and use the solution to support commercial lines with some personal.

Publicly announced clients include Zurich, Allstate, Travelers, Hanover, and Arch.

## **Key Functions and Differentiators**

Insurity cites the key functions of Insurance Decisions Suite as:

- All lines/states for commercial, workers' compensation, personal, and specialty
- Full bureau-based content and maintenance
- Full product configurability
- Unique, role-based user experiences across all functional areas
- Ability to call features and functions from a configurable API layer

<sup>†</sup> Other commercial lines include umbrella, COP, cyber-liability, and ocean marine.

The company cites as key differentiators its domain expertise and customer base; regulatory support service, hosting, and cloud services; flexible support model, from full to self-service; data and analytics integrated with predictive modeling and analytics; and its flexible, role-based UX support from native UI/external UI using system APIs and microservices from the same instance.

## **Solution Architecture and History**

Insurance Decisions Suite launched in 1985 and was re-architected in 2014. The latest release was in February 2021. The company reports that it releases product updates monthly, including regulatory content updates.

Insurity reports that 80% of the solution's customers are on the latest version and that 20% are on a version less than three years old. The company reports that 40% of customers have been through at least one upgrade.

The solution requires Microsoft SQL Server databases and Windows platforms. The solution is written in .NET (C#/VB.NET).

## **APIs and Integration**

The solution provies REST APIs. Insurity notes that APIs are widely available, and more are being developed in each release.

## **Configurability and User Interface**

Insurance Decisions Suite is browser-based for all user interface functions.

Configuration for insurance products, screens, workflows, rules, integration to third-party service calls, and document authoring is via tools for IT analysts.

## **Deployment Options**

Insurity deploys the suite on-prem, hosted at a private data center, and hosted on MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades. The hosted solution is a multi-tenant app server and a single-tenant database.

## **Average Implementation Length and Cost**

Insurity has an internal implementation staff that typically works with an SI partner or a client's internal team. It reports that Insurance Decisions Suite can be ready for initial go-live in 12 months or less and fully rolled out in an additional 90 days or less. The company declined to disclose average implementation costs.

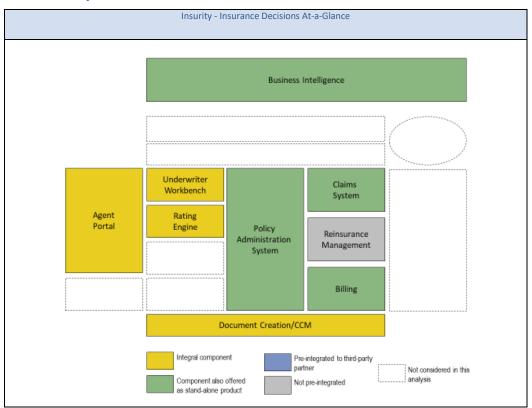
### Support

Insurity did not disclose employee team count specifics. Insurity has headquarters in Hartford, CT and has several additional US offices and remote staff across the US, as well as international offices in Montreal, Canada and London, England. Staff positions supporting Policy Decisions are primarily in Hartford, CT, with additional employees throughout the US and Montreal. Insurity offers customer engagement activities such as an online community, online training, a customer advisory committee, a user event, and training seminars.

## Systems Integrator and Other Partners

Publicly announced technology partnerships include Microsoft, ISO, Appulate, IVANS, and CoreLogic.

## **Functionality**



## **Policy Administration Functions**

The solution includes policy issue, premium accounting, out-of-sequence endorsement, bordereaux import, forms management, and manuscripted policies out of the box. The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

The company asserts that Policy Decisions is a full-featured policy administration system that supports the full policy life cycle, including submission entry/upload, eligibility/appetite rules, integration with third-party data providers, predictive analytics, rating, quote proposal generation, policy form selection/generation, and policy issuance. It also supports subsequent transactions, including out-of-sequence endorsements, as well as automatic renewals and many other transactions.

#### **Rating Functions**

Rating is an integral part of the suite and is not sold as a stand-alone rating engine.

A quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence, cross-term endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, multi-location rating on a single policy are standard functions. The company reports that the system also has a library of automatic functions that allow unattended processing.

Versioning and update management, change control functions, and auditability of rate versioning are standard functions. An application and forms library with standard and customizable applications and forms is available out of the box. Download to agency management systems and pre-integration to third-party data providers are standard functions.

ISO rates/rules/forms support, NCCI/Bureau of Workers' Comp rates/rules support, ISO-formatted statistical data, and ISO ERC integration are standard functions.

Product design and development tools as well as saving/storing an in-process or completed policy change transaction to allow issuance at a later date are standard functions. Setting insurer-specific defaults is available with configuration via tools for IT analysts or BAs, and multi-carrier comparison is available with configuration using developer tools, XML manipulation, or a scripting language.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are standard.

Displacement testing (i.e., the ability to run existing book of business through proposed rate/product changes to determine impact) and testing, modeling, and product analysis are available with configuration via developer tools, XML manipulation, or a scripting language.

#### **Underwriter Workbench Functions**

Underwriting features are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing the submission data from a structured data feed is a standard function. Uploading/importing the submission information from documents (OCR-like functionality) is available via out-of-the-box integration to its third-party partner, Appulate.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, cancellation transactions, and underwriting multiple submissions as one work portfolio are standard.

Capturing underwriting analysis; capturing underwriter loss analysis; underwriter checklists that can validate information and process completeness; submission rating; pricing analysis and scheduled rating information; and providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are standard.

The ability to combine individual quotes for different lines into a single proposal is available with configuration using simple tools targeted for IT analysts or BAs.

Document creation (e.g., proposals, applications, correspondence) and document storage are standard functions. Pricing analysis and scheduled rating information as well as underwriter checklists that can document information completeness and process completeness are standard functions.

Workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); a rules engine that interfaces to order specific data conditionally; inline reports/dashboards on task/work/work status; inline reports/dashboards to support underwriting analysis; displaying aggregate risk accumulations for the existing book at granular location level (i.e., geo-mashup of existing book and proposed risk); and rules engines that automatically apply underwriting, workflow, and general business rules are standard functions.

Agent-facing capabilities, proposal co-authoring with other underwriters, and screen sharing with other underwriters are standard. IM collaboration with other underwriters is available via out-of-the-box integration to a third-party system or service.

Preconfigured interfaces with policy admin systems and third-party data services as well as natively calculated predictive scores are standard. Preconfigured interfaces with agent portals are available with configuration via developer tools, XML manipulation, or a scripting language. Preconfigured integration with business intelligence environments and preconfigured interfaces with external predictive scoring models are available via out-of-the-box integration to a third-party system or service.

Support for variable binding/approval authority by role and support for email notification/communication with agents and underwriters within the system are available out of the box.

### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents (e.g., statements) and ad hoc documents (e.g., correspondence, manuscripted policies). The suite includes pre-packaged, pre-built forms, libraries, and templates from ACORD, ISO, NCCI, and AAIS. The primary authoring environment is MS Word. Content, business rules, schema mapping, and data sources are designed to be managed by business analysts.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is a standard function. Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

Content repository and content management tools are available with configuration via tools for IT analysts or BAs. Archival capabilities for all generated documents are standard. The solution supports ACORD XML schemas out of the box.

#### **Agent Portal Functions**

Role-based functionality is integral to the suite and is not sold as a stand-alone agent portal.

New business entry/submission, account clearance, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, integration and pre-fill with data services, policy change entry/submission, online payment, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, proposal creation, ACORD application creation, side-by-side quote comparison, agency management system upload, account or client view (in addition to a policy view), underwriter view and tools, agent/underwriter collaboration, and a rating engine are all available out of the box with no configuration necessary.

Document creation; file attachment support; workflow and task management capabilities; business intelligence and reporting; a consumer portal; and scheduling, diary, and calendar functions are available out of the box. E-signature is available via out-of-the-box integration to a third-party system or service.

#### **Reinsurance Functions**

Reinsurance functionality is not pre-integrated as part of the suite, but Insurity notes that it supports integration with third-party reinsurance solutions.

## **Business Intelligence Functions**

DataHouse is part of the suite and is also sold as a stand-alone business intelligence component.

DataHouse supports data from any policy, billing, claims, reinsurance, MGA, or TPA application. It provides reporting and analytics via any reporting or analytics tool that can feed data to other downstream applications, e.g., general ledger or reinsurance. DataHouse supports these capabilities with three integrated components: a data integration layer, a data repositories layer, and tools.

The data integration layer interfaces to DataHouse via industry standard and non-proprietary ACORD XML model, or users can configure custom integration layouts with Insurity's structured data integration option. The data repositories layer provides integrated repositories that store, secure, track, and manage data. The tools allow Insurity and its customers to configure the product, manage data and flow, validate and transform rules, and create custom reports and dashboards.

The solution includes tools to support data governance, dictionaries, quality, and validation; an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes; a presentation/reporting component; standard predefined reports and predefined insurance dashboards; an ad hoc reporting tool; and data mining and analytics tools.

The solution supports data movement via batch ETL.

## **Billing Functions**

Billing Decisions is part of the suite and is sold as a stand-alone billing component. Payment and billing plan configurability is standard. The table below shows the availability of other billing functions.

Direct bills	Aveilable and of the beneviable as earlievention as access.
Direct bill:	Available out of the box with no configuration necessary
Agency bill: Account or list bill:	Available out of the box with no configuration necessary
	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available out of the box with no configuration necessary
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available via out-of-the-box integration to a third-party
	system or service
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available via out-of-the-box integration to a third-party
	system or service
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available via out-of-the-box integration to a third-party
	system or service
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Available out of the box with no configuration necessary
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Available out of the box with no configuration necessary
reporting:	
Pay-as-you-report for workers' comp:	Available via out-of-the-box integration to a third-party
	system or service
Invoice and correspondence:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Check generation/production:	Available via out-of-the-box integration to a third-party
	system or service
Billing for non-premium receivables (such	Available out of the box with no configuration necessary
as claims deductibles paid):	
Payment of non-refund payables (such as	Available out of the box with no configuration necessary
policy dividends or mutual dividends):	
Multi-currency support in a single instance	No
of the application:	

#### **Claims Functions**

Claims Decisions is part of the suite and is also sold as a stand-alone claims component.

#### **Adjudication**

Medical case management, injury detail maintenance (coding), disability management, automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard functions.

#### Catastrophe

Catastrophe definition, automatic identification of catastrophe claims, and attaching multiple LOBs and causes of loss to a single catastrophe are standard functions. Mapping tools are available with configuration via tools for IT analysts or BAs.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) are standard functions. Combining multiple pending payments for a single client into one disbursement and OFAC checking are available via out-of-the-box integration to a third-party system or service.

#### **Documents**

Image and media management, document rendering, a content repository, content management tools, and multi-channel delivery and output of documents (e.g., PDF, email, web, print) are standard. A correspondence or forms library is available with configuration via tools for IT analysts or BAs. State-specific claims reporting templates are available via out-of-the-box integration with Wolters Kluwer.

### **FNOL**

Recording and storage of new loss notices (including FROI/FNOL) from a web portal, email, fax, or manual entry; mobile and smart device input; scripting for claims intake with reflexive questioning; custom question sets to prompt additional, mandatory questions depending on given answers (branch scripting); claimant contact management data capture; and checking for duplicate claims are standard functions.

Claim characteristics scoring (to calculate alerts, trigger workflow, assign a claims handler, or otherwise segment the claim) is available with configuration using simple tools targeted for IT analysts or BAs. The solution also includes FROI/SROI EDI reporting and integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) via out-of-the-box integration to a third-party system or service.

#### **Fraud**

Configurable business rules and tasks (specific to fraud and special investigations) are available with configuration via tools for IT analysts or BAs. The provision of multiple search and reporting criteria for fraud detection (via the ability to track common clients across multiple claims) is available out of the box.

### Litigation

Litigation process tracking, including negotiation details and litigation costs, is standard. Creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management is available with configuration via developer tools, XML manipulation, or a scripting language. The company reports that the system integrates with third-party legal case management systems.

#### **Multi-Channel**

An agent portal with self-service and a policyholder portal with self-service are standard. Esignature is available with configuration via tools for IT analysts or BAs. Call center integration for FNOL via telephony and call center integration for claims status check via telephony are available with configuration via developer tools, XML manipulation, or a scripting language.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, and assignment to facultative arrangements are standard functions.

#### Reporting

The standard reporting of claims performance monitoring (including claims handling and high-risk indicators, e.g., fatality, large losses, fraud), standard reporting of configurable metrics for claims reporting, ad hoc reports, dashboards, and reporting that includes jurisdiction-specific reports and forms are standard functions. Electronic reporting or automated state filings are available via out-of-the-box integration to a third-party system or service.

### Reserves, Recoveries, Subrogation

The granular tracking of reserves and payments; automatic reserve calculations using business rules and risk characteristics; and direct, case, average, factor, and expense reserve types are standard functions. Automatic subrogation identification; jurisdictional wage and rate calculations integrated for workers' comp; and creating separate tasks, workflow, diaries, and business rules for subrogated cases are available with configuration via tools for IT analysts or BAs. Subrogation billing and the production of correct GL entries are available with configuration via developer tools, XML manipulation, or a scripting language.

#### **Vendor Management**

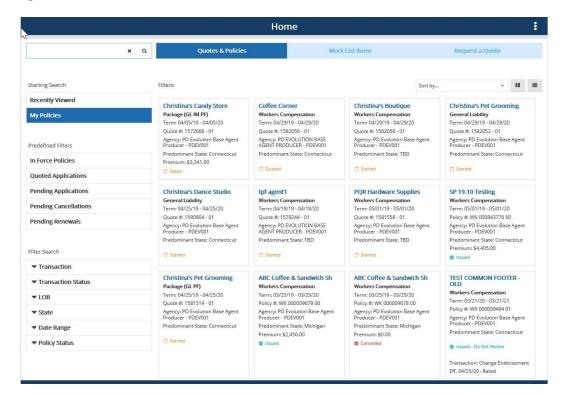
Vendor management functions are standard. The processing of required forms (including 1099s) is available via out-of-the-box integration to a DataHouse, which the company notes provides a 1099 extract that can be fed to third-party solutions for producing 1099 forms.

#### Workflow

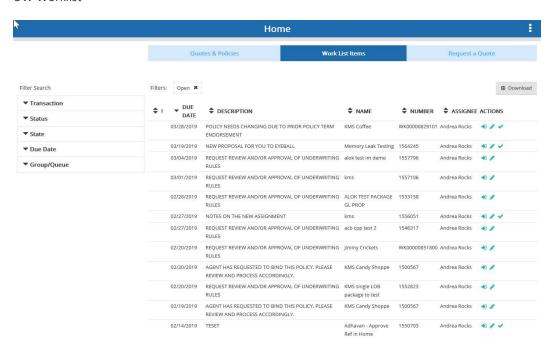
Automated workflow/task generation; overriding automated processes and triggering workflow processes manually; automatic work assignment based on configurable rules; the inclusion of external documents (e.g., letters, pictures) in file notes; assigning multiple adjusters to a single claim; and generating notes, diaries, and reminders are standard functions. Processing claim workflow trigger (CWT) files at insurer-defined intervals is available with configuration via tools for IT analysts or BAs. Compliance with the Document Repository Interface (DRI) standards is available via out-of-the-box integration to a third-party system or service. The solution does not currently include OCR-triggered workflow or full integration with electronic court filings (ECF2).

## **Screenshots**

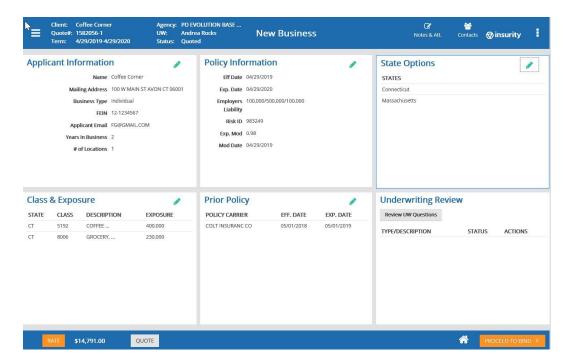
Agent Quotes and Policies



### **UW Worklist**



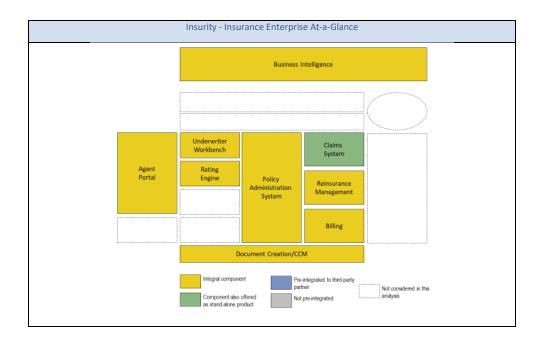
## Quote Dashboard



# **Insurity - Insurance Enterprise**

# **Executive Summary**

- Insurity is a private company that provides cloud-based solutions and data analytics for large global insurers, brokers, and MGAs. The company reports that it is trusted by 15 of the top 25 P/C insurance carriers in the US and that it empowers clients to focus on their core businesses, optimize their operations, and deliver superior customer experiences.
- Insurity declined to disclose employee headcount or revenue information.
- The suite includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, reinsurance, billing, and claims.
- It currently has six live insurer clients using the suite in the US, most of which are smaller insurers (under \$1B) using the solution to support personal lines.
- Insurity did not disclose any clients for this solution.
- The solution is browser-based for all user interface functions. It is written in Java.
- Configuration for insurance products, workflows, rules, and document authoring is via tools
  for BAs and non-IT staff. Configuration for screens and integration to third-party service calls
  is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through Insurity's own resources. Insurity deploys the solution
  hosted on AWS. The company offers a SaaS delivery model that includes hosting, license,
  maintenance and support, ongoing access to the latest version, and implementation of the
  upgrades.
- The company reports that the average time to initial go-live is 180 days or less. Insurity
  declined to disclose average implementation costs.



# **Lines of Business Supported**

Personal auto:	Solution is designed to support, but no clients live or implementing	
Homeowners:	Live clients offering this product in 10-49 US states	
Personal umbrella:	Solution is designed to support, but no clients live or implementing	
Dwelling fire:	Live clients offering this product in 10-49 US states	
Boatowners:	Live clients offering this product in 2-9 US states	
Personal package:	Solution is designed to support, but no clients live or implementing	
Commercial property:	Live clients offering this product in 2-9 US states	
General liability:	Solution is designed to support, but no clients live or implementing	
BOP:	Live clients offering this product in 2-9 US states	
Commercial crime:	Not currently supported	
Commercial auto:	Not currently supported	
E&O/D&O:	Solution is designed to support, but no clients live or implementing	
Inland marine:	Solution is designed to support, but no clients live or implementing	
Professional liability (including medical malpractice):	Not currently supported	
Commercial package:	Not currently supported	
Specialty:	Live clients offering this product in 2-9 US states	
Workers' comp:	Not currently supported	
Surety:	Not currently supported	
Other personal lines*:	Live clients offering this product in 2-9 US states	
Other commercial lines:	Not currently supported	

<sup>\*</sup>Other personal lines include motorcycle.

## **Client Base**

Globally, Insurity has six clients live on Insurance Enterprise, all of which are insurer clients (i.e., not MGAs, self-insureds) in the US. Most of these clients are smaller (under \$1B) insurers using the solution to support personal lines.

Insurity did not disclose any clients for this solution.

# **Key Functions and Differentiators**

Insurity cites the key functions of Insurance Enterprise as:

- Cloud-native P/C policy administration system across personal and commercial LOBs
- Configuration-driven billing solution that provides complete control of bill plans, billing options, and rules to help carriers effectively cater to customer preferences
- · Claims system with low-code, automated claims adjusting workflows
- Omni-channel portal applications and in-line collaboration capabilities across internal (agent, underwriter, CSR, adjuster) and external (policyholder, claimant) stakeholders
- A powerful rating engine for effective underwriting and precise pricing

The company cites as its key differentiators that it enables speed to market by providing product and rule configurability, pre-built integrations, and a 100% cloud solution ensuring rapid implementations; that it is an omni-channel solution built on a service-oriented architecture that enables loosely coupled but tightly integrated solutions; a cloud-native platform and apps that auto-scale to handle any workload; and no-/low-code product development, rating, billing, and claim setups.

# **Solution Architecture and History**

Insurance Enterprise launched in 2008 and was re-architected in 2012. The latest release was in January 2021. Insurity reports that 80% of the solution's customers are on the latest version and 10% are on a version less than three years old. All customers have been through at least one upgrade.

The solution supports DB2/UDB, Oracle, Microsoft SQL Server, and MySQL/MariaDB databases as well as UNIX/Linux and Windows platforms. The solution is written in Java.

# **APIs and Integration**

The solution provides REST and SOAP APIs.

# **Configurability and User Interface**

Insurance Enterprise is browser-based for all user interface functions.

Configuration for insurance products, workflows, rules, and document authoring is via tools for BAs and non-IT staff. Configuration for screens and integration to third-party service calls is available via developer tools, XML manipulation, or a scripting language.

# **Deployment Options**

Insurity deploys the solution hosted on AWS.

The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades. The hosted solution is a single-tenant app server and database.

## Average Implementation Length and Cost

Insurity implements the solution through its own resources. It reports that Insurance Enterprise can be ready for initial go-live in 180 days or less and fully rolled out in an additional 30 days or less. The company reports that the average implementation cost is \$500K-\$1M.

## Support

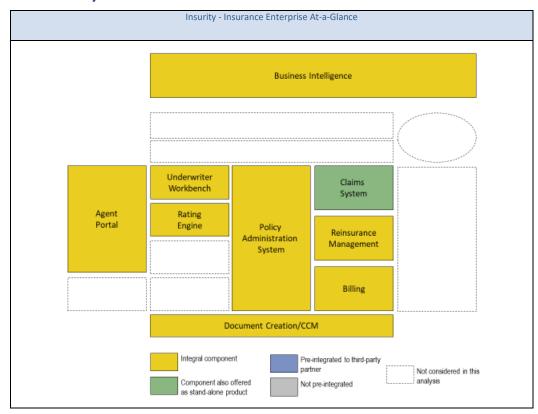
Of the 1,000 people employed at Insurity, there are between 50 and 100 on the product design and engineering team, between ten and 50 on the implementation (not counting partnerships) team, and fewer than ten on the support team for Insurance Enterprise.

Insurity has headquarters in Hartford, CT and has several additional US offices and remote staff across the US, as well as international offices in Montreal, Canada and London, England. Staff positions supporting Insurance Enterprise are primarily in California and Virginia. Insurity offers customer engagement activities such as training seminars for Insurance Enterprise.

# **Systems Integrator and Other Partners**

Publicly announced technology partnerships include Winward, Pentaho, Amazon Web Services, and IBM Watson.

# **Functionality**



## **Policy Administration Functions**

Policy issue, premium accounting, out-of-sequence endorsement, and forms management are available out of the box. Bordereaux import and manuscripted policies are available with configuration via tools for IT analysts or BAs.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

## **Rating Functions**

Rating functionality is part of the suite and is not sold as a stand-alone rating engine.

Quick quote; support for after-inception policy rating for endorsements, cancellations, reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-state, multi-location rating on a single policy are standard functions.

Versioning and update management, change control functions, and the auditability of rate versioning are standard functions.

An application and forms library with standard and customizable applications and forms is available with configuration via tools for IT analysts or BAs. Download to agency management systems is standard, and pre-integration to third-party data providers is available via out-of-the-box integration to a third-party system or service.

ISO rates/rules support is available with configuration using simple tools targeted for IT analysts or BAs. ISO-formatted statistical data is available with configuration using developer tools, XML manipulation, or a scripting language. Currently, the solution does not include NCCI/Bureau of Workers' Comp rates/rules support or ISO ERC integration.

Setting carrier-specific defaults is standard. Multi-carrier comparison is available with configuration using simple tools targeted for IT analysts or BAs. Saving/storing an in-process or completed policy change transaction to allow issuance at a later date along with product design and development tools are standard functions.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, import/export rating tables to/from spreadsheets (e.g., Excel), rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are standard functions.

Testing, modeling, and product analysis are standard. Displacement testing (i.e., the ability to run existing book of business through proposed rate/product changes to determine impact) is available with configuration using developer tools, XML manipulation, or a scripting language.

### **Underwriter Workbench Functions**

Underwriting functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing the submission data from a structured data feed is a standard function. Uploading/importing the submission information from documents (OCR-like functionality) is available with configuration using developer tools, XML manipulation, or a scripting language.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, and cancellation transactions are standard functions. Supporting underwriting multiple submissions as one work portfolio is also standard.

Allowing individual quotes for different lines to be combined into a single proposal is available with configuration using developer tools, XML manipulation, or a scripting language.

Capturing underwriting analysis, capturing underwriter loss analysis, underwriter checklists that can validate information completeness and process completeness, submission rating, and pricing analysis and scheduled rating information are standard functions.

Providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems is available out of the box. Document creation (proposals, applications, correspondence) and document storage are standard functions.

A rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries, etc.); a rules engine that interfaces to conditionally order specific data; inline reports/dashboards on tasks/work/work status; and inline reports/dashboards to support underwriting analytis are all available out of the box.

The solution does not currently include displaying aggregate risk accumulations for existing book at granular location level (i.e., geo-mashup of existing book and proposed risk).

IM collaboration with other underwriters and screensharing with other underwriters are available with configuration using developer tools, XML manipulation, or a scripting language. Insurity notes that for agent-facing capabilities, the same base platform is exposed to both agents and underwriters, with a role-based permission model that controls access and allows abilities to be tailored to actors' needs.

Proposal co-authoring with other underwriters; preconfigured interfaces with policy admin systems, agent portals, and third-party data services; preconfigured integration with business intelligence environments; support for variable binding/approval authority by role; and support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) are all standard functions.

Currently, the solution does not include natively calculated predictive scores or preconfigured interfaces with external predictive scoring models.

#### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents (e.g., statements) and ad hoc documents (e.g., correspondence and manuscripted policies).

The suite includes pre-packaged, pre-built forms, libraries, and templates from ACORD. The primary authoring environment is MS Word. Content is designed to be maintained by the average business user; business rules, schema mapping, and data sources are all designed to be managed by business analysts.

The solution is designed to support print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is a standard function.

Clients primarily use the toolset built into the solution for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository and content management tools are available via out-of-the-box integration to a third-party system or service. Archival capabilities for all generated documents are available with configuration using simple tools targeted for IT analysts or BAs. The solution supports ACORD XML schemas out of the box.

## **Agent Portal Functions**

Agent portal functionality is part of the suite and is not sold as a stand-alone agent portal.

New business entry/submission, account clearance, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, policy change entry/submission, online payment, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, agency management system upload, account or client view in addition to a policy view, underwriter view and/or tools, agent/underwriter collaboration, and a rating engine are all standard. Integration and pre-fill with data services are available via out-of-the-box integration to a third-party system or service.

ACORD application creation and side-by-side quote comparison are available with configuration using developer tools, XML manipulation, or a scripting language.

File attachment support; scheduling, diary, and calendar functions; workflow and task management capabilities; business intelligence and reporting; and a consumer portal are standard functions. Support for e-signature is available via out-of-the-box integration to a third-party system or service. Document creation is available with configuration using simple tools targeted for IT analysts or BAs.

#### **Reinsurance Functions**

Reinsurance is integral to the suite and is not marketed as a stand-alone solution.

Manual entry and tracking of cessions, reserves, and limits; automated notification if a reserve reaches a specific amount or treaties approach set limits; and automated identification/calculation of accounts with applicable reinsurance are standard functions.

Manual entry and tracking of assumed reinsurance contracts is standard. Currently, the solution does not include automated assumed reinsurance calculations based on reinsured data feeds/connections or retrocession reinsurance management.

Treaty management, facultative management, proportional support, non-proportional/excess of loss, and multiple basis types (risks attaching, losses occuring, and claims made) are available out of the box. Retroactively processing late placements or midterm contract changes is available with configuration using developer tools, XML manipulation, or a scripting language. Configuration of contract rules, formulas, and types is available with configuration using simple tools targeted for IT analysts or BAs.

End-user interfaces for manual entry of contracts, for manual flagging of premiums and claims subject to reinsurance, and for for review and approval of assumed policies as part of facultative contracts are all available out of the box.

Real-time data intake from core systems (e.g., PAS, claims) via API or another mechanism and real-time integration to an underwriting system (e.g., to display limits/reserves) are standard. The solution does not currently include batch file import/export for integration to other systems or integration between other insurer/reinsurer systems.

Automated Schedule F reporting and ad hoc reporting are available with configuration using simple tools targeted for IT analysts or BAs. Automated bordereau reporting as well as integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc. are available with configuration using developer tools, XML manipulation, or a scripting language.

Automated recoverable claims identification and viewing the full history and status of a claim and claim recovery are standard functions. Document management and storage of the actual contracts as well as an audit trail for all transactions are standard.

Tracking reinsurance payables and receivables and multi-language support are available with configuration using developer tools, XML manipulation, or a scripting language. Currently, the solution does not include entity management (CRM) or multi-currency support.

## **Business Intelligence Functions**

Business intelligence functionality is part of the suite and is not sold as a stand-alone solution.

Insurity provides operational reporting and business intelligence on policy and claim historical and current transactional data. Users have access to pre-defined reports, dashboards, and ad hoc reporting.

The solution includes an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes; a presentation/reporting component; and an ad hoc reporting tool.

The solution also includes some tools and features to support data governance, dictionaries, quality, and validation as well as standard predefined reprots and predefined insurance dashboards.

The solution leverages a scalable, cloud-based MPP solution such as AWS Redshift, Google BigQuery, or Azure SQL Data Warehouse.

The solution supports data movement via batch ETL.

# **Billing Functions**

Billing functions are part of the suite and are not sold as a stand-alone billing component. Payment and billing plan configurability are standard functions. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available out of the box with no configuration necessary
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available with configuration using simple tools targeted
and disbursements:	for IT analysts or BAs
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	No
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Not available
Billing dashboarding/reporting:	Available with configuration using simple tools targeted for IT analysts or BAs
Workers' compensation monthly self-	Available with configuration using developer tools, XML
reporting:	manipulation, or a scripting language
Pay-as-you-report for workers' comp:	Available with configuration using developer tools, XML
	manipulation, or a scripting language
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available out of the box with no configuration necessary
Billing for non-premium receivables (such	Available out of the box with no configuration necessary
as claims deductibles paid):	
Payment of non-refund payables (such as	Available with configuration using simple tools targeted
policy dividends or mutual dividends):	for IT analysts or BAs
Multi-currency support in a single instance	No
of the application:	

### **Claims Functions**

ClaimEnterprise is integral to the suite and is also sold as a stand-alone component.

### **Adjudication**

Automated coverage verification and deductible tracking are standard. Aggregate tracking (erosion of policy limits) is available with configuration using developer tools, XML manipulation, or a scripting language. Currently, the solution does not include medical case management, injury detail maintenance (coding), or disability management.

#### Catastrophe

Catastrophe definition, automatic identification of catastrophe claims, and attaching multiple LOBs and causes of loss to a single catastrophe are standard functions. Mapping tools are available with configuration using developer tools, XML manipulation, or a scripting language.

#### **Disbursements**

Check processing, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), and combining multiple pending payments for a single client into one disbursement are standard functions. Calculating and scheduling recurring payments, OFAC checking, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) are available with configuration using developer tools, XML manipulation, or a scripting language.

#### **Documents**

Image and media management, document rendering, a content repository and content management tools, and multi-channel delivery and output of documents (including PDF, email, web, and print) are standard. A correspondence or forms library and state-specific claims reporting templates are available with configuration using simple tools targeted for IT analysts or BAs.

## **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; mobile and smart device input; scripting for claims intake with reflexive questioning; customized question sets to prompt mandatory additional questions depending on the answers given (branch scripting); claim characteristics scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim); claimant contact management data capture; and checking for duplicate claims are standard.

Handling of FROI/SROI EDI reporting and integration with external vendors and services (such as car rental companies or repair shops) are available with configuration using developer tools, XML manipulation, or a scripting language.

## Fraud

Configurable business rules and tasks (specific to fraud and special investigations) are available out of the box. Provision of multiple search and reporting criteria for fraud detection (via the ability to track common clients across multiple claims) is available with configuration via tools for IT analysts or BAs.

## Litigation

Creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management as well as litigation process tracking, including negotiation details and litigation costs, are available out of the box.

#### **Multi-Channel**

An agent portal with self-service, a policyholder portal with self-service, call center integration for FNOL, and call center integration for claims status check via telephony are available out of the box. E-signature capability is available via out-of-the-box integration to a third-party system or service.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, and assignment to facultative arrangements are standard functions.

### Reporting

Standard reporting of claims performance monitoring, including claims handling, and high-risk indicators such as fatality, large losses, and fraud; standard reporting of configurable metrics for claims reporting; ad hoc reports; dashboards; and electronic reporting or automated state filings are available out of the box. Reporting that includes jurisdiction-specific reports and forms is available with configuration using simple tools targeted for IT analysts or BAs.

### Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; subrogation billing and the production of correct GL entries; the granular tracking of reserves and payments; automatic reserve calculations using business rules and risk characteristics; and direct, case, average, factor, and expense reserve types are standard functions. The solution does not currently include jurisdictional wage and rate calculations integrated for workers' comp.

### **Vendor Management**

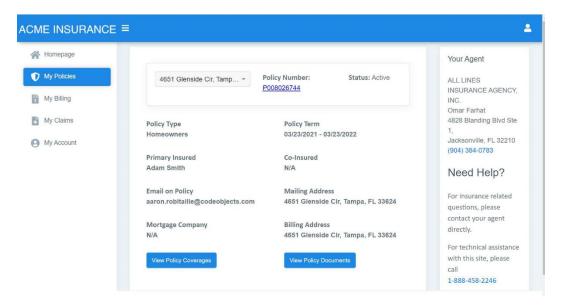
Vendor management functions are standard. Processing required forms (including 1099s) is not currently available.

### Workflow

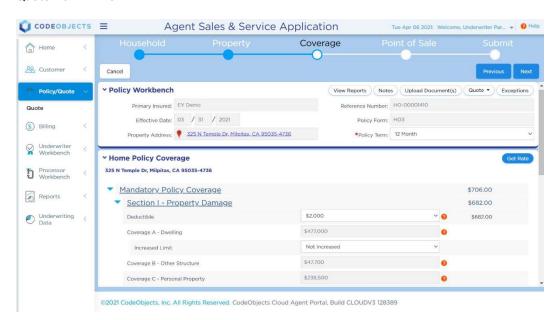
Automated workflow/task generation; overriding automated processes and manually triggering workflow processes; automatic work assignment based on configurable rules; generating notes, diaries, and reminders; the inclusion of external documents (e.g., letters, pictures) in file notes; and assigning multiple adjusters to a single claim are available out of the box. Processing claim workflow trigger (CWT) files at insurer-defined intervals and full integration with Electronic Court Filings (ECF2) are available with configuration using developer tools, XML manipulation, or a scripting language. Currently, the solution does not include OCR-triggered workflow or compliance with the Document Repository Interface (DRI).

## **Screenshots**

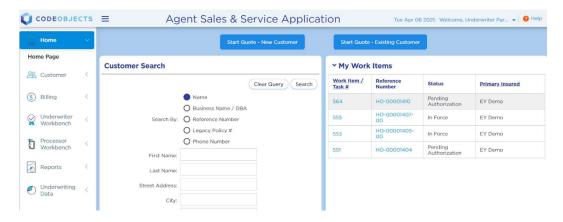
**Digital Customer Portal** 



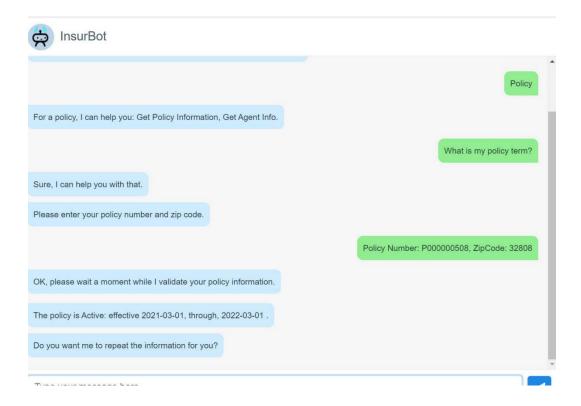
#### Quote Flow in PAS



## PAS Dashboard Post-Login



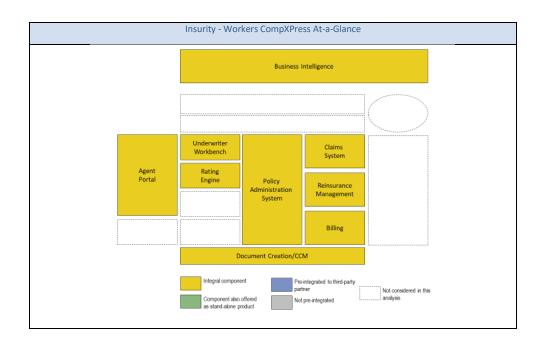
### InsurBot Conversational Client



# **Insurity - Workers CompXPress**

# **Executive Summary**

- Insurity is a private company that provides cloud-based solutions and data analytics for large global insurers, brokers, and MGAs. The company reports that it is trusted by 15 of the top 25 P/C insurance carriers in the US and that it empowers clients to focus on their core businesses, optimize their operations, and deliver superior customer experiences.
- Insurity declined to disclose employee headcount or revenue information.
- The suite includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, reinsurance, billing, and claims.
- It currently has 15 live insurer clients using the suite in the US, all of which are smaller insurers (under \$1B) using the solution to support workers' comp.
- Publicly announced clients include Midwest Builders' Casualty, James River (Falls Lake and Stonewood Insurance), Risk Administration Services, The Builders' Group, and AlaCOMP Self-Insurance Fund.
- The solution is browser-based for all user interface functions. It is written in .NET (C#/VB.NET) with some JavaScript, Boostrap, and Angular.
- Configuration for insurance products, rules, integration to third-party service calls, and
  document authoring is via tools for BAs and non-IT staff. Workflow is configurable via tools
  for IT analysts. Screen configuration is available via developer tools, XML manipulation, or a
  scripting language.
- Implementation is available through Insurity's resources or a partner. Insurity deploys the solution on-prem, hosted at a private data center, and hosted on AWS or MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is 180 days or less. Insurity declined to disclose average implementation costs.



# **Lines of Business Supported**

Personal auto:	Not currently supported
Homeowners:	Not currently supported
Personal umbrella:	Not currently supported
Dwelling fire:	Not currently supported
Boatowners:	Not currently supported
Personal package:	Not currently supported
Commercial property:	Not currently supported
General liability:	Not currently supported
BOP:	Not currently supported
Commercial crime:	Not currently supported
Commercial auto:	Not currently supported
E&O/D&O:	Not currently supported
Inland marine:	Not currently supported
Professional liability (including medical malpractice):	Not currently supported
Commercial package:	Not currently supported
Specialty:	Not currently supported
Workers' comp:	Live clients offering this product in 10-49 US states
Surety:	Not currently supported
Other personal lines:	Not currently supported
Other commercial lines:	Not currently supported

# **Client Base**

Globally, Insurity has 26 clients live on Workers CompXPress, 15 of which are insurer clients (i.e., not MGAs, self-insureds) in the US. These clients are smaller (under \$1B) insurers using the solution to support workers' comp.

Publicly announced clients include Midwest Builders' Casualty, James River (Falls Lake and Stonewood Insurance), Risk Administration Services, The Builders' Group, and AlaCOMP Self-Insurance Fund.

# **Key Functions and Differentiators**

Insurity cites the key functions of Workers CompXPress as:

- Complete, out-of-the-box policy, billing, claims, portal, reports, dashboards, and visual workflow designer for all mono-line workers' comp markets
- Professionally managed, secure SaaS cloud hosting and a 100-day implementation plan to onboard quickly
- Native integration and automated decision-making capabilities leveraging predictive analytics
- Full bureau-based content, maintenance, and support leveraging Insurity's compliance services
- Robust configuration tools enabling rapid initial implementation and new state expansion for growing insurers

The company cites as its key differentiators out-of-the-box SaaS with a purpose-built workers' comp core platform; Visual Workflow Designer to enable automation, manage custom business rules, and control user workflow without custom programming; out-of-the-box document and check printing, document creation and management (including imaging), and workers' compspecific compliance reporting tools; digital capabilities including predictive analytics, visualization dashboards, electronic communication, and diary/task management; and an out-of-the-box external user portal for agencies and insureds, including bill payments, policy info, new business and renewal management, certificate holders, reported payroll management, dashboards, and report generation.

# **Solution Architecture and History**

Workers CompXPress launched in 1994 and was re-architected in 2012. The latest release was in April 2021. Insurity reports that 10% of the solution's customers are on the latest version and 90% are on a version less than three years old. All customers have been through at least one upgrade.

The solution supports Microsoft SQL Server databases and Windows platforms. The solution is written in .NET (C#/VB.NET) with some JavaScript, Bootstrap, and Angular.

## **APIs and Integration**

Insurity reports that APIs are on the product roadmaps for Workers CompXPress.

# **Configurability and User Interface**

Workers CompXPress is browser-based for all user interface functions.

Configuration for insurance products, rules, integration to third-party service calls, and document authoring is via tools for BAs and non-IT staff. Workflow is configurable via tools for IT analysts. Screen configuration is available via developer tools, XML manipulation, or a scripting language.

# **Deployment Options**

Insurity offers on-premise, hosted at a private data center, and hosted on AWS or MS Azure deployment options for Workers CompXPress.

The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades. The hosted solution is a multi-tenant app server and a single-tenant database.

# **Average Implementation Length and Cost**

Insurity implements the solution through its own resources or its implementation partner, RCG Global Partners. It reports that Workers CompXPress can be ready for initial go-live in 180 days or less and fully rolled out in an additional 180 days or less. Insurity declined to disclose average implementation costs.

# Support

Insurity did not disclose employee team count specifics.

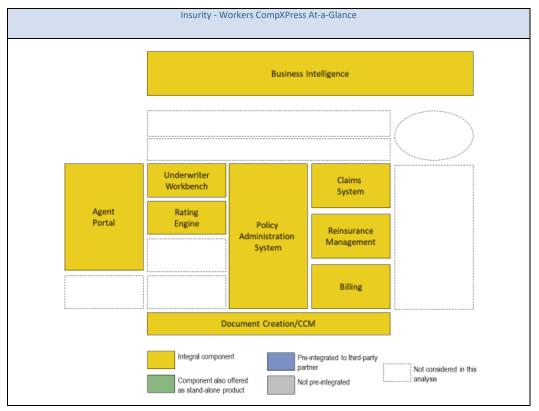
Insurity has headquarters in Hartford, CT and has several additional US offices and remote staff across the US, as well as international offices in Montreal, Canada and London, England. Staff positions supporting Workers CompXPress are primarily in Sarasota, FL with additional employees throughout Insurity offices.

Insurity offers customer engagement activities such as an online community, online training, a customer advisory committee, a user event, and training seminars.

## Systems Integrator and Other Partners

Publicly announced technology partnerships include Microsoft, Mitchell, Franco Signor, Appulate, and WorkersCompensation.com, LLC.

# **Functionality**



## **Policy Administration Functions**

Policy issue, premium accounting, and out-of-sequence endorsement are available out of the box. Forms management and manuscripted policies are available with configuration via tools for IT analysts or BAs. The solution does not currently include bordereaux import.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

### **Rating Functions**

Rating functionality is part of the suite and is not sold as a stand-alone rating engine.

Quick quote; support for after-inception policy rating for endorsements, cancellations, reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-state, multi-location rating on a single policy are standard functions.

Versioning and update management and the auditability of rate versioning are standard functions. The solution does not currently include change control functions. An application and forms library with standard and customizable applications and forms is available with configuration via tools for IT analysts or BAs.

NCCI/Bureau of Workers' Comp rates/rules support is available out of the box. The company reports that the solution also includes support for all independent state bureaus out of the box.

Multi-carrier comparison and setting insurer-specific defaults are standard functions. Product design and development tools are available with configuration via tools for IT analysts or BAs. The solution does not currently include saving/storing an in-process or completed policy change transaction to allow issuance atallater date.

Import/export rating tables to/from spreadsheets (e.g., Excel) and date management capabilities are standard functions. Maintaining rating algorithm definition management separately from rate tables and rating and rule definition and management (e.g., automatic driver assignment) are available with configuration via tools for IT analysts or BAs.

Displacement testing (i.e., the ability to run existing book of business through proposed rate/product changes to determine impact) and testing, modeling, and product analysis are available with configuration via tools for IT analysts or BAs.

### **Underwriter Workbench Functions**

Underwriting functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing the submission data from a structured data feed is a standard function. Uploading/importing the submission information from documents (OCR-like functionality) is available via out-of-the-box integration to a third-party system or service.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, and cancellation transactions are standard functions.

Capturing underwriting analysis, capturing underwriter loss analysis, submission rating, and pricing analysis and scheduled rating information are standard functions. Underwriter checklists that can validate information and process completeness are available with configuration via tools for IT analysts or BAs.

Providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems is available out of the box. Document creation (proposals, applications, correspondence) and document storage are standard functions.

A rules engine that automatically applies underwriting, workflow, and general business rules is available with configuration via tools for IT analysts or BAs. The solution does not currently include a rules engine that interfaces to order specific data conditionally.

Workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries), inline reports/dashboards on tasks/work/work status, and inline reports/dashboards to support underwriting analysis are available out of the box.

The solution does not currently include IM collaboration with other underwriters, proposal coauthoring with other underwriters, screen sharing with other underwriters, preconfigured interfaces with policy admin systems, preconfigured interfaces with agent portals, or preconfigured integration with business intelligence environments. Support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) is standard. Support for variable binding/approval authority by role is available via tools for IT analysts or BAs.

Preconfigured interfaces with third-party data services are available with configuration via developer tools, XML manipulation, or a scripting language. Natively calculated predictive scores and preconfigured interfaces with external predictive scoring models are available via out-of-the-box integration to a third-party system or service.

#### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents (e.g., statements) and ad hoc documents (e.g., correspondence and manuscripted policies).

The suite includes pre-packaged, pre-built forms, libraries, and templates from ACORD for clients who are ACORD members. The primary authoring environment is MS Word or Adobe Creative Suite. Content is typically maintained by business analysts; business rules, schema mapping, and data sources are all designed to be managed by technical resources.

The solution is designed to support print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is a standard function. Clients must use the solution's built-in toolset for document authoring and content management workflow.

A content repository and content management tools are available with configuration via tools for IT analysts or BAs. Archival capabilities for all generated documents are standard. The solution supports ACORD XML schemas out of the box.

#### **Agent Portal Functions**

Agent portal functionality is part of the suite and is not sold as a stand-alone agent portal.

New business entry/submission, account clearance, quick quote, policy change entry/submission, online payment, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, proposal creation, ACORD application creation, account or client view in addition to a policy view, and a rating engine are all standard.

Integration and pre-fill with data services and agency management system upload are available via out-of-the-box integration to a third-party system or service. The solution does not currently include uploading/importing data from Excel (e.g., locations, cars, drivers), side-by-side quote comparison, underwriter view and/or tools, or agent/underwriter collaboration.

Document creation, file attachment support, business intelligence and reporting, and a consumer portal are standard functions. The solution does not currently include support for e-signature; workflow and task management capabilities; or schedule, diary, and calendar functions.

#### **Reinsurance Functions**

Reinsurance is integral to the suite and is not marketed as a stand-alone solution.

Manual entry and tracking of cessions, reserves, and limits; automated notification if a reserve reaches a specific amount or treaties approach set limits; and automated identification/calculation of accounts with applicable reinsurance are standard functions.

The solution does not currently include manual entry and tracking of assumed reinsurance contracts, automated assumed reinsurance calculations based on reinsured data feeds/connections, or retrocession reinsurance management.

Treaty management and non-proportional/excess of loss are available out of the box. Facultative management; retroactively processing late placements or midterm contract changes; and configuration of contract rules, formulas, and types are available with configuration via tools for IT analysts or BAs. The solution does not currently include proportional support or multiple basis types (e.g., risks attaching, losses occurring, claims made).

End-user interfaces for manual entry of contracts and for manual flagging of premiums and claims subject to reinsurance are standard. The solution does not currently include an end-user interface for review and approval of assumed policies as part of facultative contracts.

Real-time data intake from core systems (e.g., PAS, claims) via API or another mechanism and real-time integration to an underwriting system (e.g., to display limits/reserves) are standard. The solution does not currently include batch file import/export for integration to other systems or integration between other insurer/reinsurer systems.

Statutory and regulatory reporting, a standard library of canned reports, automated bordereau reporting, and ad hoc reporting are available with configuration via tools for IT analysts or BAs. Integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc. are available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include automated Schedule F reporting.

Automated recoverable claims identification and viewing the full history and status of a claim and claim recovery are standard functions.

Tracking reinsurance payables and receivables, entity management (CRM), document management and storage of the actual contracts, and an audit trail for all transactions are standard. The solution does not currently include multi-currency or multi-language support.

### **Business Intelligence Functions**

Business intelligence functionality is part of the suite and is not sold as a stand-alone solution.

Insurity Workers CompXPress BI solution comes pre-integrated with the WCXP database and offers dashboards, ad hoc report building, canned reports, and drill-down data analysis.

The solution includes a presentation/reporting component, standard predefined reports and dashboards, ad hoc reporting tools, and data mining and analytics tools.

The solution supports data movement via batch ETL.

# **Billing Functions**

Billing functions are part of the suite and are not sold as a stand-alone billing component. Payment and billing plan configurability are standard functions. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Currently not available, but could be available with a
	system enhancement
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Currently not available, but could be available with a
time party (ner, meregages, sim	system enhancement
Split or multi-payer bill:	Available out of the box with no configuration necessary
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	Ç
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Currently not available, but could be available with a
	system enhancement
Automated workflow and task	Available with configuration using simple tools targeted
management:	for IT analysts or BAs
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	No
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Currently not available, but could be available with a
	system enhancement
Billing dashboarding/reporting:	Available with configuration using simple tools targeted
Manhaud commonantian manthly salf	for IT analysts or BAs
Workers' compensation monthly self-	Available out of the box with no configuration necessary
reporting: Pay-as-you-report for workers' comp:	Available out of the box with no configuration necessary
Invoice and correspondence:	Available out of the box with no configuration necessary  Available out of the box with no configuration necessary
Check generation/production:	Available out of the box with no configuration necessary  Available out of the box with no configuration necessary
Billing for non-premium receivables (such	Available out of the box with no configuration necessary
as claims deductibles paid):	Available out of the box with no configuration necessary
Payment of non-refund payables (such as	Available out of the box with no configuration necessary
policy dividends or mutual dividends):	Available out of the box with no configuration necessary
Multi-currency support in a single instance	No
of the application:	
or the application.	

#### **Claims Functions**

Claims functionality is integral to the suite and is not sold as a stand-alone component.

### **Adjudication**

Medical case management, injury detail maintenance (coding), automated coverage verification, and deductible tracking are standard functions. The solution does not currently include disability management or aggregate tracking (erosion of policy limits).

#### Catastrophe

Catastrophe definition is a standard function. Automatic identification of catastrophe claims is available with configuration via tools for IT analysts or BAs. The solution does not currently include mapping tools or attaching multiple causes of loss to a single catastrophe.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, OFAC checking, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) are standard functions.

#### **Documents**

Image and media management, a correspondence or forms library, state-specific claims reporting templates, document rendering, and multi-channel delivery and output of documents (e.g., PDF, email, web, and print) are standard functions. A content repository and content management tools are available with configuration via tools for IT analysts or BAs.

#### **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; mobile and smart device input; claimant contact management data capture; and checking for duplicate claims are standard. Claim characteristics scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim) is available with configuration via tools for IT analysts or BAs. FROI/SROI EDI reporting is available via out-of-the-box integration to a third-party system or service. The solution does not currently include scripting for claims intake with reflexive questioning; custom question sets to prompt additional, mandatory additional questions depending on given answers (branch scripting); or integration with external vendors and services (e.g., car rental companies, car/equipment repair shops).

#### **Fraud**

Configurable business rules and tasks (specific to fraud and special investigations) are available out of the box. Provision of multiple search and reporting criteria for fraud detection (via the ability to track common clients across multiple claims) is available with configuration via tools for IT analysts or BAs.

#### Litigation

Creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management is available out of the box. Litigation process tracking, including negotiation details and litigation costs, is available with configuration via tools for IT analysts or BAs.

#### **Multi-Channel**

An agent portal with self-service and a policyholder portal with self-service are standard functions. Insurity reports that e-signature capability is under development and should be available in less than six months. The solution does not currently include call center integration for FNOL/claim status check via telephony.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, and assignment to facultative arrangements are standard functions.

## Reporting

Standard reporting of configurable metrics for claims reporting, ad hoc reports, dashboards, reporting that includes jurisdiction-specific reports and forms, electronic reporting or automated state filings, and the standard reporting of claims performance monitoring (including claims handling and high-risk indicators, e.g., fatality, large losses, fraud) are standard functions.

### Reserves, Recoveries, Subrogation

Subrogation billing and the production of correct GL entries; the granular tracking of reserves and payments; automatic reserve calculations using business rules and risk characteristics; jurisdictional wage and rate calculations integrated for workers' comp; and creating separate tasks, workflow, diaries, and business rules for subrogated cases are standard functions. Automatic subrogation identification is available with configuration via tools for IT analysts or BAs. The solution does not currently include direct, case, average, factor, or expense reserve types.

#### **Vendor Management**

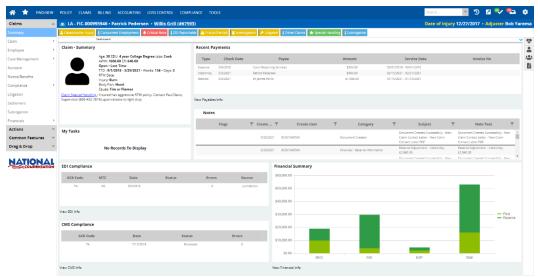
Vendor management functions are standard. Processing required forms (including 1099s) is available via out-of-the-box integration to a third-party system or service.

#### Workflow

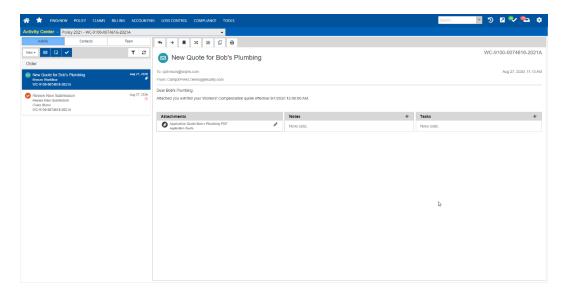
Automated workflow/task generation; automatic work assignment based on configurable rules; the inclusion of external documents (e.g., letters, pictures) in file notes; assigning multiple adjusters to a single claim; and generating notes, diaries, and reminders are standard functions. The solution does not currently include OCR-triggered workflow, overriding automated processes and triggering workflow processes manually, compliance with the Document Repository Interface (DRI), processing claim workflow trigger (CWT) files at insurer-defined intervals, or full integration with electronic court filings (ECF2).

# **Screenshots**

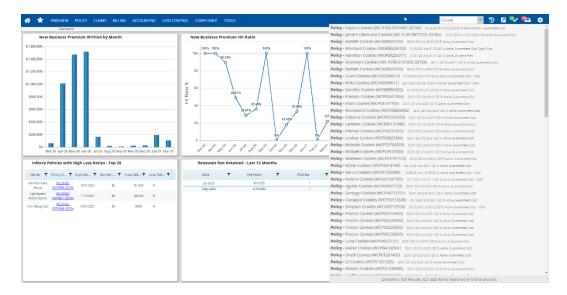
Claim Summary Landing Page



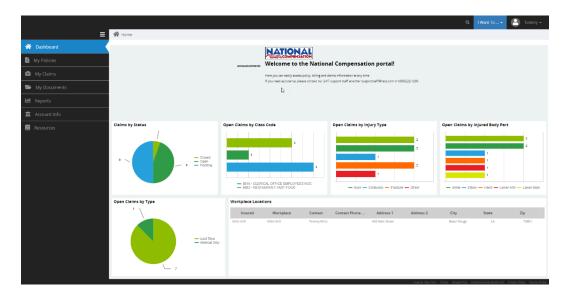
Activity Center Tasks, Emails, and Notes



## Underwriter Dashboard and Quick Search



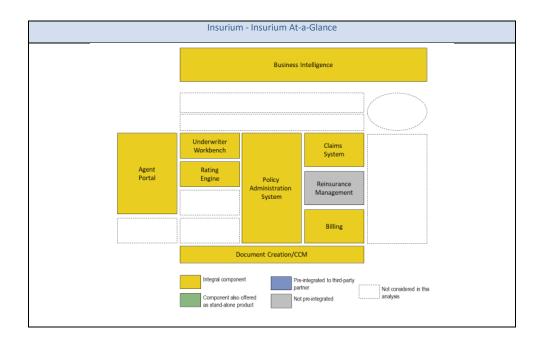
## Insured Portal Dashboard



# Insurium - Insurium

# **Executive Summary**

- Insurium is a private company that provides commercial insurance companies with a cloudbased platform offering a 360-degree view of the insurance process life cycle.
- It is headquartered in Denver, CO and employs 50 people. The company declined to disclose its annual revenue.
- The Insurium suite of solutions includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, billing, and claims components as well as an insured portal. Insurium notes that claims is currently only available for workers' comp.
- It currently has 16 live insurer clients using the suite in the US and Canada, all of which are smaller insurers (under \$1B) using the solution to support commercial lines.
- Publicly announced clients include Diamond Insurance, MTMIC, Synergy Comp, Cimmaron Insurance, and Utah Business Insurance Company.
- The solution is browser-based for all user interface functions. It is written in .NET (C#/VB.NET) and JavaScript with some proprietary database languages.
- Configuration for workflows, rules, and document authoring is via simple tools targeted for IT analysts or BAs. Configuration for insurance products, screens, and integration to thirdparty service calls is not available; changes are done by the vendor.
- Implementation is available through the company's own resources. Insurium deploys the solution hosted on MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, and ongoing access to the latest version.
- The company reports that the average time to initial go-live is 180 days or less and that the average implementation cost is \$100K-\$500K.



# **Lines of Business Supported**

Personal auto:	Not currently supported
Homeowners:	Not currently supported
Personal umbrella:	Not currently supported
Dwelling fire:	Not currently supported
Boatowners:	Not currently supported
Personal package:	Not currently supported
Commercial property:	Live clients offering this product in 2-9 US states
General liability:	Live clients offering this product in 2-9 US states
BOP:	Live clients offering this product in 2-9 US states
Commercial crime:	Live clients offering this product in 2-9 US states
Commercial auto:	Live clients offering this product in 2-9 US states
E&O/D&O:	Live clients offering this product in 2-9 US states
Inland marine:	Live clients offering this product in 2-9 US states
Professional liability (including medical malpractice):	Live clients offering this product in 2-9 US states
Commercial package:	Live clients offering this product in 2-9 US states
Specialty:	Live clients offering this product in one US state
Workers' comp:	Live clients offering this product in 10-49 US states
Surety:	Live clients offering this product in 10-49 US states
Other personal lines:	Not currently supported
Other commercial lines:	Not currently supported

# **Client Base**

Globally, Insurium has 60 clients live on its platform, 16 of which are insurer clients (i.e., not MGAs, self-insureds). All of these insurer clients are live in the US and Canada.

These clients are smaller (under \$1B) insurers using the solution to support commercial lines with some specialty lines.

Publicly announced clients include Diamond Insurance, MTMIC, Synergy Comp, Cimmaron Insurance, and Utah Business Insurance Company.

# **Key Functions and Differentiators**

Insurium cites the key functions of the Insurium suite as:

- Customer relationship management in a single place that is shared by teams, tracking the life cycle of each customer's policy, billing, and claims information
- Policy administration that includes end-to-end underwriting workflows for all P/C coverage options
- Billing and reporting functions that include full accounts receivable functionality with robust integrations to any third-party financial reporting software
- Full-cycle claims administration with unlimited third-party integrations for holistic reporting and data ingestion
- Agent portal access for policy submission/access for book of business visibility and member portal access with decentralized management/maintenance of insured coverage information

The company cites as its key differentiators that it offers a 100% SaaS-delivered, 360 degree view of the insurance life cycle, all in one place, reducing the need for multiple systems, processes, and integrations; that all capabilities are native to Insurium, with no acquisitions made to complete the solution; its real-time indication returns for brokers and agents; robust claims integrations for full-service reporting and data transference; and streamlined and on-time implementations.

# **Solution Architecture and History**

Insurium launched in 2010. The company notes that there are new releases every month and that all clients are on the latest version.

The solution supports Microsoft SQL Server, PostgreSQL, and Azure Blob Storage databases and Unix/Linux, Windows, and Mac OS platforms. The solution is written in .NET (C#/VB.NET) and JavaScript with some proprietary database language.

# **APIs and Integration**

The solution provides REST APIs. Insurium notes that APIs are available for data ingestion, data egress, indication pricing, submission pricing, and quote submission.

## **Configurability and User Interface**

Insurium is browser-based for all user interface functions. Configuration for workflows, rules, and document authoring is via simple tools targeted for BAs and non-IT staff. Configuration is not available for insurance products, screens, or integration to third-party service calls; changes are done by the vendor.

## **Deployment Options**

Insurium deploys the solution hosted on MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, and ongoing access to the latest version. The hosted solution is a multi-tenant app server and database with single-tenant options available.

# **Average Implementation Length and Cost**

Insurium implements the solution through its own resources. It reports that the platform can be ready for initial go-live in 180 days or less and fully rolled out in an additional 90 days or less. The company reports that the average implementation cost is \$100K-\$500K.

# **Support**

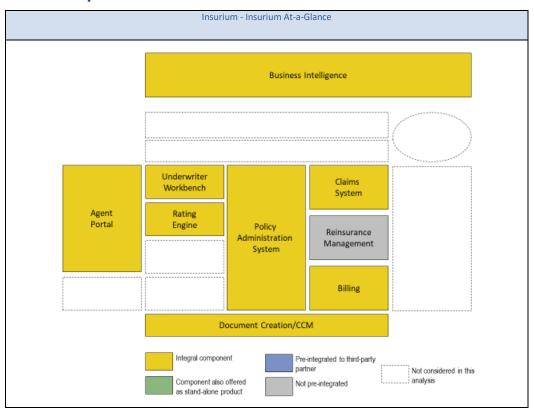
Of the 50 people employed at Insurium, there are between ten and 50 on the product design and engineering team, fewer than ten on the implementation (not counting partnerships) team, and fewer than ten on the support team.

Support for the solution is provided out of Henderson, NV and Denver, CO. Insurium offers customer engagement activities such as a customer advisory committee and a user event.

# **Systems Integrator and Other Partners**

Insurium did not disclose any technology or SI partnerships for the suite.

# **Functionality**



## **Policy Administration Functions**

Policy issue, premium accounting, and out-of-sequence endorsement are available out of the box. Forms management is available with configuration using simple tools targeted for IT analysts or BAs.

Bordereaux import is available with configuration using developer tools, XML manipulation, or a scripting language. Currently, the solution does not include manuscripted policies.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

## **Rating Functions**

Rating functionality is part of the suite and is not sold as a stand-alone rating engine.

Quick quote; support for after-inception policy rating for endorsements, cancellations, reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-state, multi-location rating on a single policy are standard functions.

Versioning and update management and change control functions are standard. The auditability of rate versioning is available with configuration using developer tools, XML manipulation, or a scripting language. An application and forms library with standard and customizable applications and forms is available with configuration via tools for IT analysts or BAs.

Pre-integration to third-party data providers is available via out-of-the-box integration to a third-party system or service. Download to agency management systems is not currently available.

NCCI/Bureau of Workers' Comp rates/rules support is available out of the box. Currently, the solution does not include ISO rates/rules support, ISO-formatted statistical data, or ISO ERC integration.

Multi-carrier comparison and setting insurer-specific defaults are not currently available. Saving/storing an in-process or completed policy change transaction to allow issuance at a later date as well as product design and development tools are available with configuration using developer tools, XML manipulation, or a scripting language.

Date management capabilities are available out of the box. Maintaining rating algorithm definition and management separately from rate tables as well as rate table design and update management tools are available with configuration using developer tools, XML manipulation, or a scripting language. Currently, the solution does not include import/export rating tables to/from spreadsheets (e.g., Excel) or rating and rule definition and management (e.g., automatic driver assignment).

Displacement testing (i.e., the ability to run existing book of business through proposed rate/product changes to determine impact) and testing, modeling, and product analysis are not currently available.

## **Underwriter Workbench Functions**

Underwriting functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing the submission data from a structured data feed is available via out-of-the-box integration to a third-party system or service. Uploading/importing the submission information from documents (OCR-like functionality) is not currently available.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, and cancellation transactions are standard functions.

Supporting underwriting multiple submissions as one work portfolio and allowing individual quotes for different lines to be combined into a single proposal are available with configuration using developer tools, XML manipulation, or a scripting language.

Capturing underwriting analysis and submission rating are not currently available. Capturing an underwriter's loss analysis; underwriter checklists that can validate information completeness and process completeness; pricing analysis and scheduled rating information; providing a single current and historical view of the insured's account across the enterprise, line of business, and policy systems; document creation (proposals, applications, and correspondence); and document storage are all standard functions.

A rules engine that automatically applies underwriting, workflow, and general business rules and a rules engine that interfaces to conditionally order specific data are standard fucntions. Workflow/task capabilities (inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries, etc.) are available with configuration using simple tools targeted for IT analysts or BAs.

Inline reports/dashboards on tasks/work/work status, inline reports/dashboards to support underwriting analysis, and displaying aggregate risk accumulations for an existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) are available with configuration using developer tools, XML manipulation, or a scripting language.

Proposal co-authoring with other underwriters is standard. Currently, the solution does not include IM collaboration with other underwriters, screensharing with other underwriters, agent-facing capabilities, or preconfigured interfaces with policy admin systems. preconfigured interfaces with agent portals and support for variable binding/approval authority by role are standard. Support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) is not currently available.

Insurium reports that preconfigured integration with business intelligence environments, preconfigured interfaces with third-party data services, natively calculated predictive scores, and preconfigured interfaces with external predictive scoring models are under development and should be available in less than six months.

## **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents (e.g., statements) and ad hoc documents (e.g., correspondence and manuscripted policies). The suite includes pre-packaged, pre-built forms, libraries, and templates from ACORD and ISO. The primary authoring environment is a custom environment.

Business rules are designed to be maintained by business analysts. Content, schema mapping, and data sources are designed to be maintained by technical resources.

The solution is designed to support print and e-delivery output channels. Managing preferences for print vs. electronic delivery is a standard function.

Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow and BPM tools.

A content repository, content management tools, and archival capabilities for all documents generated are available out of the box with no configuration necessary.

## **Agent Portal Functions**

Agent portal functionality is part of the suite and is not sold as a stand-alone agent portal.

New business entry/submission, account clearance, quick quote, policy change entry/submission, online payment, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, side-by-side quote comparison, account or client view in addition to a policy view, underwriter view and/or tools, and a rating engine are standard functions.

The solution does not currently include uploading/importing data from Excel (e.g., locations, cars, drivers), integration and pre-fill with data services, proposal creation, ACORD application creation, or agency management system upload. Insurium reports that agent/underwriter collaboration functionality is under development and should be available in less than six months.

Document creation, file attachment support, and a consumer portal are standard functions. The solution does not currently include support for e-signature; workflow and task management capabilities; or schedule, diary, and calendar functions. Insurium notes that business intelligence and reporting capabilities are under development and should be available in less than six months.

#### **Reinsurance Functions**

Reinsurance is not pre-integrated as part of the suite.

### **Business Intelligence Functions**

Business intelligence functionality is part of the suite and is not sold as a stand-alone solution.

The suite offers paginated forms, self-service reporting, and data visualizations for data produced by the company's claims, policy, and producer access products.

The solution includes a presentation/reporting component, standard predefined reports and dashboards, an ad hoc reporting tool, and data mining and analytics tools.

It also includes some features of an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes as a secondary part of the offering.

The solution leverages a scalable, cloud-based MPP solution such as AWS Redshift, Google BigQuery, or Azure SQL Data Warehouse.

The solution supports data movement via batch ETL.

# **Billing Functions**

Billing functions are part of the suite and are not sold as a stand-alone billing component. Payment and billing plan configurability are standard functions. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available with configuration using developer tools, XML
	manipulation, or a scripting language
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available with configuration using developer tools, XML
	manipulation, or a scripting language
Split or multi-payer bill:	Available with configuration using developer tools, XML
	manipulation, or a scripting language
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available with configuration using developer tools, XML
and disbursements:	manipulation, or a scripting language
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Available with configuration using developer tools, XML
	manipulation, or a scripting language
Automated workflow and task	Currently not available but could be available with a
management:	system enhancement
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	No
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Available out of the box with no configuration necessary
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Available out of the box with no configuration necessary
reporting:	Ŭ,
Pay-as-you-report for workers' comp:	Available out of the box with no configuration necessary
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Under development and will be available in less than six
	months
Billing for non-premium receivables (such	Available out of the box with no configuration necessary
as claims deductibles paid):	, and the second of the second
Payment of non-refund payables (such as	Available out of the box with no configuration necessary
policy dividends or mutual dividends):	
Multi-currency support in a single instance	No
of the application:	

#### **Claims Functions**

Claims functionality is integral to the suite and is not sold as a stand-alone component. Insurium notes that its claims features were originally developed to support workers' comp and are being expanded to support other commercial lines products.

## **Adjudication**

Medical case management, injury detail maintenance (coding), disability management, automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard functions.

#### Catastrophe

Insurium notes that automatic identification of catastrophe claims is under development and should be available in less than six months. The solution does not currently include catastrophe definition, attaching multiple LOBs or causes of loss to a single catastrophe, or mapping tools.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, and calculating partial or oneoff payments are standard functions. Insurium asserts that accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, OFAC checking, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) are under development and should be available in less than six months.

#### **Documents**

Image and media management, a correspondence or forms library, state-specific claims reporting templates, document rendering, a content repository and content management tools, and multi-channel delivery and output of documents (e.g., PDF, email, web, and print) are standard functions.

# **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; handling of FROI/SROI EDI reporting; scripting for claims intake with reflexive questioning; custom question sets to prompt mandatory additional questions depending on the answers given (branch scripting); claim characteristics scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim); claimant contact management data capture; and checking for duplicate claims are standard. The solution does not currently include mobile and smart device input for FNOL or integration with external vendors and services such as car rental companies or repair shops.

#### Fraud

Configurable business rules and tasks (specific to fraud and special investigations) are available out of the box. Provision of multiple search and reporting criteria for fraud detection (via the ability to track common clients across multiple claims) are not currently available.

## Litigation

Creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management as well as litigation process tracking, including negotiation details and litigation costs, are available out of the box.

## **Multi-Channel**

Currently, the solution does not include multi-channel capabilities.

#### Reinsurance

The solution does not currently include any reinsurance functionality.

## Reporting

Standard reporting of claims performance monitoring, including claims handling, and high-risk indicators such as fatality, large losses, and fraud; standard reporting of configurable metrics for claims reporting; reporting that includes jurisdiction-specific reports and forms,; and electronic reporting or automated state filings are available out of the box with no configuration necessary. Insurium reports that ad hoc reports and dashboards are under development and should be available in less than six months.

## Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; subrogation billing and the production of correct GL entries; the granular tracking of reserves and payments; direct, case, average, factor, and expense reserve types; and jurisdictional wage and rate calculations integrated for workers' comp are available out of the box. Automatic subrogation identification and automatic reserve calculations using business rules and risk characteristics are not currently available.

## Vendor Management

Vendor management functions and processing required forms (including 1099s) are standard.

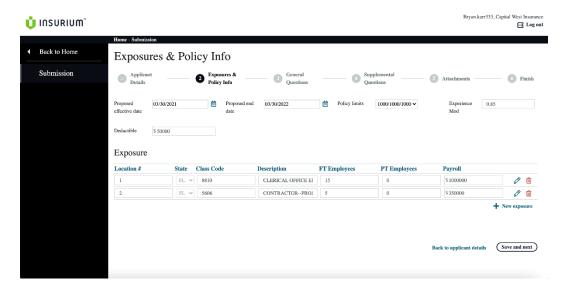
#### Workflow

Automatic work assignment based on configurable rules; generating notes, diaries, and reminders; the inclusion of external documents (e.g., letters, pictures) in file notes; assigning multiple adjusters to a single claim; and compliance with the Document Repository Interface (DRI) stndards are all standard functions.

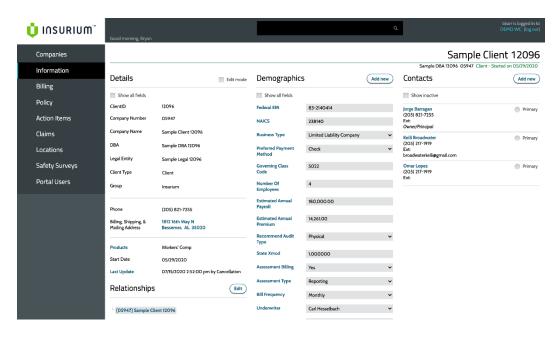
Automated workflow/task generation and overriding automated processes and manually triggering workflow processes are available with configuration using simple tools targeted for IT analysts or BAs. The solution does not currently include OCR-triggered workflow, processing claim workflow trigger (CWT) files at insurer-defined intervals, or full integration with electronic court filings (ECF2).

# **Screenshots**

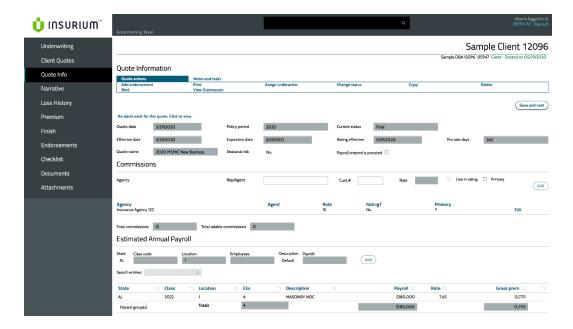
**Agent Portal** 



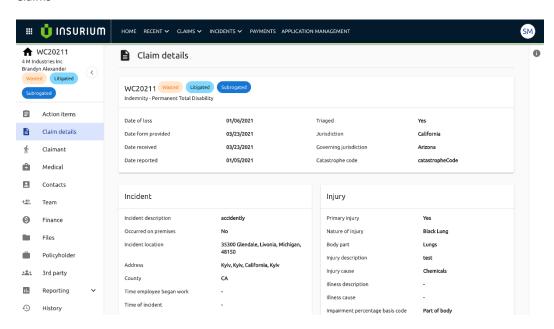
## CRM



## Policy Admin

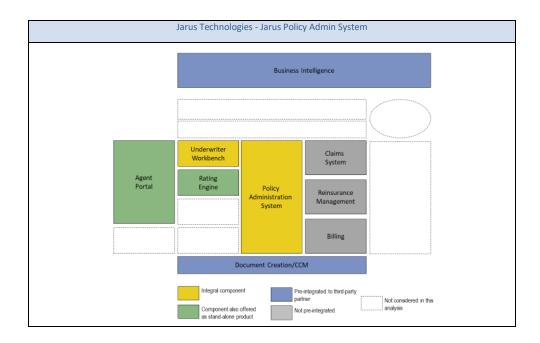


#### Claims



# Jarus Technologies - Jarus Policy Admin System Executive Summary

- Jarus Technologies offers digital experience platforms and policy administration systems. It
  has provided portals, mobile apps, and core system transformation services for more than
  25 insurers. The company reports that its policy admin system enables carriers to build
  custom systems that are flexible, scalable, and Agile. The company is headquartered in
  Pittsburgh, PA and employs 170 people. Jarus does not publish revenue numbers.
- Jarus Policy Admin System is a suite of solutions that includes core policy features, rating, underwriter workbench, and agent portal components. It also includes a rules engine.
- It currently has four live US/Canadian insurer clients using the suite, most of which are smaller (under \$1B) companies using the solution to support commercial lines.
- Publicly announced clients include Goodville Mutual Casualty Company, North Star Mutual Insurance Company, ALPS Lawyers Professional Liability, and AIPSO.
- The solution is browser-based for all user interface functions. It is written in .NET Core (C#)
  with some JavaScript for the presentation layer. Jarus notes that there is a Java version of
  Jarus Rating Engine and Rules Engine used by some carriers.
- Configuration for insurance products, screens, workflows, and rules is via simple tools targeted for BAs and non-IT staff. Configuration for integration to third-party service calls is via simple tools targeted for IT analysts. Configuration for document authoring is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's own resources or a partner. Jarus
  deploys the solution on-prem or hosted on MS Azure. The company offers a SaaS delivery
  model that includes license, maintenance and support, ongoing access to the latest version,
  and the implementation of upgrades.
- The company reports that the average time to initial go-live is 12 months or less and that the average implementation cost is \$1M-\$2M.



# **Lines of Business Supported**

Personal auto:	Clients currently in implementation for this line/product
Homeowners:	Clients currently in implementation for this line/product
Personal umbrella:	Clients currently in implementation for this line/product
Dwelling fire:	Clients currently in implementation for this line/product
Boatowners:	Clients currently in implementation for this line/product
Personal package:	Clients currently in implementation for this line/product
Commercial property:	Clients currently in implementation for this line/product
General liability:	Clients currently in implementation for this line/product
BOP:	Clients currently in implementation for this line/product
Commercial crime:	Solution is designed to support, but no clients live or implementing
Commercial auto:	Clients currently in implementation for this line/product
E&O/D&O:	Clients currently in implementation for this line/product
Inland marine:	Clients currently in implementation for this line/product
Professional liability (including medical malpractice):	Live clients offering this product in 10-49 US states
Commercial package:	Solution is designed to support, but no clients live or implementing
Specialty:	Clients currently in implementation for this line/product
Workers' comp:	Solution is designed to support, but no clients live or implementing
Surety:	Solution is designed to support, but no clients live or implementing
Other personal lines:	Solution is designed to support, but no clients live or implementing
Other commercial lines†:	Live clients offering this product in 2-9 US states

<sup>†</sup>Other commercial lines include commercial umbrella and cyber.

Jarus Policy Admin System is designed to support on-demand insurance offerings and has delivered a pilot project with an insurer client for UBI pay-per-mile auto insurance.

## **Client Base**

Globally, Jarus Technologies has four clients live on Jarus Policy Admin System, all of which are insurer clients (i.e., not MGAs, self-insureds) in the US and Canada. The company notes that it has one other client in implementation.

Most of these clients are smaller (under \$1B) companies using the solution to support commercial lines.

Publicly disclosed clients include Goodville Mutual Casualty Company, North Star Mutual Insurance Company, ALPS Lawyers Professional Liability, and AIPSO.

# **Key Functions and Differentiators**

Jarus cites the key functions of Jarus Policy Admin System as:

- Jarus Policy Admin Microservices, the headless portion with the schema and API, to create/ manage quotes, applications, and policies and to enable issue and post-issuance transactions
- Jarus Agent Portal to create and manage quotes as well as apply and bind quotes if there are no referrals
- Jarus Underwriting Workbench, an internal user interface to review referrals and underwriter policies as well as manage in-force policies, renewals, cancellations, etc.
- Jarus Rating Engine, which enables a product team to create and manage rates and rating logic
- Jarus Rules Engine, which enables a product team to create and manage underwriting and STP rules

The company cites as its key differentiators a flexible, agile system with a web-based product configurator that allows product teams to manage product definitions, rates, rating logic, and business rules with a no-/low-code approach; a policy admin core back end that is a set of line-neutral microservices and schema which support mono-line and multi-line policies, allowing carriers to quote, bind, and issue policy bundles or package policies; that it is a modular solution with individual components that can be used independently or together to give carriers maximum flexibility for customization and mix-and-match and that permits incremental evolution; a single, role-based UI instead of two separate interfaces for agents and underwriters, ensuring that all users have the same consistent workflow and view the same information filtered by access privileges; and end-to-end training provided in addition to the source code, ensuring no vendor lock-in and that carriers are able to manage the system with or without assistance from Jarus.

# **Solution Architecture and History**

Jarus Policy Admin System launched in 2018 and was rearchitected in 2019. The latest release was in February 2021. Jarus reports that 70% of customers are on the latest version. Half of the solution's customers have been through at least one upgrade.

The solution supports Microsoft SQL Server and Azure SQL Server databases as well as UNIX/Linux, Windows, cloud, and MacOS platforms. The solution is written in .NET Core (C#), with some JavaScript for the presentation layer. Jarus notes that there is a Java version of Jarus Rating Engine and Jarus Rules Engine used by some carriers.

## **APIs and Integration**

The solution provides REST APIs.

Jarus notes that all back-end functionality to create and manage quotes and policies is available in the microservices, i.e., it is a headless policy admin system. Presentation layer and integration layer communicate with policy admin via microservices. These are RESTful APIs. Jarus also reports that microservices provide layered functionality to opearte at all levels of granularity: policy, product, risk item, coverage, form, party role, etc.

# **Configurability and User Interface**

Jarus Policy Admin System is browser-based for all user interface functions.

Configuration for insurance products, screens, workflows, and rules is via simple tools for BAs and non-IT staff. Configuration for integration to third-party service calls is via simple tools targeted for IT analysts. Configuration for document authoring is via developer tools, XML manipulation, or a scripting language.

# **Deployment Options**

Jarus deploys the solution on-prem or hosted on MS Azure. The company offers a SaaS delivery model that includes license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades. The hosted solution is a multi-tenant app server and database with single-tenant options available.

# **Average Implementation Length and Cost**

Jarus implements the solution through its own resources or through an implementation partner. It reports that Jarus Policy Admin System can be ready for initial go-live in 12 months or less and fully rolled out in an additional 12 months or less. The average implementation cost is \$1M-\$2M.

# Support

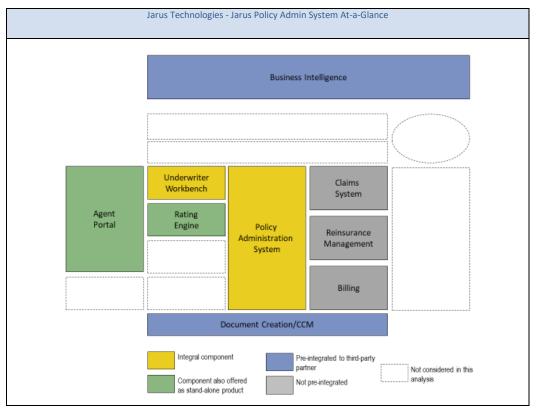
Of the 170 people employed at Jarus Technologies, there are between ten and 50 on the product design and engineering team, between 50 and 100 on the implementation team (not counting partnerships), and between ten and 50 on the support team. Resources are located out of Pittsburgh, PA and Hyderabad, India.

Jarus offers customer engagement activities such as online training and training seminars.

# **Systems Integrator and Other Partners**

Publicly announced technology partnerships include iText (document generation), AssureSign (esignature), Microsoft Power BI (BI and reporting), and Axiom, Inc. (billing and claims systems).

# **Functionality**



# **Policy Administration Functions**

The solution includes policy issue and out-of-sequence endorsement out of the box. Forms management is available via out-of-the-box integration to a third-party system or service. Currently, the solution does not include premium accounting, bordereaux import, or manuscripted policies.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

## **Rating Functions**

Jarus Rating Engine is integral to the suite and is also marketed as a stand-alone solution.

Quick quote; support for after-inception policy rating for endorsements, cancellations, reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are available with configuration using simple tools targeted for IT analysts or BAs.

Versioning and update management, change control functions, and auditability of rate versioning are standard functions. The solution does not currently include an application/forms library with standard and customizable applications and forms.

Download to agency management systems and pre-integration to third-party data providers are both available with configuration using developer tools, XML manipulation, or a scripting language.

ISO rates/rules support and NCCI/Bureau of Workers' Comp rates/rules support are available with configuration using simple tools targeted for IT analysts or BAs. The solution does not currently include ISO-formatted statistical data or ISO ERC integration.

Setting insurer-specific defaults and saving/storing in-process or completed policy change transactions to allow issuance at a later date are standard functions. Multi-carrier comparison is available with configuration using simple tools targeted for IT analysts or BAs. Setting carrier-specific defaults as well as product design and development tools are available out of the box.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, import/export rating tables to/from spreadsheets (e.g., Excel), rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are standard functions

Displacement testing (ability to run existing book of business through proposed rate/product changes to determine impact) along with testing, modeling, or product analysis are available with configuration using simple tools targeted for IT analysts or BAs.

#### **Underwriter Workbench Functions**

Jarus Underwriter Workbench is integral to the suite and is not sold as a stand-alone system.

Uploading/importing the submission data from a structured data feed is available with configuration using developer tools, XML manipulation, or a scripting language. Currently, the solution does not include uploading/importing the submission information from documents (OCR-like functionality).

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, and cancellation transactions is available out of the box. Supporting non-renewal transactions is available with configuration using simple tools targeted for IT analysts or BAs. Currently, the solution does not support underwriting multiple submissions as one work portfolio.

Capturing underwriting analysis and underwriter checklists that can validate information and process completeness are standard functions. Capturing an underwriter's loss analysis is available with configuration using simple tools targeted for IT analysts or BAs. The ability to combine individual quotes from different lines into a single proposal is a standard function.

Submission rating; pricing analysis and scheduled rating information; and providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are standard functions.

Document creation (e.g., proposals, applications, correspondence) and document storage are available via out-of-the-box integration to a third-party system or service. A rules engine that automatically applies underwriting, workflow, and general business rules as well as inline reports/dashboards on tasks/work/work status are available out of the box.

Jarus notes that workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries) are under development and should be available in less than six months. A rules engine that interfaces to conditionally order specific data is available via out-of-the-box integration to a third-party system or service.

The solution does not currently include inline reports/dashboards to support underwriting analysis, displaying aggregate risk accumulations for existing book at granular location level (i.e., geo-mashup of existing book and proposed risk), IM collaboration with other underwriters, proposal co-authoring with other underwriters, screensharing with other underwriters, or agentfacing capabilities.

Preconfigured interfaces with policy admin systems and with agent portals are standard functions. Natively calculated predictive scores and preconfigured interfaces with external predictive scoring models are available with configuration using developer tools, XML manipulation, or a scripting language.

Currently, the solution does not include preconfigured integration with business intelligence environments or preconfigured interfaces with third-party data services.

Support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) is available with configuration using developer tools, XML manipulation, or a scripting language. The solution does not currently support variable binding/approval authority by role.

## **Document Functions**

Jarus Policy Admin provides the ability to specify appropriate forms to be attached using the rule engine. Jarus notes that it does not provide a form authoring or design environment; this has to be done using a third-party tool. Jarus uses iText for actual document generation and AssureSign for e-signature.

## **Agent Portal Functions**

Jarus Agent Portal is integral to the suite and is also sold stand-alone.

Quick quote, policy change entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, account or client view in addition to a policy view, underwriter view and/or tools, and a rating engine are standard functions.

New business entry/submission, renewal quote entry/submission, proposal creation, and agent/underwriter collaboration are available with configuration using simple tools targeted for IT analysts or BAs.

Account clearance and uploading/importing data from Excel (e.g., locations, cars, drivers) are available with configuration using developer tools, XML manipulation, or a scripting language. Integration and pre-fill with data services along with online payment are available via out-of-thebox integration to a third-party system or service.

The solution does not currently include ACORD application creation, side-by-side comparison, or agency management system upload.

File attachment support and a consumer portal are standard functions. Workflow and task management capabilities are available with configuration using simple tools targeted for IT analysts or BAs. Support for e-signature is available through integration to AssureSign, and document creation is available using an external tool such as OpenText Exstream.

Jarus notes that business intelligence and reporting functions are under development and should be available in less than six months. Currently, the solution does not include scheduling, diary, and calendar functions.

#### **Reinsurance Functions**

Reinsurance functionality is not pre-integrated as part of the solution.

## **Business Intelligence Functions**

Business intelligence functionality is provided via integration with Microsoft Power BI. Jarus asserts that it provides pre-built data integration and pre-built reports.

# **Billing Functions**

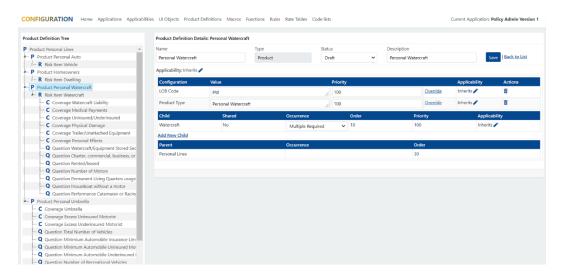
Billing functionality is not pre-integrated as part of the solution.

## **Claims Functions**

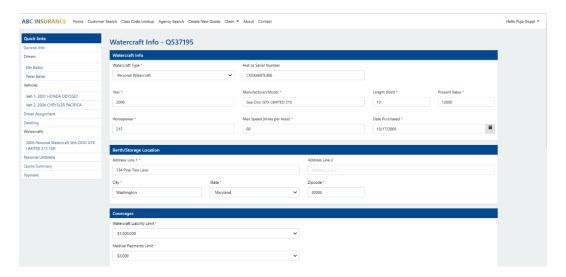
Claims capabilities are not pre-integrated as part of the suite.

# **Screenshots**

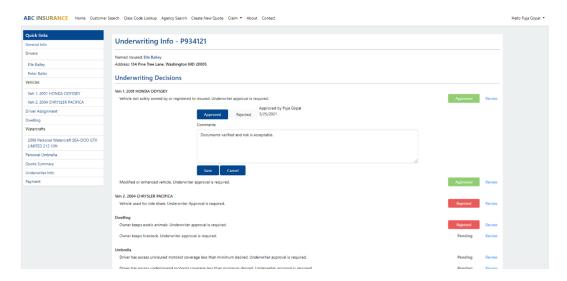
Watercraft Product Definition



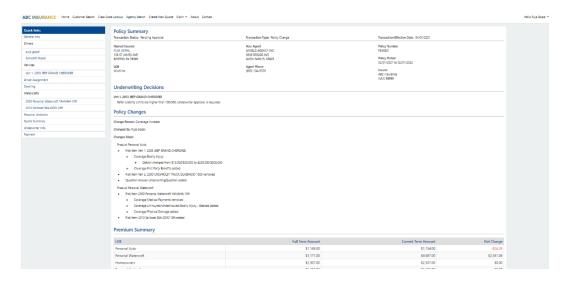
## Watercraft Info Page



## **Underwriting Info Page**



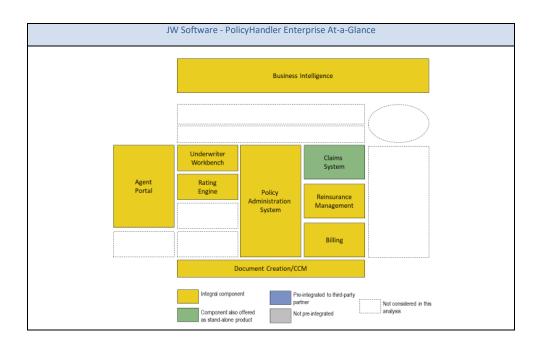
## Policy Summary Page



# JW Software - PolicyHandler Enterprise

# **Executive Summary**

- JW Software is a privately held company with headquarters in St. Louis, MO. The company has 39 employees and reports annual revenue of \$5M-\$10M.
- PolicyHandler Enterprise (PHE) is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, reinsurance, billing, and claims components.
- It currently has four live US/Canadian insurer clients using the suite, all of which are smaller (under \$1B) companies using the solution to support workers' comp.
- Publicly announced clients include Normandy Insurance Company, Kentucky AGC/SIF, The Lawson Group, and First Benefits Insurance Mutual.
- The solution is browser-based for all user interface functions. It is written in.NET (C#/VB.NET), JavaScript, and a proprietary database (PL/SQL, T-SQL, etc.).
- Configuration for insurance products, screens, and integration to third-party service calls is
  via code. Configuration for workflow, rules, and document authoring is available via simple
  tools for BAs and non-IT staff.
- Implementation is available through the company's own resources. JW Software deploys the solution on-prem or hosted at a private data center. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades.
- The company reports that the average time to initial go-live is 12 months or less and that the average implementation cost is \$500K-\$1M.



# **Lines of Business Supported**

Personal auto:	Not currently supported
Homeowners:	Not currently supported
Personal umbrella:	Not currently supported
Dwelling fire:	Not currently supported
Boatowners:	Not currently supported
Personal package:	Not currently supported
Commercial property:	Not currently supported
General liability:	Not currently supported
BOP:	Not currently supported
Commercial crime:	Not currently supported
Commercial auto:	Not currently supported
E&O/D&O:	Not currently supported
Inland marine:	Not currently supported
Professional liability (including medical malpractice):	Not currently supported
Commercial package:	Not currently supported
Specialty:	Not currently supported
Workers' comp:	Live clients offering this product in 10-49 US states
Surety:	Not currently supported
Other personal lines:	Not currently supported
Other commercial lines†:	Not currently supported

## **Client Base**

Globally, JW Software has four clients live on PHE, all of which are insurer clients (i.e., not MGAs, self-insureds) in the US and Canada. These clients are smaller (under \$1B) companies using the solution to support workers' comp. Publicly announced clients include Normandy Insurance Company, Kentucky AGC/SIF, The Lawson Group, and First Benefits Insurance Mutual.

# **Key Functions and Differentiators**

JW Software cites the key functions of Policy Handler as:

- Integrated rating engine
- Quoting
- Policy documentation/generation
- Automated renewal
- Policy auditing

The company cites as its key differentiators customer support, dedicated implementation team, company longevity, workers' compensation expertise and experience, and affordability.

# **Solution Architecture and History**

PHE launched in 2006 and was rearchitected in 2020. The latest release was in February 2021. JW Software reports that none of the customers are yet on the latest version, but all are on a version less than three years old. All customers have been through at least one upgrade.

The solution supports Oracle and Microsoft SQL Server databases and requires Windows platforms. The solution is written in .NET(C#/VB.NET), JavaScript, and a proprietary database (PL/SQL, T-SQL, etc.).

# **APIs and Integration**

The solution does not provide any APIs.

# **Configurability and User Interface**

PHE is browser-based for all user interface functions.

Configuration for insurance products, screens, and integration to third-party service calls is via code. Configuration for workflow, rules, and document authoring is available using simple tools targeted for BAs and non-IT staff.

# **Deployment Options**

JW Software deploys the solution on-prem or hosted at a private data center. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades. The hosted solution is a multitenant app server and database with single-tenant options available.

# **Average Implementation Length and Cost**

JW Software implements the solution through the company's own resources. It reports that PHE can be ready for initial go-live in 12 months or less and fully rolled out in an additional 30 days or less. The average implementation cost is \$500K-\$1M.

# Support

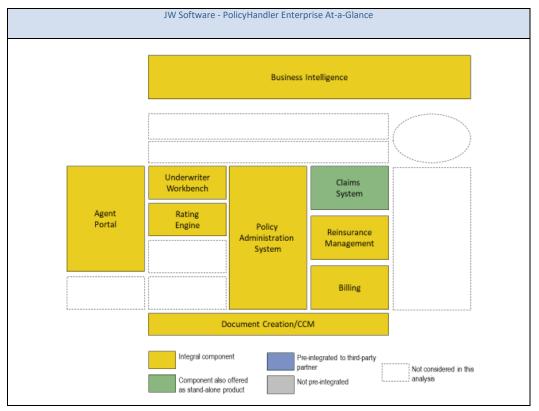
Of the 39 people employed at JW Software, there are between ten and 50 on the product design and engineering team, fewer than ten on the implementation team (not counting partnerships), and fewer than ten on the support team. Resources are located out of St. Louis, MO.

JW Software offers customer engagement activities such as online training and a user event.

# **Systems Integrator and Other Partners**

JW Software did not disclose any public partnerships for this suite.

# **Functionality**



# **Policy Administration Functions**

The solution includes out-of-sequence endorsement and forms management out of the box. Policy issue and premium accounting are available with configuration via tools for IT analysts or BAs. The solution does not currently include bordereaux import or manuscripted policies.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

# **Rating Functions**

A rating engine is integral to the suite and is not marketed as a stand-alone solution.

Quick quote; support for after-inception policy rating for endorsements, cancellations, reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are standard functions.

Versioning and update management, change control functions, auditability of rate versioning, and an application/forms library with standard and customizable applications and forms are standard functions.

The solution does not currently include download to agency management systems or preintegration to third-party data providers. NCCI/Bureau of Workers' Comp rates/rules support is standard. The solution does not currently include ISO rates/rules support, ISO-formatted statistical data, or ISO ERC integration.

Setting insurer-specific defaults and saving/storing in-process or completed policy change transactions to allow issuance at a later date are standard functions. The solution does not currently include multi-carrier comparison or product design/development tools.

Maintaining rating algorithm definition and management separately from rate tables, import/ export rating tables to/from spreadsheets (e.g., Excel), and date management capabilities are standard functions. Rate table design and update management tools as well as rating and rule definition management (e.g., automatic driver assignment) are available with configuration via tools for IT analysts or BAs.

The solution does not currently include displacement testing (ability to run existing book of business through proposed rate/product changes to determine impact) or testing, modeling, or product analysis.

## **Underwriter Workbench Functions**

Underwriting functions are integral to the suite and are not sold as a stand-alone system.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, cancellation transactions, and underwriting multiple submissions as one work portfolio is standard. The solution does not currently include uploading/importing submission data from a structured data feed or uploading/importing submission data from documents (OCR-like functionality).

Capturing underwriting analysis, capturing underwriter loss analysis, and underwriter checklists that can validate information and process completeness are standard functions. The solution does not currently include the ability to combine individual quotes from different lines into a single proposal.

Submission rating; pricing analysis and scheduled rating information; and providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are standard functions.

Document creation (e.g., proposals, applications, correspondence); document storage; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); and a rules engine that automatically applies underwriting, workflow, and general business rules are standard.

A rules engine that interfaces to order specific data conditionally, inline reports/dashboards on tasks/work/work status, and inline reports/dashboards to support underwriting analysis are standard functions. The solution does not currently display aggregate risk accumulations for the existing book at granular location levels (i.e., geo-mashup of existing books and proposed risk).

Screen sharing with other underwriters and agent-facing capabilities are standard. The solution does not currently include IM collaboration with other underwriters or proposal co-authoring with other underwriters.

Support for variable binding/approval authority by role and support for email notifications with agents and underwriters within the system (retaining a record of all emails) are standard. The solution does not currently include natively calculated predictive scores; preconfigured integration with business intelligence environments; or preconfigured interfaces with policy admin systems, agent portals, third-party data services, or external predictive scoring models.

#### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents (e.g., statements) and ad hoc documents (e.g., correspondence, manuscripted policies).

The suite does not include pre-packaged, pre-built forms, libraries, and templates from ACORD or ISO. The primary authoring environment is a custom environment. Content, business rules, schema mapping, and data sources are maintained by the average business user.

The solution supports print and e-delivery output channels. Managing preferences for print vs. electronic delivery is standard. Clients must use the solution's built-in toolset for document authoring and content management workflow.

A content repository, content management tools, and archival capabilities are standard. The solution does not currently support industry-standard schemas (e.g., ACORD XML, ebXML, XBRL) out of the box.

#### **Agent Portal Functions**

Agent portal functions are integral to the suite and are not sold stand-alone.

Quick quote, policy change entry/submission, online payment, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, side-by-side quote comparison, account or client view in addition to a policy view, underwriter view and/or tools, agent/underwriter collaboration, and a rating engine are standard functions.

The solution does not currently include account clearance, upload/import data from Excel (e.g., locations, cars, drivers), integration and pre-fill with data services, renewal quote entry/submission, proposal creation, ACORD application creation, or agency management system upload.

Document creation; file attachment support; scheduling, diary, and calendar functions; workflow and task management capabilities; business intelligence and reporting; and a consumer portal are standard functions. The solution does not currently include e-signature.

## **Reinsurance Functions**

Reinsurance functions are integral to the suite and are not sold as a stand-alone solution.

Ceded reinsurance management functions like manual entry and tracking of cessions, reserves, and limits; automated notifications if reserves reach a specific amount or treaties approach set limits; and automated identification/calculation of accounts with applicable reinsurance are standard.

The solution does not currently include assumed reinsurance management functions such as manual entry/tracking of assumed reinsurance contracts, automated assumed reinsurance calculations based on reinsured data feeds/connections, or retrocession reinsurance management.

The solution includes multiple basis types (e.g., risks attaching, losses occurring, claims made) out of the box. The solution does not currently include treaty management; facultative management; proportional support; non-proportional/excess of loss; retroactive processing of late placements or midterm contract changes; or the configuration of contract rules, formulas, and types.

An end-user interface for manual flagging of premiums and claims subject to reinsurance is standard. The solution does not currently include an end-user interface for manual contract entry or an end-user interface for review and approval of assumed policies as part of facultative contracts.

The solution does not currently include integration functionality, i.e., batch file import/export for integration to other systems, real-time data intake from core systems via API or another mechanism, real-time integration to an underwriting system, or integration between other insurer or reinsurer systems.

Statutory and regulatory reporting, a standard library of canned reports, automated Schedule F reporting, automated bordereau reporting, and ad hoc reporting are standard functions. The solution does not currently include integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc.

Automated recoverable claims identification and viewing the full history and status of claims and claim recovery are standard functions.

Tracking reinsurance payables and receivables, document management and storage of the actual contracts, and an audit trail for all transactions are standard functions. The solution does not currently include entity management (CRM), multi-currency support, or multi-language support.

#### **Business Intelligence Functions**

BI functions are integral to the suite and are not sold as a stand-alone solution.

The solution includes a presentation/reporting component, standard predefined reports, predefined insurance dashboards, and an ad hoc reporting tool.

The solution supports data movement via batch ETL.

# **Billing Functions**

Billing functions are integral to the suite are not sold as a stand-alone billing component. Payment and billing plan configurability is available out of the box. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Currently not available, but could be available with a
	system enhancement
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	No
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Currently not available, but could be available with a
	system enhancement
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Available out of the box with no configuration necessary
reporting:	
Pay-as-you-report for workers' comp	Available out of the box with no configuration necessary
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available out of the box with no configuration necessary
Billing for non-premium receivables (such	Currently not available, but could be available with a
as claims deductibles paid):	system enhancement
Payment of non-refund payables (such as	Currently not available, but could be available with a
policy dividends or mutual dividends):	system enhancement
Multi-currency support in a single instance	No
of the application:	

#### **Claims Functions**

FileHandler is integral to the suite and is also sold as a stand-alone claims component.

## **Adjudication**

Injury detail maintenance (coding), automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard functions. The solution does not currently include medical case management or disability management.

#### Catastrophe

Catastrophe definition, automatic identification of catastrophe claims, and attaching multiple LOBs and causes of loss to a single catastrophe are standard functions. The solution does not currently include mapping tools.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, and OFAC checking are standard functions. The solution does not currently include handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support).

#### **Documents**

Image and media management, a correspondence or forms library, state-specific reporting templates, document rendering, a content repository, content management tools, and multichannel delivery and output of documents (e.g., PDF, email, web, print) are standard functions.

#### **FNOL**

FROI/SROI EDI reporting; mobile and smart device input; claimant contact management data capture; checking for duplicate claims; and recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry are standard functions. Claim characteristics scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim) is available with configuration using simple tools targeted for IT analysts or BAs. The solution does not currently include scripting for claims intake with reflexive questioning, custom question sets to prompt mandatory additional questions depending on given answers (e.g., branch scripting), or integration with external vendors and services (e.g., car rental companies, car/equipment repair shops).

#### Fraud

Configurable business rules and tasks (specific to fraud and special investigation) and multiple search and reporting criteria for fraud detection (via ability to track common clients across multiple claims) are standard.

## Litigation

Litigation process tracking, including negotiation details and litigation costs, and creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management are standard functions.

#### **Multi-Channel**

An agent portal with self-service and a policyholder portal with self-service are available out of the box. The solution does not currently include e-signature or call center integration for FNOL/claim status check.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location) is a standard function. The solution does not currently include assignment to reinsurance treaties or facultative arrangements.

#### Reporting

Standard reporting of configurable metrics for claims reporting, ad hoc reports, dashboards, and standard reporting of claims performance monitoring (including claims handling and high-risk indicators, e.g., fatality, large losses, fraud) are standard functions. Reporting that includes jurisdiction-specific reports and forms and electronic reporting or automated state filings are available with configuration via tools for IT analysts or BAs.

#### Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; subrogation billing and the production of correct GL entries; granular tracking of reserves and payments; automatic reserve calculations using business rules and risk characteristics; direct, case, average, factor, and expense reserve types; and jurisdictional wage and rate calculations integrated for workers' compensation are standard functions. The solution does not currently include automatic subrogation identification.

# **Vendor Management**

Vendor management and processing required forms (including 1099s) are standard functions.

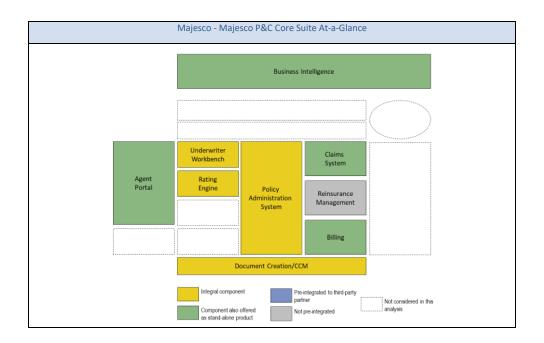
## Workflow

Automated workflow/task generation; overriding automated processes and triggering workflow processes manually; automatic work assignment based on configurable rules; the inclusion of external documents (e.g., letters, pictures) in file notes; assigning multiple adjusters to a single claim; and generating notes, diaries, and reminders are standard functions. The solution does not currently include OCR-triggered workflow, compliance with the Document Repository Interface (DRI) standards, processing claim workflow trigger (CWT) files at insurer-defined intervals, or full integration with electronic court filings (ECF2).

# Majesco - Majesco P&C Core Suite

# **Executive Summary**

- Majesco is a provider of cloud insurance software solutions for more than 200 insurance carriers globally. The company's software solutions include core insurance areas and a robust ecosystem of partners. Majesco asserts that its digital solutions are cloud-native, including a digital engagement and microservices PaaS for the entire insurance business.
- Majesco has headquarters in Morristown, NJ and employs 2,195 people. As a privately held company Majesco does not share revenue information.
- Majesco P&C Core Suite is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, billing, and claims components.
- It currently has 45 live US/Canadian insurer clients using the suite, most of which are smaller (under \$1B) companies and some of which are larger (over \$1B) companies using the solution to support commercial lines with a few personal lines.
- Publicly announced clients include QBE, Munich Re, Swiss Re, Ategrity, and Heritage Insurance.
- The solution is browser-based for all user interface functions. It is written in Java.
- Configuration for insurance products, screens, workflows, rules, and document authoring is
  via tools for BAs and non-IT staff. Integration to third-party service calls is configured via
  developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's own resources or a partner. Majesco
  deploys the suite on-prem, hosted at a private data center, and on MS Azure. The company
  offers a SaaS delivery model that includes hosting, license, maintenance and support,
  ongoing access to the latest version, and implementation of the upgrades.
- Majesco reports that the average time to initial go-live is 180 days or less (or 12 weeks or less in out-of-the-box scenarios) and that the average implementation cost is \$1M-\$2M.



# **Lines of Business Supported**

Personal auto:	Live clients offering this product in 2-9 US states
Homeowners:	Live clients offering this product in 10-49 US states
Personal umbrella:	Live clients offering this product in 2-9 US states
Dwelling fire:	Live clients offering this product in 10-49 US states
Boatowners:	Not currently supported
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Live clients offering this product in all 50 US states
General liability:	Live clients offering this product in all 50 US states
BOP:	Live clients offering this product in all 50 US states
Commercial crime:	Live clients offering this product in all 50 US states
Commercial auto:	Live clients offering this product in all 50 US states
E&O/D&O:	Live clients offering this product in all 50 US states
Inland marine:	Live clients offering this product in all 50 US states
Professional liability (including medical malpractice):	Live clients offering this product in all 50 US states
Commercial package:	Live clients offering this product in all 50 US states
Specialty:	Live clients offering this product in all 50 US states
Workers' comp:	Live clients offering this product in all 50 US states
Surety:	Live clients offering this product in 2-9 US states
Other personal lines*:	Live clients offering this product in 10-49 US states
Other commercial lines†:	Live clients offering this product in all 50 US states

<sup>\*</sup> Other personal lines include motorcycle and farm.

Majesco offers a usage-based "ride share" product for a Tier 1 customer where rates vary based on the driving period (offline, waiting for trip, going for pickup, and during ride with passenger) through a combination of Digital 1<sup>st</sup> (Majesco's customer-facing front end) and Majesco P&C Core Suite.

## **Client Base**

Globally, Majesco has 53 clients live on Majesco Policy for P&C, 45 of which are insurer clients (i.e., not MGAs, self-insureds). The company also asserts that these clients include InsureTech startups and greenfields. These 45 insurer clients are live in the US and Canada. Most are smaller companies (under \$1B), with some larger (over \$1B), using the solution to support commercial lines and a few personal lines.

Publicly announced clients include QBE, Munich Re, Swiss Re, Ategrity, and Heritage Insurance.

<sup>†</sup> Other commercial lines include agro, farm, cyber, aviation, rideshare, EPLI, and umbrella.

# **Key Functions and Differentiators**

Majesco cites the key functions of Majesco P&C Core Suite as:

- Fully built bureau products (ISO/NCCI) with 53 jurisdictions and a custom/specialty product development framework
- Comprehensive policy administration functions
- Pre-integrated document creation and content management components with out-of-thebox bureau forms and data mapping
- Pre-integrated financials for managing commission plans
- Microservices-based API framework

The company cites as its key differentiators its integrated document generation and storage, financials, distribution management, reporting renewals, configurable underwriting tools, and workflow with a web 2.0 user interface; fully built bureau capability (both ISO and NCCI) for commercial products (not just templates); ad hoc reporting with all data stored in a relational database; that it allows self-service for rule definition/management, product design/development, forms, UI design, and a no-script regression testing tool; and seamless integration with other components of Majesco Suite such as billing and claims.

# **Solution Architecture and History**

Majesco P&C Core Suite launched in 1997 and was re-architected in 2017. The latest release was in February 2021. Majesco reports that approximately 90% of the solution's customers are on the latest version (based on the automatic monthly upgrade process for customers on v10 or greater) and that 90% of customers have been through at least one upgrade.

The solution supports Oracle databases and Windows server platforms. The solution is written in Java. The company reports that Majesco Policy for P&C has a three-tier web architecture: a frontend built in HTML5, Backbone & Bootstrap, a middle tier in Java, Vaadin, JSP, Spring, Hibernate, XML/XSLT & Apache CXF, and persistence on Oracle.

# **APIs and Integration**

The solution provides OAS 3.0 API, REST, and SOAP APIs.

# **Configurability and User Interface**

Majesco Policy for P&C is browser-based for all user interface functions.

Configuration for insurance products, screens, workflows, rules, and document authoring is via simple tools targeted for BAs and non-IT staff. Integration to third-party service calls is configured via developer tools, XML manipulation, or a scripting language.

# **Deployment Options**

Majesco deploys the suite on-prem, hosted at a private data center, and hosted on MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades. The hosted solution is a single-tenant app server and database.

# **Average Implementation Length and Cost**

Majesco implements the solution through the company's own resources or a partner. Majesco reports that the average time to initial go-live is 180 days or less (or 12 weeks or less in out-of-the-box scenarios) and fully rolled out in an additional 12 months or less. The company reports that the average implementation cost is \$1M-\$2M.

# **Support**

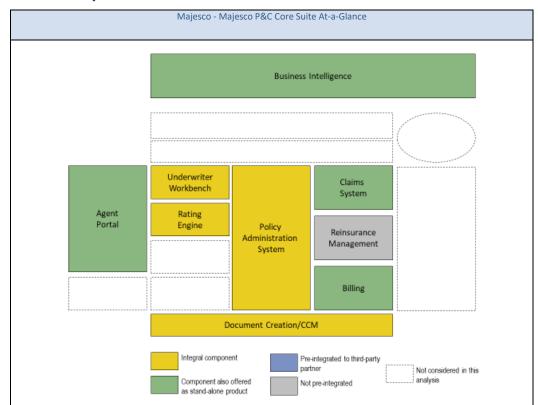
Of the 2,195 people employed at Majesco, there are between 250 and 1,000 on the product design and engineering team, over 1,000 on the implementation team (not counting partnerships), and between 250 and 1,000 on the support team. Support for the solution is provided out of Majesco's corporate headquarters in Morristown, NJ and global delivery operations in India.

Majesco offers customer engagement activities such as an online community, online training, a customer advisory committee, a user event, and training seminars.

# **Systems Integrator and Other Partners**

Publicly announced technology partnerships include ISO, HazardHub, IBM, DataRobot, and LexisNexis. Publicly announced SI partnerships include Cappemini, Deloitte, Ernst & Young, KPMG, and PwC.

# **Functionality**



## **Policy Administration Functions**

Policy issue, premium accounting, out-of-sequence endorsement, roster management, forms management, and manuscripted policies are standard functions. Bordereaux import is available with configuration using developer tools, XML manipulation, or a scripting language.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

# **Rating Functions**

Majesco Rating is integral to the suite and is not sold as a stand-alone rating engine.

Support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are standard. Quick quote is available with configuration via tools for IT analysts or BAs.

Versioning and update management, change control functions, auditability of rate versioning, and an application and forms library with standard and customizable applications and forms are standard functions. Download to agency management systems and pre-integration to third-party data providers are available with configuration using developer tools, XML manipulation, or a scripting language.

ISO rates/rules support, NCCI/Bureau of Workers' Comp rates/rules support, and ISO-formatted statistical data are all standard. The solution does not currently include ISO ERC integration. Setting insurer-specific defaults is available with configuration via tools for IT analysts or BAs. Multi-carrier comparison is not currently available.

Saving/storing an in-process or completed policy change transaction to allow issuance at a later date is standard. Product design and development tools are available out of the box with no configuration necessary.

The import/export of rating tables to/from spreadsheets (e.g., Excel) is standard. Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are available with configuration via tools for IT analysts or BAs. Displacement testing (i.e., the ability to run existing book of business through proposed rate/ product changes to determine impact) as well as testing, modeling, and product analysis are available with configuration via tools for IT analysts or BAs.

## **Underwriter Workbench Functions**

Majesco Underwriter Workbench is integral to the suite and is not marketed as a stand-alone solution.

Uploading/importing the submission data from a structured data feed and uploading/importing the submission information from documents (OCR-like functionality) are available with configuration using developer tools, XML manipulation, or a scripting language.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, and cancellation transactions are standard functions. Support for underwriting multiple submissions as one work portfolio is available with configuration using simple tools for IT analysts or BAs.

Allowing individual quotes for different lines to be combined into a single proposal and underwriter checklists that can validate information and process completeness are available out of the box. Capturing underwriting analysis and capturing an underwriter's loss analysis are available with configuration via developer tools, XML manipulation, or a scripting language.

Submission rating; pricing analysis and scheduled rating information; providing a single current and historical view of the insured's account across the enterprise, lines of business, and policy systems; document creation (e.g., proposals, applications, correspondence); document storage; a rules engine that applies underwriting, workflow, and general business rules automatically; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); a rules engine that interfaces to conditionally order specific data; inline reports/dashboards on tasks/work/work status; and inline reports/dashboards to support underwriting analysis are available out of the box.

Allowance of proposal co-authoring with other underwriters; agent-facing capabilities; preconfigured interfaces with policy admin systems, agent portals, and third-party data services; and preconfigured integration with business intelligence environments are standard functions.

Displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) is available with configuration via tools for IT analysts or BAs. Allowance of IM collaboration with other underwriters and preconfigured interfaces with external predictive scoring models are available with configuration via developer tools, XML manipulation, or a scripting language.

Support for variable binding/approval authority by role and support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) are standard functions. The solution does not currently include screen sharing with other underwriters or natively calculated predictive scores.

#### **Document Functions**

Document functionality is integral to the suite and is not marketed as a stand-alone solution. The solution supports mass-produced documents, e.g., statements, (the most common use case) and ad hoc documents, e.g., correspondence and manuscripted policies, (the less common use case).

The suite includes pre-packaged, pre-built forms, libraries, and templates from ISO. The primary authoring environment is a custom environment or MS Word. Content, business rules, schema mapping, and data sources are designed to be maintained by business analysts.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is a standard function. Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository, content management tools, and archival capabilities for all generated documents are standard functions. The solution supports ACORD XML, ebXML, and XBRL schemas out of the box.

# **Agent Portal Functions**

Majesco Digital1st Insurance is part of the suite and is also marketed as a stand-alone solution. The company asserts that Majesco Digital1st has pre-built integrations for seamless integration.

New business entry/submission, account clearance, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, integration and pre-fill with data services, policy change entry/submission, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, proposal creation, side-by-side quote comparison, account/client view (in addition to a policy view), underwriter view and/or tools, agent/underwriter collaboration, and a ratine engine are available out of the box with no configuration necessary.

ACORD application creation and agency management system upload are available with configuration via developer tools, XML manipulation, or a scripting language. Online payment is available via out-of-the-box integration to a third-party system or service.

Document creation; file attachment support; scheduling, diary, and calendar functions; workflow and task management capabilities; business intelligence and reporting; and a consumer portal are standard functions. E-signature is available via out-of-the-box integration to a third-party system or service.

## **Reinsurance Functions**

Reinsurance functions are not integral to the suite.

# **Business Intelligence Functions**

Majesco Data & Analytics Insurance Platform (which includes Majesco EDW and Majesco Business Analytics) is part of the suite and is also sold as a stand-alone business intelligence component.

Majesco EDW and Majesco Business Analytics provide a BI solution from customer source to an enterprise data warehouse and operational analytics data mart with a mobile-enabled front end. The solution includes ETL between each component and a business user front end that enables business users to drill anywhere into their data. The solution enables social collaboration like report and analysis annotations (public and private), configurable report alerts, following users and business topics, and report and analysis broadcasting, including PDF reports to non-system-users.

The solution includes an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and OLAP cubes. It includes a presentation/reporting component, standard predefined reports and predefined insurance dashboards, and an ad hoc reporting tool. The solution also includes, as a secondary part of the offering, data mining and analytics tools as well as tools to support data governance, dictionaries, quality, and validation.

The solution supports data movement via batch ETL.

# **Billing Functions**

Majesco Billing for P&C is part of the suite and is also sold as a stand-alone billing component. Payment and billing plan configurability is available out of the box. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available out of the box with no configuration necessary
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	No
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Available out of the box with no configuration necessary
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Available with configuration using simple tools targeted
reporting:	for IT analysts or BAs
Pay-as-you-report for workers' comp:	Available out of the box with no configuration necessary
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available out of the box with no configuration necessary
Billing for non-premium receivables (such	Available out of the box with no configuration necessary
as claims deductibles paid):	
Payment of non-refund payables (such as	Available out of the box with no configuration necessary
policy dividends or mutual dividends):	
Multi-currency support in a single instance	Yes
of the application:	

## **Claims Functions**

Majesco Claims for P&C is part of the suite and is also sold as a stand-alone claims component.

## **Adjudication**

Medical case management, injury detail maintenance (coding), disability management, automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard functions.

## Catastrophe

Catastrophe definition, automatic identification of catastrophe claims, and attaching multiple LOBs and causes of loss to a single catastrophe are standard functions. Mapping tools are available via out-of-the-box integration to a third-party system or service.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) are standard functions. OFAC checking is available via out-of-the-box integration to a third-party system or service.

#### **Documents**

Image and media management, a correspondence or forms library, and multi-channel delivery and output of documents (e.g., PDF, email, web, and print) are standard. State-specific claims reporting templates are available with using simple tools targeted for IT analysts or BAs. Document rendering as well as a content repository and content management tools are available via out-of-the-box integration to a third-party system or service.

# **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; mobile and smart device input; scripting for claims intake with reflexive questioning; custom question sets to prompt mandatory additional questions depending on given answers (branch scripting); claim characteristics scoring (to calculate alerts, trigger workflow, assign a claims handler, or otherwise segment the claim); claimant contact management data capture; and checking for duplicate claims are standard functions. Handling of FROI/SROI EDI reporting and integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) are available with configuration via developer tools, XML manipulation, or a scripting language.

#### Fraud

Configurable business rules and tasks (specific to fraud and special investigations) and the provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims are standard functions.

## Litigation

Litigation process tracking, including negotiation details and litigation costs, and creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management are standard functions.

#### **Multi-Channel**

An agent portal with self-service, a policyholder portal with self-service, call center integration for FNOL via telephony, and call center integration for claim status check via telephony are all available out of the box with no configuration necessary. Currently, the solution does not support e-signature.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location, etc.), assignment to reinsurance treaties, and assignment to facultative arrangements are available with configuration using simple tools targeted for IT analysts or BAs.

#### Reporting

Standard reporting of claims performance monitoring, including claims handling and high-risk indicators, e.g., fatality, large losses, and fraud; standard reporting of configurable metrics for claims reporting; ad hoc reports; and dashboards are standard. Reporting that includes jurisdiction-specific reports and forms and electronic reporting or automated state filings are available with configuration via tools for IT analysts or BAs.

# Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; subrogation billing and the production of correct GL entries; granular tracking of reserves and payments; automatic reserve calculations using business rules and risk characteristics; direct, case, average, factor, and expense reserve types; and jurisdictional wage and rate calculations integrated for workers' comp are standard.

# **Vendor Management**

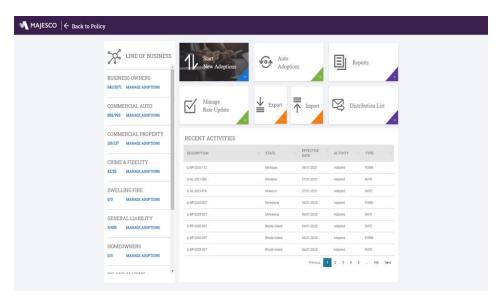
Vendor management functions and processing required forms (including 1099s) are standard.

## Workflow

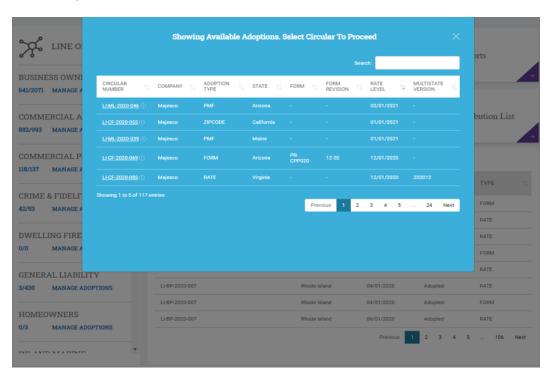
Automated workflow/task generation; overriding automated processes and manually triggering workflow processes; automatic work assignment based on configurable rules; generating notes, diaries, and reminders; inclusion of external documents (e.g., letters, pictures) in file notes; and assigning multiple adjusters to single claims are standard functions. OCR-triggered workflow, compliance with the Document Repository Interface (DRI) standards, processing claim workflow trigger (CWT) files at insurer-defined intervals, and full integration with electronic court filings (ECF2) are available with configuration via developer tools, XML manipulation, or a scripting language.

# **Screenshots**

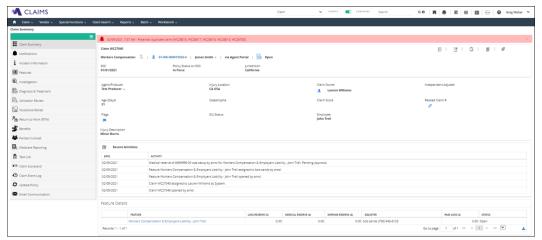
Bureau Adoption Dashboard



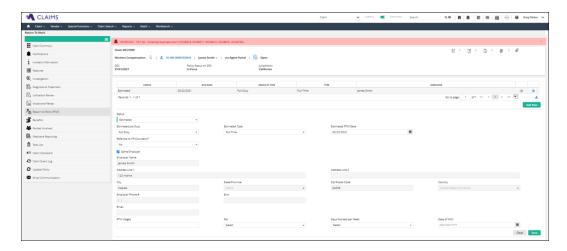
# Bureau Adoption Wizard



## Claim Summary



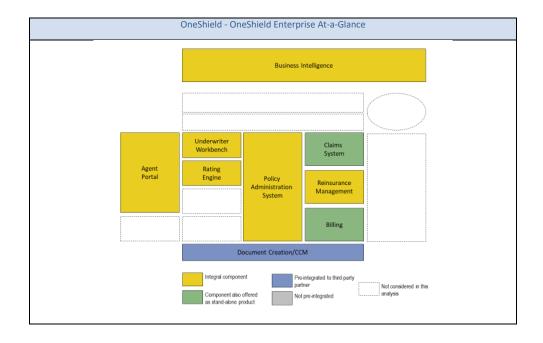
# Return to Work



# OneShield, Inc. - OneShield Enterprise

# **Executive Summary**

- OneShield is a privately held company headquartered in Marlborough, MA that employs 264 people. As a private company, OneShield does not disclose its financials, but the company notes that it operates profitably. OneShield provides more than 50 cloud-based solutions for insurers of all sizes across P/C and specialty insurance markets. It offers stand-alone, subscription, and -as-a-Service products. In addition to its corporate headquarters, OneShield has offices in India.
- OneShield Enterprise is a suite of solutions that includes core policy features, rating, underwriter workbench, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has 31 live US/Canadian insurer clients using the suite, most of which are smaller companies (under \$1B) using the solution to support personal and commercial lines.
- Publicly announced clients include Hiscox Insurance, ICAT, Erie Insurance, Allied World Insurance, and Utica First.
- The solution is browser-based for all user interface functions. It is written in Java.
- Configuration for insurance products, screens, workflows, rules, and integration to thirdparty service calls is via tools for BAs and non-IT staff. Configuration for document authoring is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's resources or a partner. OneShield
  deploys the solution on-prem, hosted at a private data center, and hosted on AWS. The
  company offers a delivery model that includes hosting, license, maintenance and support,
  ongoing access to the latest version, and implementation support of the upgrades.
- The company reports that the average time to initial go-live is 180 days or less and that the average implementation cost is \$2M-\$5M.



# **Lines of Business Supported**

Personal auto:	Live clients offering this product in all 50 US states
Homeowners:	Live clients offering this product in all 50 US states
Personal umbrella:	Live clients offering this product in all 50 US states
Dwelling fire:	Live clients offering this product in all 50 US states
Boatowners:	Live clients offering this product in all 50 US states
Personal package:	Live clients offering this product in 2-9 US states
Commercial property:	Live clients offering this product in all 50 US states
General liability:	Live clients offering this product in all 50 US states
BOP:	Live clients offering this product in all 50 US states
Commercial crime:	Live clients offering this product in all 50 US states
Commercial auto:	Live clients offering this product in all 50 US states
E&O/D&O:	Live clients offering this product in all 50 US states
Inland marine:	Live clients offering this product in all 50 US states
Professional liability (including medical malpractice):	Live clients offering this product in all 50 US states
Commercial package:	Live clients offering this product in all 50 US states
Specialty:	Live clients offering this product in all 50 US states
Workers' comp:	Live clients offering this product in 2-9 US states
Surety:	Live clients offering this product in all 50 US states
Other personal lines*:	Live clients offering this product in all 50 US states
Other commercial lines†:	Live clients offering this product in all 50 US states

<sup>\*</sup>Other personal lines include excess, collections, watercraft, workers' comp as an HO rider, cost of construction, and MGU for excess.

# **Client Base**

Globally, OneShield has 32 clients live on OneShield Enterprise, 31 of which are insurer clients (i.e., not MGAs, self-insureds). These insurer clients are all live in the US and Canada. Most are smaller companies (under \$1B) using the solution to support personal and commercial lines.

Publicly announced clients include Hiscox Insurance, ICAT, Erie Insurance, Allied World Insurance, and Utica First.

<sup>†</sup> Other commercial lines include general casualty, residential earthquake, residential hurricane, commercial earthquake, commercial hurricane, and residential multi-peril.

# **Key Functions and Differentiators**

OneShield cites the key functions of OneShield Enterprise as:

- Full workflow and task transparency across all products
- Package Designer, which provides the ability to wrap disparate coverages and coverage parts into a single policy package
- OneShield Relationship Management, a relationship management module for clients, partners, entities, and other third-party relationships
- OneShield Reporting, which uses a comprehensive set of star schemas and analytical processing capabilities for near-real-time reports
- Reinsurance Cession Management, which provides business intelligence data and an administrative tool to work with third-party reinsurers

The company cites as its key differentiators a suite offered on the same platform that utilizes a shared database for efficiency and reusability; strong client relationships, enabling self-sufficiency with the product; Services Designer, which facilitates microservices, pre-built APIs, and a collection of vendor- and product-independent SOA web services to execute business transactions remotely; a streamlined upgrade process; as well as that it is a use-case-driven organization.

# **Solution Architecture and History**

OneShield Enterprise launched in 1999 and was re-architected in 2012. The latest release was in February 2021. OneShield reports that 90% of the solution's customers are on the latest version, while 10% are on a version that is older than three years. Approximately 90% of customers have been through at least one upgrade.

The solution supports Oracle and Microsoft SQL Server databases as well as UNIX/Linux and Windows platforms. The solution is written in Java.

# **APIs and Integration**

The solution provides REST, SOAP, and other APIs. The company notes that single jobs can be run in the background or batches of jobs can be run. Jobs and batches can run on a schedule or be invoked on the fly by workflow. Jobs and batches can also be invoked remotely by external applications via OneShield SOAP/REST interface. The solution supports both XML and JSON via the interface.

OneShield notes that OneShield Services Designer is a collection of web services that exposes OneShield functionality. External applications use the service layer as a transaction engine and data store independent of UI. The service layer provides a general-purpose API that can be used across all product configurations.

# **Configurability and User Interface**

OneShield Policy is browser-based for all user interface functions.

Configuration for insurance products, screens, workflows, rules, and integration to third-party service calls is via tools for BAs and non-IT staff. Configuration for document authoring is via developer tools, XML manipulation, or a scripting language.

# **Deployment Options**

OneShield deploys the solution on-prem, hosted at a private data center, and hosted on AWS. The company offers a delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation support of the upgrades.

The hosted solution is a multi-tenant app server with a single-tenant option available and a single-tenant database.

# **Average Implementation Length and Cost**

OneShield implements the solution through the company's resources or a partner. OneShield reports that OneShield Enterprise can be ready for initial go-live in 180 days or less and fully rolled out in an additional 12 months or less. The company reports that the average implementation cost is \$2M-\$5M.

# Support

Of the 264 people employed at OneShield, there are between 50 and 100 on the product design and engineering team, between 100 and 250 on the implementation (not counting partnerships) team, and between ten and 50 on the support team. OneShield resources are located in Marlborough, MA as well as Gurgaon, India.

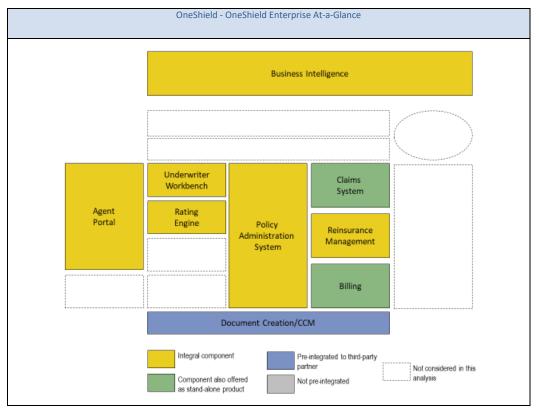
OneShield offers customer engagement activities such as an online community, online training, a customer advisory committee, a user event, and training seminars.

# **Systems Integrator and Partners**

Publicly announced technology partnerships include LexisNexis Risk Solutions, Pentaho (BI), Oracle Corporation, UrbanStat, and GhostDraft.

Publicly announced SI partnerships include Inforce Technologies, Intelliberg Associates, Tata Consultancy Services, and DayStar Limited.

# **Functionality**



# **Policy Administration Functions**

Policy issue, premium accounting, out-of-sequence endorsement, and manuscripted policies are available out of the box. Bordereaux import and forms management are available with configuration via tools for IT analysts or BAs.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

# **Rating Functions**

OneShield Rating is part of the suite and is not sold as a stand-alone rating engine.

A quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are standard functions.

Versioning and update management, change control functions, and auditability of rate versioning are standard functions. Download to agency management systems and pre-integration to third-party data providers are available with configuration via developer tools, XML manipulation, or a scripting language. OneShield notes that forms are available through a partner.

ISO rates/rules support, NCCI/Bureau of Workers' Comp rates/rules support, ISO-formatted statistical data, and ISO ERC integration are available with configuration via tools for IT analysts or BAs.

Multi-carrier comparison and setting insurer-specific defaults are available with configuration via tools for IT analysts or BAs. Product design and development tools and saving/storing an inprocess or completed policy change transaction to allow issuance at a later date are standard functions.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are standard functions.

Displacement testing (i.e., the ability to run the existing book of business through proposed rate/product changes to determine impact) and testing, modeling, and product analysis are standard functions.

### **Underwriter Workbench Functions**

Underwriting functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing the submission data from a structured data feed is available with configuration via tools for IT analysts or BAs. Uploading/importing the submission information from documents (OCR-like functionality) is available via out-of-the-box integration to a third-party system or service.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, cancellation transactions, and underwriting multiple submissions as one work portfolio are standard.

The ability to combine individual quotes for different lines into a single proposal; capturing underwriting analysis; capturing underwriter loss analysis; submission rating; pricing analysis and scheduled rating information; and providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are standard functions.

Underwriter checklists that can validate information and process completeness are available with configuration via tools for IT analysts or BAs. Document storage is available out of the box. Document creation (e.g., proposals, applications, correspondence) is available via out-of-the-box integration to a third-party system or service.

A rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); a rules engine that interfaces to order specific data conditionally; inline reports/dashboards on tasks/work/work status; and inline reports/dashboards to support underwriting analysis are standard functions.

Displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) is available via out-of-the-box integration to a third-party system or service.

Allowance of proposal co-authoring with other underwriters; agent-facing capabilities; preconfigured interfaces with policy admin systems, agent portals, and third-party data services; and preconfigured integration with business intelligence environments are standard. IM collaboration with other underwriters is available via out-of-the-box integration to a third-party system or service. Currently, the solution does not include screen sharing with other underwriters.

Support for variable binding/approval authority by role and support for email notification/ communication with agents and underwriters within the system (i.e., retaining a record of all emails) are standard. Natively calculated predictive scores and preconfigured interfaces with external predictive scoring models are configurable via tools for IT analysts or BAs.

#### **Document Functions**

Document functions are provided via third-party pre-integration with GhostDraft or a third-party document rendering system of the client's choice.

# **Agent Portal Functions**

Agent portal functions are integral to the suite and are not marketed as a stand-alone solution.

New business entry/submission, account clearance, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, policy change entry/submission, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, proposal creation, side-by-side quote comparison, account or client view in addition to a policy view, underwriter view and/or tools, agent/underwriter collaboration, and a rating engine are standard functions.

ACORD application creation is available with configuration via tools for IT analysts or BAs. Integration and pre-fill with data services and agency management system upload are available with configuration via developer tools, XML manipulation, or a scripting language. The solution also includes online payment via out-of-the-box integration to a third-party system or service.

File attachment support; workflow and task management capabilities; business intelligence and reporting; a consumer portal; and scheduling, diary, and calendar functions are standard. Esignature and document creation are available via out-of-the-box integration to a third-party system or service.

### **Reinsurance Functions**

OneShield Reinsurance is integral to the suite and is not marketed as a stand-alone solution.

Ceded reinsurance management functions like the manual entry and tracking of cessions, reserves, and limits are available out of the box. Automated notification if reserves reach specific amounts or treaties approach set limits and automated identification/calculation of accounts with applicable reinsurance are available with configuration via tools for IT analysts or BAs.

Assumed reinsurance management functions like the manual entry and tracking of assumed reinsurance contracts are available out of the box. Automated assumed reinsurance calculations based on reinsured data feeds/connections and retrocession reinsurance management are available with configuration via tools for IT analysts or BAs.

Treaty management and facultative management are standard functions. Proportional support; non-proportional/excess of loss; multiple basis types (e.g., risks attaching, losses occurring, and claims made); retroactively processing late placements or midterm contract changes; and configuration of contract rules, formulas, and types are available with configuration via tools for IT analysts or BAs.

End-user interfaces for manual entry of contracts, manual flagging of premiums and claims subject to reinsurance, and review and approval of assumed policies as part of facultative contracts are available with configuration via tools for IT analysts or BAs.

Real-time data intake from core systems (e.g., PAS, claims) via API or another mechanism and real-time integration to an underwriting system (e.g., to display limits/reserves) are available out of the box. Batch file import/export for integration to other systems and integration between other insurer/reinsurer systems are available with configuration via tools for IT analysts or BAs.

Statutory and regulatory reporting and a standard library of canned reports are standard. Automated Schedule F reporting and ad hoc reporting are available with configuration via developer tools, XML manipulation, or a scripting language. Automated bordereau reporting and integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc. are available with configuration via tools for IT analysts or BAs. Automated recoverable claims identification and viewing the full history and status of claims and claim recovery are available with configuration via tools for IT analysts or BAs.

Entity management (CRM), multi-currency support, multi-language support, and an audit trail for all transactions are standard functions. Tracking reinsurance payables and receivables as well as document management and storage of the actual contracts are available with configuration via tools for IT analysts or BAs.

### **Business Intelligence Functions**

OneShield Reporting & Business Intelligence is part of the suite and is not sold as a stand-alone business intelligence component. It is powered by out-of-the-box integration to Pentaho. The OneShield Reporting & BI module uses star schemas and analytical processing capabilities to provides users with near-real-time cubes and reports. OneShield reports that OneShield Reporting satisfies reporting requirements via dashboards, cubes, standardized reports, and ad hoc reporting.

The company also notes that reporting content subject areas include quotes, policy transactions, tasks, referral summary and details, user details, and attribute usage. OneShield reports that it provides standard reports that users can select from a drop-down and that the cube and ad hoc functionality allow users to create hundreds of reports per client requirements. It also asserts that OneShield Reporting supports the ability to configure management, financial, operational, statistical, and marketing reports.

The solution includes tools to support data governance, dictionaries, quality, and validation; a presentation/reporting component; standard predefined reports and predefined insurance dashboards; an ad hoc reporting tool; and data mining and analytics tools. OneShield provides a third-party tool to support an insurance data model and databases for insurers to use to replace existing EDW, ODS, and/or OLAP cubes. The solution supports data movement via batch ETL.

# **Billing Functions**

OneShield Billing is part of the suite and also sold as a stand-alone solution. Payment and billing plan configurability are standard. The table below shows the availability of other functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available out of the box with no configuration necessary
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available via out-of-the-box integration to a third-party
	system or service
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available via out-of-the-box integration to a third-party
	system or service
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Currently not available, but could be available with a
	system enhancement
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Available with configuration using simple tools targeted
reporting:	for IT analysts or BAs
Pay-as-you-report for workers' comp:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available via out-of-the-box integration to a third-party
	system or service
Billing for non-premium receivables (such	Available out of the box with no configuration necessary
as claims deductibles paid):	
Payment of non-refund payables (such as	Available out of the box with no configuration necessary
policy dividends or mutual dividends):	
Multi-currency support in a single instance	Yes
of the application:	

# **Claims Functions**

OneShield Claims is part of the suite and is also sold as a stand-alone claims component.

### **Adjudication**

Automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard functions. Injury detail maintenance (coding) is available with configuration via tools for IT analysts or BAs. The solution does not currently include medical case management or disability management.

### Catastrophe

Catastrophe definition, automatic identification of catastrophe claims, attaching multiple LOBs and multiple causes of loss to a single catastrophe, and mapping tools are standard.

#### **Disbursements**

Check processing, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) are standard functions. OFAC checking is available via out-of-the-box integration to a third-party system or service. The solution does not currently include calculating or scheduling recurring payments.

#### **Documents**

Image and media management, a content repository and content management tools, and multichannel delivery and output of documents (e.g., PDF, email, web, and print) are standard functions. A correspondence or forms library is available with configuration using simple tools targeted for IT analysts or BAs. State-specific claims reporting templates are available with configuration via developer tools, XML manipulation, or a scripting language. Document rendering is available via out-of-the-box integration to a third-party system or service.

### **FNOL**

Mobile and smart device input; scripting for claims intake with reflexive questioning; custom question sets to prompt additional, mandatory questions depending on given answers (branch scripting); claimant contact management data capture; and checking for duplicate claims are standard functions. Claim characteristic scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim) is available with configuration via tools for IT analysts or BAs. Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry as well as integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) are available via out-of-the-box integration to a third-party system or service. The solution does not currently include FROI/SROI EDI reporting.

# Fraud

Configurable business rules and tasks specific to fraud and special investigations are standard functions. The provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims is available with configuration via tools for IT analysts or BAs.

### Litigation

Litigation process tracking (including negotiation details and litigation costs) and creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management are standard functions.

#### **Multi-Channel**

An agent portal with self-service and a policyholder portal with self-service are standard. Esignature is available via out-of-the-box integration to a third-party system or service. The solution does not currently include call center integration for FNOL/claim status check via telephony.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, and assignment to facultative arrangements are available with configuration via tools for IT analysts or BAs.

#### Reporting

Standard reporting of configurable metrics for claims reporting, dashboards, and electronic reporting or automated state filings are standard functions. Standard reporting of claims performance monitoring (including claims handling and high-risk indicators, e.g., fatality, large losses, fraud), ad hoc reports, and reporting that includes jurisdiction-specific reports and forms are available with configuration via tools for IT analysts or BAs.

### Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; granular tracking of reserves and payments; and automatic reserve calculations using business rules and risk characteristics are standard functions. Subrogation billing and the production of correct GL entries are available with configuration using simple tools targeted for IT analysts or BAs. Direct, case, average, factor, and expense reserve types are available with configuration using developer tools, XML manipulation, or a scripting language. The solution does not currently include jurisdictional wage and rate calculations integrated for workers' compensation.

### **Vendor Management**

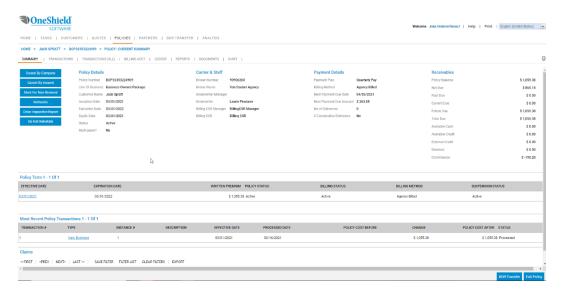
Vendor management functions and processing required forms (including 1099s) are standard.

### Workflow

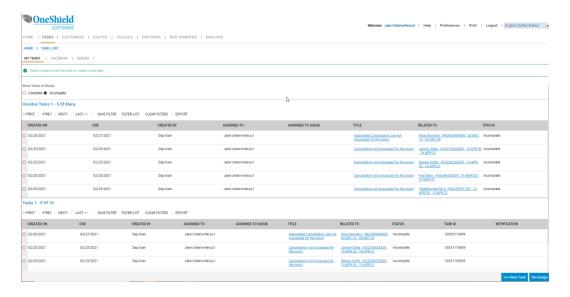
Automated workflow/task generation; overriding automated processes and manually triggering workflow processes; automatic work assignment based on configurable rules; generating notes, diaries, and reminders; inclusion of external documents (e.g., letters, pictures) in file notes; and assigning multiple adjusters to a single claim are standard functions. Processing claim workflow trigger (CWT) files at insurer-defined intervals is available with configuration via tools for IT analysts or BAs. Compliance with Document Repository Interface (DRI) standards is configurable via developer tools, XML manipulation, or a scripting language. The solution does not currently include OCR-triggered workflow or full integration with electronic court filings (ECF2).

# **Screenshots**

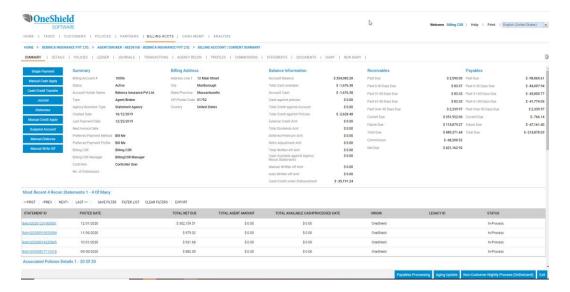
Policy Summary - Underwriter



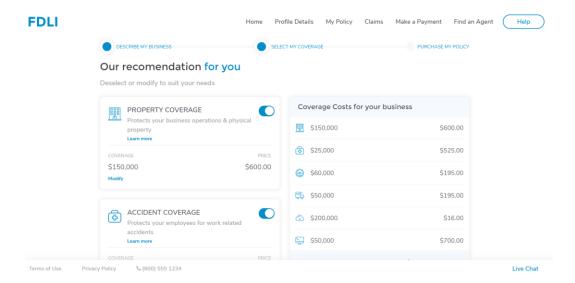
# Task Page - Underwriter



### Agent Account Summary - BCSR

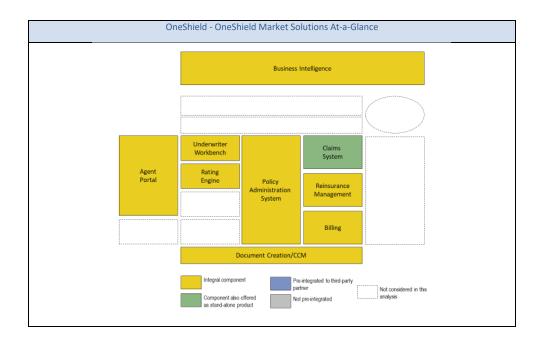


# End-User Portal Sample Coverage Recommendation Page



# OneShield, Inc. - OneShield Market Solutions Executive Summary

- OneShield is a privately held company headquartered in Marlborough, MA that employs 264 people. As a private company, OneShield does not disclose its financials, but the company notes that it operates profitably. OneShield provides more than 50 cloud-based solutions for insurers of all sizes across P/C and specialty insurance markets. It offers stand-alone, subscription, and -as-a-Service products. In addition to its corporate headquarters, OneShield has offices in India.
- OneShield Market Solutions is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has four live US/Canadian insurer clients using the suite, all of which are smaller companies (under \$1B) using the solution to support commercial lines.
- Publicly announced clients include Workers' Compensation Trust, Accident Insurance
   Company, West Congress Insurance Services, Keswick, and Omaha National Underwriters.
- The solution is browser-based for all user interface functions. It is written in .NET (C#/VB.NET).
- Configuration for insurance products and screens is available via tools for BAs and non-IT staff. Configuration for workflow, rules, integration to third-party service calls, and document authoring is not available; changes are made by the vendor.
- Implementation is available through the company's resources. OneShield deploys the
  solution hosted at a private data center, on MS Azure, or on Ntirety. The company offers a
  SaaS delivery model that includes hosting, license, maintenance and support, ongoing access
  to the latest version, implementation, and ongoing managed service hours.
- The company reports that the average time to initial go-live is 90 days or less and that the average cost is \$100K-\$500K.



# **Lines of Business Supported**

Personal auto:	Clients currently in implementation for this line/product
Homeowners:	Solution is designed to support, but no clients live or implementing
Personal umbrella:	Solution is designed to support, but no clients live or implementing
Dwelling fire:	Solution is designed to support, but no clients live or implementing
Boatowners:	Solution is designed to support, but no clients live or implementing
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Live clients offering this product in 10-49 US states
General liability:	Live clients offering this product in 10-49 US states
BOP:	Live clients offering this product in 10-49 US states
Commercial crime:	Live clients offering this product in 10-49 US states
Commercial auto:	Live clients offering this product in 10-49 US states
E&O/D&O:	Live clients offering this product in 10-49 US states
Inland marine:	Live clients offering this product in 10-49 US states
Professional liability (including medical malpractice):	Live clients offering this product in 10-49 US states
Commercial package:	Live clients offering this product in 10-49 US states
Specialty:	Live clients offering this product in 10-49 US states
Workers' comp:	Live clients offering this product in 10-49 US states
Surety:	Live clients offering this product in 10-49 US states
Other personal lines:	Solution is designed to support, but no clients live or implementing
Other commercial lines†:	Live clients offering this product in 10-49 US states

<sup>†</sup> Other commercial lines include lawyers professional liability and cyber liability.

For one customer, OneShield has built out event-based coverages such as event-by-event liability coverage or coverage for a time period, increased medical payments, and social media liability.

### **Client Base**

Globally, OneShield has 12 clients live on OneShield Market Solutions, four of which are insurer clients in the US and Canada (i.e., not MGAs, self-insureds). All of these clients are smaller (under \$1B) companies using the solution to support commercial lines.

Publicly announced clients include Workers' Compensation Trust, Accident Insurance Company, West Congress Insurance Services, Keswick, and Omaha National Underwriters.

# **Key Functions and Differentiators**

OneShield cites the key functions of OneShield Market Solutions as:

- Fully automated, end-to-end policy administration system
- Spreadsheet rating driven by scalable microservices
- Fully integrated journal functionality including tasks, notes, documents, and emails
- Intuitive agent and insured portals
- Integrated advanced reporting and analytics tools

The company cites as its key differentiators that it offers a comprehensive SaaS solution packaged with an "all-in-one" price that includes license, hosting, support services, implementation, annual managed service hours, and upgrades; enhanced rating capabilities using highly scalable serverless microservices; all modules on a single platform, supported by a customer center, with reporting and analysis capabilities for a comprehesive view of all insurance entities within the system; preconfigured insurance workflows and rules with the ability to tailor them to meet client-specific business needs; and flexible frameworks for integrations to third-party systems.

# **Solution Architecture and History**

OneShield Market Solutions launched in 2007 and was re-architected in 2017. The latest version was released in February 2021. OneShield notes that it releases updates 4-6 times a year. OneShield, Inc. reports that 100% of the solution's customers are on the latest version and 90% have been through at least one upgrade.

The solution supports Microsoft SQL Server databases and requires Windows platforms. The solution is written in .NET (C#/VB.NET).

# **APIs and Integration**

The solution provides REST and SOAP APIs, and OneShield notes that it is flexible to support all client integration needs. OneShield is open to integration with any third-party partner or file format and provides a flexible framework for integrations. The system uses APIs, REST, and SOAP standards whenever possible to interface with third-party systems.

# **Configurability and User Interface**

OneShield Market Solutions is browser-based for all user interface functions.

Configuration for insurance products and screens is available via tools for BAs and non-IT staff. Configuration for workflow, rules, integration to third-party service calls via configuration, and document authoring is not available; changes are done by the vendor.

### **Deployment Options**

OneShield hosts the solution at a private data center, on MS Azure, or on Ntirety. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades. The hosted solution is a multitenant app server and database. Single-tenant options are available for both.

# **Average Implementation Length and Cost**

OneShield implements the solution through the company's resources. It reports that OneShield Market Solutions can be ready for initial go-live in 90 days or less and fully rolled out in an additional nine months or less. The company reports that average implementation cost is \$100K-\$500K.

# Support

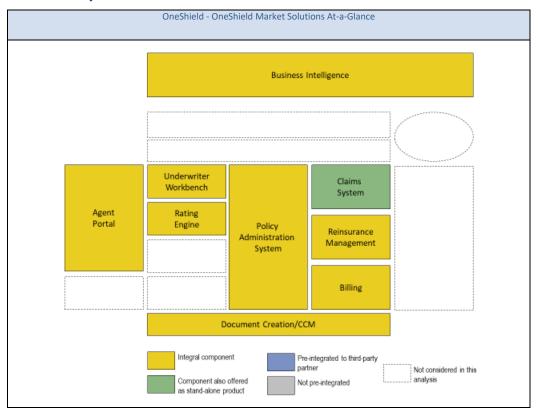
Of the 264 people employed at OneShield, there are between 50 and 100 on each of the product design and engineering, implementation (not counting partnerships), and support teams.

OneShield Market Solutions resources are based throughout North America and two offices in India. OneShield offers customer engagement activities such as an online community, online training, a customer advisory committee, a user event, and training seminars.

# **Systems Integrator and Other Partners**

Publicly announced technology partnerships include Pentaho, Medata, Duo MFA, Mitchell, and ClaimWire.

# **Functionality**



# **Policy Administration Functions**

Policy issue and out-of-sequence endorsements are available out of the box. Bordereaux import, forms management, and manuscripted policies are available with configuration via tools for IT analysts or BAs. Premium accounting is available via out-of-the-box integration to a third-party system or service.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

### **Rating Functions**

A rating engine is integral to the suite and is not marketed as a stand-alone solution. A quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-carrier rating on a single policy are standard functions.

Versioning and update management, change control functions, and auditability of rate versioning are standard functions.

An applications and forms library with standard and customizable applications and forms is available out of the box. Pre-integration to third-party data providers is standard. Download to agency management systems is available with configuration via tools for IT analysts or BAs.

NCCI/Bureau of Workers' Comp rates/rules support is standard. ISO rates and rules support along with ISO-formatted stastistical data are available via out-of-the-box integration to a third-party system or service. ISO ERC integration is not currently available.

Multi-carrier comparison is standard. Setting insurer-specific defaults is available with configuration via tools for IT analysts or BAs. Saving/storing an in-process or completed policy change transaction to allow issuance at a later date is a standard function. Product design and development tools are available with configuration via tools for IT analysts or BAs.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, rating and rule definition and management (e.g., automatic underwriter assignment), and date management capabilities are all standard. The import/export of rating tables to/from spreadsheets (e.g., Excel) is available with configuration via tools for IT analysts or BAs.

The solution does not currently include displacement testing or testing, modeling, and product analysis.

### **Underwriter Workbench Functions**

Underwriting functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing the submission data from a structured data feed is a standard function. Uploading/importing the submission information from documents (OCR-like functionality) is available via out-of-the-box integration to a third-party system or service.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, cancellation transactions, and underwriting multiple submissions as one work portfolio are standard functions.

Combining quotes for different lines into a single proposal; capturing underwriting analysis; capturing underwriter loss analysis; underwriter checklists that can validate information and process completeness; submission rating; pricing analysis and scheduled rating information; and providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are standard functions.

Document creation (proposals, applications, correspondence) and document storage are available out of the box. A rules engine that applies underwriting, workflow, and general business rules automatically; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); a rules engine that interfaces to order specific data conditionally; inline reports/dashboards on tasks/work/work status; and inline reports/dashboards to support underwriting analysis are standard functions.

Displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) is available via out-of-the-box integration to a third-party system or service.

Proposal co-authoring with other underwriters, screen sharing with other underwriters, and agent-facing capabilities are available out of the box. The solution does not currently include IM collaboration with other underwriters.

Preconfigured interfaces with agent portals are standard. Preconfigured interfaces with policy admin systems, preconfigured integration with business intelligence environments, preconfigured interfaces with third-party data services, and natively calculated predictive scores are available with configuration via tools for IT analysts or BAs.

Support for variable binding/approval authority by role and support for email notification or communication with agents and underwriters within the system (retaining a record of all emails) are standard functions. Preconfigured interfaces with external predictive scoring models are available via out-of-the-box integration to a third-party system or service.

#### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents (e.g., statements) and ad hoc documents (e.g., correspondence, manuscripted policies).

The suite includes pre-packaged, pre-built forms, libraries, and templates from ACORD. The primary authoring environment is a custom environment, MS Word, Adobe Creative Suite, or a non-Microsoft/Adobe solution.

Content and business rules are designed to be managed by business analysts, with schema mapping and data sources maintained by technical resources.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is available out of the box. Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository, content management tools, and archival capabilities for all documents generated are standard. The solution supports industry-standard schemas like ACORD XML, ebXML, and XBRL out of the box.

### **Agent Portal Functions**

Agent portal functions are integral to the suite and are not marketed as a stand-alone solution.

New business entry/submission, account clearance, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, policy change entry/submission, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, proposal creation, ACORD application creation, side-by-side quote comparison, underwriter view and/or tools, agent/underwriter collaboration, and a rating engine are standard functions.

Agency management system upload and account/client view (in addition to a policy view) are available with configuration via tools for IT analysts or BAs. Integration and pre-fill with data services and online payment are available via out-of-the-box integration to a third-party system or service.

Document creation; file attachment support; workflow and task management capabilities; a consumer portal; scheduling, diary, and calendar functions; and business intelligence and reporting are standard. E-signature is available via out-of-the-box integration to a third-party system or service.

#### **Reinsurance Functions**

Reinsurance is integral to the suite and is not marketed as a stand-alone solution. Ceded reinsurance management functions like the manual entry and tracking of cessions, reserves, and limits; automated notification if a reserve reaches a specific amount or treaties approach set limits; and automated identification/calculation of accounts with applicable reinsurance are available out of the box.

Assumed reinsurance management functions like the manual entry and tracking of assumed reinsurance contracts are standard. Automated assumed reinsurance calculations based on reinsured data feeds/connections and retrocession reinsurance management are available with configuration via tools for IT analysts or BAs.

Treaty management; facultative management; proportional support; non-proportional/excess of loss; multiple basis types (e.g., risks attaching, losses occurring, claims made); retroactive processing of late placements or midterm contract changes; and configuration of contract rules, formulas, and types are standard functions.

End-user interfaces for manual entry of contracts, manual flagging of premiums and claims subject to reinsurance, and review and approval of assumed policies as part of facultative contracts are available out of the box.

Real-time integration to an underwriting system (e.g., to display limits/reserves) is standard. Batch file import/export for integration to other systems, real-time data intake from core systems (e.g., PAS, claims) via API or another mechanism, and integration between other insurer/reinsurer systems are available with configuration via tools for IT analysts or BAs.

A standard library of canned reports, automated bordereau reporting, and ad hoc reporting are standard. Statutory and regulatory reporting; automated Schedule F reporting; and integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc. are available via out-of-the-box integration to a third-party system or service. Automated recoverable claims identification and viewing the full history and status of claims and claim recovery are available out of the box.

Entity management (CRM), document management and storage of the actual contracts, and an audit trail for all transactions are standard functions. Multi-currency support is available with configuration via tools for IT analysts or BAs. Tracking reinsurance payables and receivables is available via out-of-the-box integration to a third-party system or service. Currently, the solution does not include multi-language support.

# **Business Intelligence Functions**

Business intelligence functions are integral to the suite and are not marketed as a stand-alone solution.

OneShield Market Solutions' configurable business intelligence solution combines OneShield's platforms and data structures with pre-built KPIs, cubes, and reports to present big and small data analysis graphically. OneShield reports that OneShield Market Solutions utilizes the company's industry knowledge, software expertise, professional services, and pre-built content to delivery analytics to clients.

The solution includes tools to support data governance, dictionaries, quality, and validation; a presentation/reporting component; standard predefined reports and predefined insurance dashboards; an ad hoc reporting tool; and data mining and analytics tools. The solution also includes some tools/features of an insurance data model and databases for insurers to use to replace existing EDW, ODS, and/or OLAP cubes as a secondary part of the offering.

The solution supports data movement via batch ETL.

# **Billing Functions**

Billing is integral to the suite and is not marketed as a stand-alone solution. Payment and billing plan configurability is available out of the box. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available out of the box with no configuration necessary
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available via out-of-the-box integration to a third-party
	system or service
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Currently not available, but could be available with
	integration to another system or service
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Available out of the box with no configuration necessary
reporting:	
Pay-as-you-report for workers' comp:	Available out of the box with no configuration necessary
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available out of the box with no configuration necessary
Billing for non-premium receivables (such	Available out of the box with no configuration necessary
as claims deductibles paid):	
Payment of non-refund payables (such as	Available out of the box with no configuration necessary
policy dividends or mutual dividends):	,
Multi-currency support in a single instance	Yes
of the application:	
Multi-currency support in a single instance	Yes

# **Claims Functions**

OMS Claims Administration is part of the suite and is also sold as a stand-alone claims component.

### **Adjudication**

Medical case management, injury detail maintenance (coding), disability management, automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard functions.

### Catastrophe

Catastrophe definition and attaching multiple LOBs and causes of loss to a single catastrophe are standard functions. Automatic identification of catastrophe claims is available with configuration via tools for IT analysts or BAs. Mapping tools are available via out-of-the-box integration to a third-party system or service.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support, etc.) are standard. OFAC checking is available via out-of-the-box integration to a third-party system or service.

#### **Documents**

Image and media management, a correspondence or forms library, state-specific claims reporting templates, document rendering, a content repository and content management tools, and multi-channel delivery and output of documents (e.g., PDF, email, web, and print) are standard functions.

### **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; mobile and smart device input; scripting for claims intake with reflexive questioning; custom question sets to prompt additional, mandatory questions depending on given answers (branch scripting); claim characteristics scoring (to calculate alerts, trigger workflow, assign a claims handler, or otherwise segment the claim); claimant contact management data capture; and checking for duplicate claims are standard functions. FROI/SROI EDI reporting and integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) are available via out-of-the-box integration to a third-party system or service.

### **Fraud**

Configurable business rules and tasks (specific to fraud and special investigations) as well as multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims are standard.

# Litigation

Litigation process tracking, including negotiation details and litigation costs, and creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management are standard functions.

### **Multi-Channel**

An agent portal with self-service and a policyholder portal with self-service are standard functions. E-signature is available via out-of-the-box integration to a third-party system or service. The solution does not currently include call center integration for FNOL/claim status check via telephony.

### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, and assignment to facultative arrangements are standard functions.

### Reporting

Standard reporting of claims performance monitoring (including claims handling and high-risk indicators, e.g., fatality, large losses, fraud), standard reporting of configurable claims metrics for claims reporting, ad hoc reports, dashboards, and reporting that includes jurisdiction-specific reports and forms are standard functions. Electronic reporting or automated state filings are available via out-of-the-box integration to a third-party system or service.

### Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; granular tracking of reserves and payments; automatic reserve calculations using business rules and risk characteristics; direct, case, average, factor, and expense reserve types; and jurisdictional wage and rate calculations integrated for workers' comp are standard functions. Automatic subrogation identification and subrogation billing and the production of correct GL entries are available with configuration via tools for IT analysts or BAs.

### **Vendor Management**

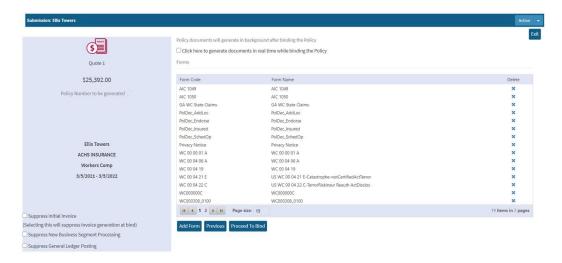
Vendor management functions and processing required forms (including 1099s) are standard.

#### Workflow

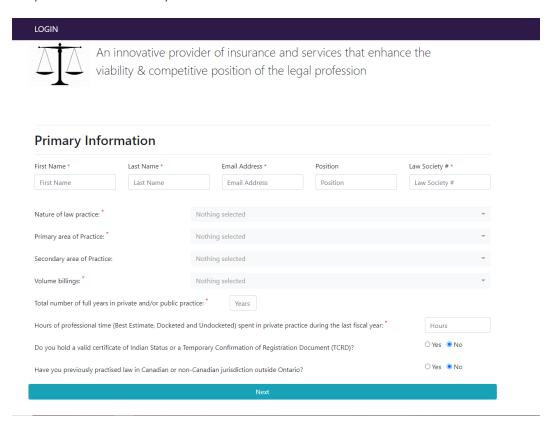
Automated workflow/task generation; overriding automated processes and manually triggering workflow processes; automatic work assignment based on configurable rules; generating notes, diaries, and reminders; inclusion of external documents (e.g., letters, pictures) in file notes; and assigning multiple adjusters to single claims are standard functions. Processing claim workflow trigger (CWT) files at insurer-defined intervals is available with configuration via tools for IT analysts or BAs. OCR-triggered workflow, compliance with Document Repository Interface (DRI) standards, and full integration with electronic court filings (ECF2) are available via out-of-the-box integration to a third-party system or service.

# **Screenshots**

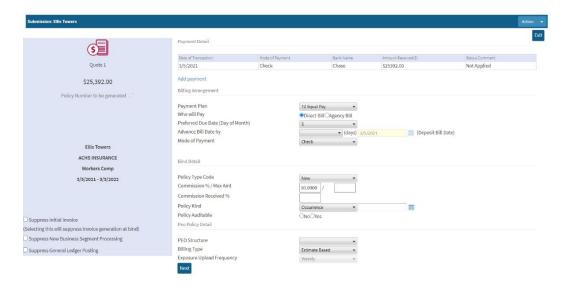
### Form Details



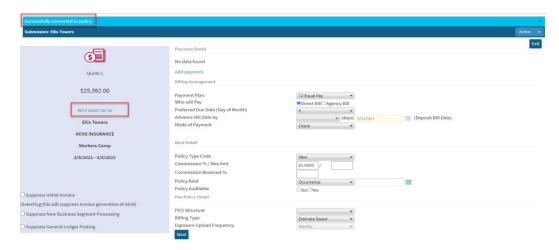
### Lawyers Professional Liability POC Portal



### **Submission Bind Tab**



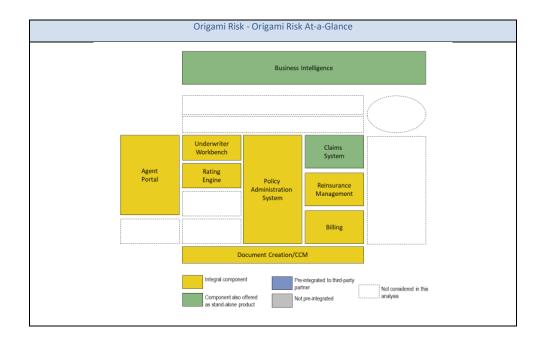
# Successfully Converted to Policy



# Origami Risk - Origami Risk

# **Executive Summary**

- Origami Risk provides integrated SaaS solutions from a multi-tenant platform for the risk and
  insurance industry. Founded in 2009, Origami Risk offers a full suite of risk management and
  insurance core system solutions from a single, secure, cloud-based platform. It delivers
  software and support to over 675 companies around the globe.
- Origami Risk has headquarters in Chicago, IL and employs 336 people. The company declined to disclose annual revenue.
- Origami Risk is a suite of solutions that include core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has eight live US/Canadian insurer clients using the suite. All clients are smaller (under \$1B) insurers using the solution to support commercial lines with some personal.
- Publicly announced clients include Arthur J. Gallagher & Co., Gallagher Bassett, Texas
   Association of School Boards, Service Lloyds Insurance Company, and Cincinnati Financial.
- The solution is browser-based for all user interface functions. It is written primarily in .NET (C#/VB.NET).
- Configuration for rules and document authoring is via UI-based configuration tools for BAs
  and non-IT staff. Insurance products and workflows are configurable via tools for IT analysts.
  Configuration for screens and integration to third-party service calls is via developer tools,
  XML manipulation, or a scripting language.
- Implementation is available through the company's resources or a partner. Origami Risk
  deploys the solution on AWS. The company offers a SaaS delivery model that includes
  hosting, license, support and maintenance, ongoing access to the latest version, and the
  implementation of upgrades.
- The company reports that the average time to go-live is 180 days or less. The company declined to disclose average implementation costs.



# **Lines of Business Supported**

Personal auto:	Live clients offering this product in 10-49 US states
Homeowners:	Solution is designed to support, but no clients live or implementing
Personal umbrella:	Solution is designed to support, but no clients live or implementing
Dwelling fire:	Solution is designed to support, but no clients live or implementing
Boatowners:	Solution is designed to support, but no clients live or implementing
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Live clients offering this product in 10-49 US states
General liability:	Live clients offering this product in 10-49 US states
BOP:	Solution is designed to support, but no clients live or implementing
Commercial crime:	Live clients offering this product in 10-49 US states
Commercial auto:	Live clients offering this product in 10-49 US states
E&O/D&O:	Live clients offering this product in 10-49 US states
Inland marine:	Live clients offering this product in 10-49 US states
Professional liability (including medical malpractice):	Live clients offering this product in 10-49 US states
Commercial package:	Live clients offering this product in 2-9 US states
Specialty:	Solution is designed to support, but no clients live or implementing
Workers' comp:	Live clients offering this product in 10-49 US states
Surety:	Solution is designed to support, but no clients live or implementing
Other personal lines:	Solution is designed to support, but no clients live or implementing
Other commercial lines†:	Live clients offering this product in 2-9 US states

<sup>†</sup> Other commercial lines include marine cargo.

### **Client Base**

Globally, Origami Risk has more than 675 clients live on Origami, eight of which are insurer clients (i.e., not MGAs, self-insureds). These insurer clients are all live in the US and Canada. They are all smaller (under \$1B) companies using the solution to support commercial lines with some personal. Publicly announced clients include Arthur J. Gallagher & Co., Gallagher Bassett, Texas Association of School Boards, Service Lloyds Insurance Company, and Cincinnati Financial.

# **Key Functions and Differentiators**

Origami Risk cites the key functions of Origami as:

- Policy underwriting, including schedule table creation, premium audit changes, commissions, and rating engines
- Custom, standard, scheduled, and ad hoc reporting that is configurable and low code
- Portals and dashboards with access and views customizable for multiple business user types (e.g., insureds, internal users, agents, brokers) for self-service
- Premium billing and associated workflows for various levels of users, i.e., customers to insurers' power users
- Full policy life-cycle support and fully automated online renewal process

The company cites as key differentiators its unified platform and database without the need for multiple integrations for policy processing, rating, underwriting, billing, and claims functions; low-code configurable, flexible modules with administrative toolset implemented to insurers' specifications without the need for custom development and a flexible data model to support specialized schedules; multi-tenant, cloud-based solution developed by industry experts that allows for ongoing, automatic updates every quarter; integrated analytics offering with capabilities such as code-free configurations with seamless, quick, drill-down functionality; and access to update rate tables, rating formulas, and associated communications and policy documents via a user-friendly interface that allows users to configure options for limits, deductibles, Xmods, etc. in proposals and policies.

# **Solution Architecture and History**

Origami Risk launched in 2009. The latest release was in April 2021; the company notes that it offers quarterly updates. Origami Risk reports that all of the solution's customers are on the latest version and that all Origami clients are always on the same release.

The solution supports Microsoft SQL Server databases and Windows platforms. The solution is written in .NET (C#/VB.NET).

# **APIs and Integration**

The system allows API publishing in SOAP, REST, JSON, and XML services as APIs. Origami Risk notes that the APIs are available via URL.

# **Configurability and User Interface**

Origami Risk is browser-based for all user interface functions. It also have a native mobile app.

Configuration for rules and document authoring is via UI-based configuration tools for BAs and non-IT staff. Insurance products and workflows are configurable via tools for IT analysts. Configuration for screens and integration to third-party service calls is via developer tools, XML manipulation, or a scripting language.

### **Deployment Options**

Origami Risk deploys the solution on AWS. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades. The hosted solution is a multi-tenant app server with a single-tenant database.

# **Average Implementation Length and Cost**

Origami Risk implements the solution through its own resources or through an implementation partner.

The company reports that Origami Risk can be ready for initial go-live in 180 days or less and fully rolled out in an additional 90 days or less. The company declined to disclose average implementation costs.

# Support

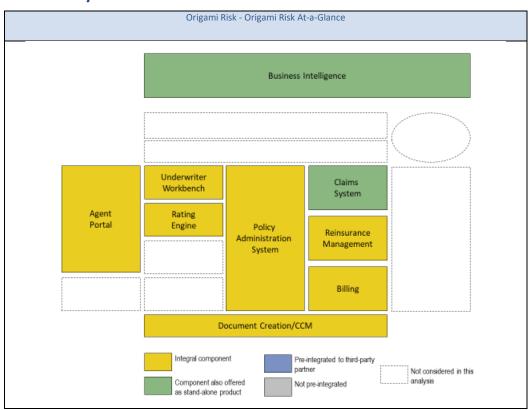
Of the 336 people employed at Origami Risk, there are between ten and 50 on the product design and engineering team, between 100 and 250 on the implementation (not counting partnerships) team, and between 100 and 250 on the support team. Origami Risk provides support out of multiple US and UK locations.

Origami Risk offers customer engagement activities such as online training, a customer advisory committee, a user event, and training seminars.

# **Systems Integrator and Other Partners**

Publicly announced technology partnerships include Gradient AI and Line Slip. Publicly announced SI partnerships include Deloitte, RCG, and Perr & Knight.

# **Functionality**



### **Policy Administration Functions**

The solution includes policy issue, premium accounting, out-of-sequence endorsement, and forms management out of the box. Bordereaux import and manuscripted policies are available with configuration via tools for IT analysts or BAs.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

# **Rating Functions**

A rating engine is integral to the suite and is not marketed as a stand-alone solution.

Core rating functions like a quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are available out of the box.

Compliance and change control functions like versioning and update management and auditability of rate versioning are available out of the box. The solution does not currently include change control functions. An applications and forms library with standard and customizable applications and forms is available out of the box.

Integration functions like download to agency management systems and pre-integration to third-party data providers are available with configuration via developer tools, XML manipulation, or a scripting language.

NCCI/Bureau of Workers' Comp rates/rules support is available out of the box. ISO rates/rules support is available via out-of-the-box integration to a third-party system or service. The solution does not currently include ISO ERC integration or ISO-formatted statistical data.

Multi-carrier comparison and setting insurer-specific defaults are available with configuration via tools for IT analysts or BAs. Saving/storing an in-process or completed policy change transaction to allow issuance at a later date and product design and development tools are available out of the box.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are standard functions.

The solution does not currently include displacement testing (ability to run existing book of business through proposed rate/product changes to determine impact) or testing, modeling, and product analysis.

### **Underwriter Workbench Functions**

Underwriting functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing submission data from a structured data feed is standard. Uploading/importing the submission information from documents (OCR-like functionality) is available with configuration via tools for IT analysts or BAs.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, cancellation transactions, and underwriting multiple submissions as one work portfolio is standard.

The ability to combine individual quotes for different lines into a single proposal, capturing underwriting analysis, capturing underwriter loss analysis, and underwriter checklists that can validate information and process completeness are available out of the box.

Submission rating; pricing analysis and scheduled rating information; and providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are standard functions.

Document creation (proposals, applications, correspondence); document storage; a rules engine that applies underwriting, workflow, and general business rules automatically; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); inline reports/dashboards on tasks/work/work status; inline reports/dashboards to support underwriting analysis; and displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) are standard functions.

A rules engine that interfaces to order specific data conditionally is available with configuration via developer tools, XML manipulation, or a scripting language.

Proposal co-authoring with other underwriters and agent-facing capabilities are available out of the box. The solution does not currently include IM collaboration with other underwriters or screensharing with other underwriters, but the company reports these functions could be available with integration to another system or service.

Support for variable binding/approval authority by role and email notification/communication with agents and underwriters within the system (retaining a record of all emails) are standard.

The solution does not currently include preconfigured interfaces with policy admin systems, agent portals, or third-party data services or natively calculated predictive scores. Preconfigured integration with business intelligence environments and preconfigured interfaces with external predictive scoring models are available via out-of-the-box integration to a third-party system or service.

### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents, e.g., statements (the most common use case) and ad hoc documents, e.g., correspondence and manuscripted policies (the less common use case).

The suite includes pre-packaged, pre-built forms, libraries, and templates from ACORD. The primary authoring environment is MS Word or Adobe Creative Suite. Content, business rules, schema mapping, and data sources are designed to be managed by business analysts.

The solution supports print and e-delivery output channels. Managing preferences for print vs. electronic delivery is available out of the box. Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository, content management tools, and archival capabilities for all documents generated are available out of the box. The solution supports industry-standard schemas from ACORD XML out of the box.

### **Agent Portal Functions**

Origami Risk's agent portal is part of the suite and is not sold as a stand-alone agent portal.

New business entry/submission, account clearance, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, policy change entry/submission, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, proposal creation, side-by-side quote comparison, account or client view in addition to a policy view, underwriter view and/or tools, agent/underwriter collaboration, and a rating engine are all standard.

ACORD application creation is available with configuration via tools for IT analysts or BAs. An agency management upload system is available with configuration via developer tools, XML manipulation, or a scripting language. Integration and pre-fill with data services and online payment are available via out-of-the-box integration to a third-party system or service.

E-signature; document creation; file attachment support; scheduling, diary, and calendar functions; workflow and task management capabilities; business intelligence and reporting; and a consumer portal are standard functions.

### **Reinsurance Functions**

Reinsurance functionality is pre-integrated as part of the suite and is not sold stand-alone.

Ceded reinsurance management functions like the manual entry and tracking of cessions, reserves, and limits as well as automated identification/calculation of accounts with applicable reinsurance are available out of the box. Automated notification if a reserve reaches a specific amount or treaties approach set limits is available with configuration using simple tools targeted for IT analysts or BAs.

Assumed reinsurance management functions like the manual entry and tracking of assumed reinsurance contracts, automated assumed reinsurance calculations based on reinsured data feeds/connections, and retrocession reinsurance management are not currently available.

Treaty management, proportional support, non-proportional/excess of loss, multiple basis types (e.g., risks attaching, losses occurring, claims made), and retroactive processing of late placements or midterm contract changes are standard functions. Configuration of contract rules, formulas, and types is available with configuration using simple tools targeted for IT analysts or BAs. The solution does not currently include facultative management.

End-user interfaces for manual entry of contracts are standard. The solution does not currently include end-user interfaces for manual flagging of premiums and claims subject to reinsurance or for review and approval of assumed policies as part of facultative contracts.

Integration between other insurer/reinsurer systems is available with configuration using simple tools targeted for IT analysts or BAs. Batch file import/export for integration to other systems, real-time data intake from core systems (PAS, claims) via API or other mechanism, and real-time integration to an underwriting system (e.g., to display limits/reserves) are available with configuration using developer tools, XML manipulation, or a scripting language.

A standard library of canned reports, automated bordereau reporting, and ad hoc reporting are standard. Currently, the solution does not include statutory and regulatory reporting; automated Schedule F reporting; or integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc. Automated recoverable claims identification and viewing the full history and status of claims and claim recovery are available out of the box.

Tracking reinsurance payables and receivables, entity management (CRM), document management and storage of the actual contracts, and an audit trail for all transactions are standard functions. Multi-currency and multi-language support are not currently available.

### **Business Intelligence Functions**

Origami Risk business intelligence functionality is integral to the suite and is also marketed as a stand-alone solution.

Origami Risk provides an integrated dashboard and reporting tools for customers' internal needs as well as agent/insured self-service. The system has a comprehensive library of over 100 standard report templates and an ad hoc report designer.

The system also features the ability to use all reportable fields as modifiers, which can turn report templates into on-the-fly custom reports. Origami also provides automated report distribution capabilities.

The solution supports an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes; a presentation/reporting component; standard predefined reports and predefined insurance dashboards; an ad hoc reporting tool; and data mining and analytics tools.

The solution also includes tools to support data governance, dictionaries, quality, and validation as a secondary part of the offering.

The solution supports real-time streaming data movement (e.g., use of Kafka).

### **Billing Functions**

Billing functionality is part of the suite and is not sold as a stand-alone billing component. Payment and billing plan configurability is available out of the box. The table on the following page shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Currently not available, but could be available with a
	system enhancement
Third-party (i.e., mortgagee) bill:	Currently not available, but could be available with a
	system enhancement
Split or multi-payer bill:	Currently not available, but could be available with a
	system enhancement
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available via out-of-the-box integration to a third-party
payment card, check, EFT, payroll	system or service
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Currently not available, but could be available with a
	system enhancement
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available via out-of-the-box integration to a third-party
	system or service
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Currently not available, but could be available with
Billian dealth and a formation	integration to another system or service
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Available out of the box with no configuration necessary
reporting	Available and of the barryith as applicated as a
Pay-as-you-report for workers' comp:	Available out of the box with no configuration necessary
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available out of the box with no configuration necessary
Billing for non-premium receivables (such	Available out of the box with no configuration necessary
as claims deductibles paid):	
Payment of non-refund payables (such as	Available with configuration using developer tools, XML
policy dividends or mutual dividends):	manipulation, or a scripting language
Multi-currency support in a single instance	No
of the application:	

# Claims Functions

Origami Claims Administration is part of the suite and is also sold as a stand-alone claims component.

### **Adjudication**

Medical case management, injury detail maintenance (coding), disability management, and deductible tracking are standard functions. Automated coverage verification is available with configuration using simple tools targeted for IT analysts or BAs. Aggregate tracking (erosion of policy limits) is available with configuration using developer tools, XML manipulation, or a scripting language.

### Catastrophe

Catastrophe definition, automatic identification of catastrophe claims, attaching multiple LOBs and causes of loss to a single catastrophe, and mapping tools are standard.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, OFAC checking, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) are standard.

#### **Documents**

Image and media management, a correspondence or forms library, document rendering, a content repository and content management tools, and multi-channel delivery and output of documents (e.g., PDF, email, web, and print) are standard. State-specific claims reporting templates are available via out-of-the-box integration to a third-party system or service.

### **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; handling of FROI/SROI EDI reporting; mobile and smart device input; scripting for claims intake with reflexive questioning; customized question sets to prompt mandatory additional questions depending on the answers given (branch scripting); claimant contact management data capture; and checking for duplicate claims are standard. Claim characteristics scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim) is available with configuration using simple tools targeted for IT analysts or BAs. Integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) is available with configuration using developer tools, XML manipulation, or a scripting language.

### **Fraud**

Configurable business rules and tasks (specific to fraud and special investigations) and the provision of multiple search and reporting criteria for fraud detection (via the ability to track common clients across multiple claims) are standard.

#### Litigation

Litigation process tracking, including negotiation details and litigation costs, and creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management are standard.

#### **Multi-Channel**

An agent portal with self-service and a policyholder portal with self-service are standard. Esignature is available via out-of-the-box integration to a third-party system or service. The solution does not currently include call center integration for FNOL via telephony or call center integration for claims status check via telephony.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location, etc.) and assignment to reinsurance treaties are available out of the box. Assignment to facultative arrangements is available with configuration using developer tools, XML manipulation, or a scripting language.

#### Reporting

Standard reporting of claims performance monitoring, including claims handling, and high-risk indicators such as fatality, large losses, and fraud; standard reporting of configurable metrics for claims reporting; ad hoc reports; dashboards; and reporting that includes jurisdition-specific reports and forms are available out of the box. Electronic reporting or automated state filings are available via out-of-the-box integration to a third-party system or service.

#### Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; subrogation billing and the production of correct GL entries; granular tracking of reserves and payments; automatic reserve calculations using business rules and risk characteristics; direct, case, average, factor, and expense reserve types; and jurisdictional wage and rate calculations integrated for workers' comp are standard.

#### **Vendor Management**

Vendor management functions and processing required forms (including 1099s) are standard.

#### Workflow

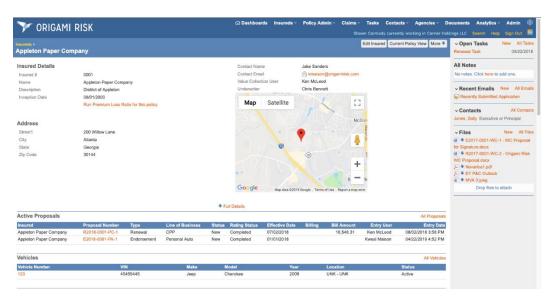
Automated workflow/task generation; overriding automated processes and manually triggering workflow processes; automatic work assignment based on configurable rules; generating notes, diaries, and reminders; inclusion of external documents (e.g., letter, pictures) in file notes; and assigning multiple adjusters to a single claim are standard functions. OCR-triggered workflow, compliance with Document Repository Interface (DRI) standards, processing claim workflow trigger (CWT) files at insurer-defined intervals, and full integration with electronic court filings (ECF2) are available with configuration via developer tools, XML manipulation, or a scripting language.

# **Screenshots**

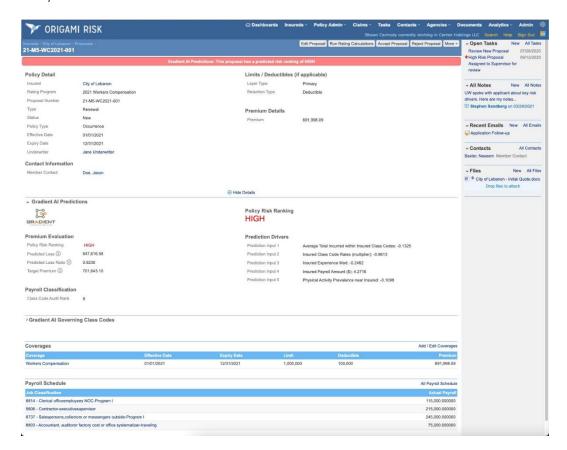
**Agent Portal** 



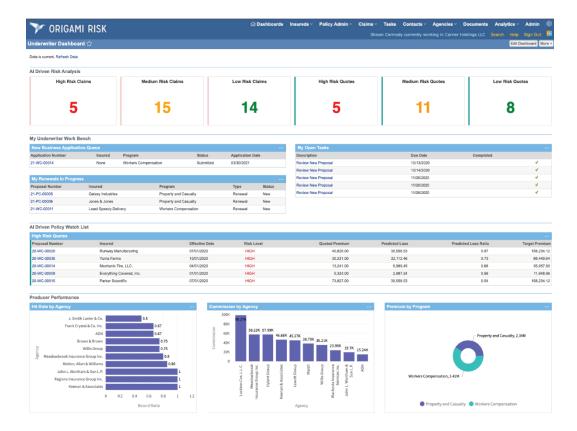
View of Insured Data



#### Policy Detail With AI Predictions



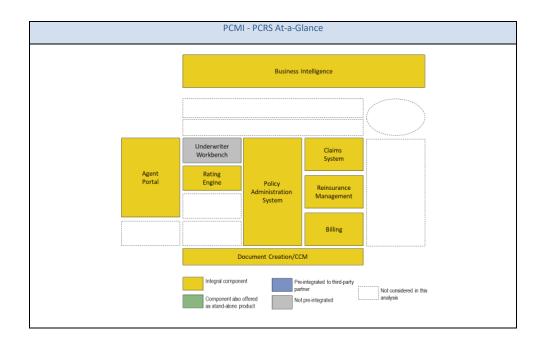
## **Underwriter Dashboard**



# PCMI, Inc. - Policy Claims & Reporting Solution

# **Executive Summary**

- PCMI, Inc is a technology solution provider for the warranty and service contract industry. It
  is headquartered in Park Ridge, IL and has 150 employees. The company's annual revenue is
  between \$10M-\$20M.
- Policy Claims & Reporting Solution is a suite that include core policy features, rating, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has 48 live US insurer clients using the suite, most of which are smaller to midsized companies (under \$1B). All clients are using the solution to support specialty lines.
- Publicly announced clients include AmTrust, EFG Companies, and Extend Warranty.
- Policy Claims & Reporting Solution (PCRS) is browser-based for all functions. It is written in .NET (C#/VB.NET).
- Configuration for insurance products, screens, workflows, rules, and document authoring is
  via simple tools targeted for BAs and non-IT staff. Integration to third-party service calls is
  convifgured via code.
- Implementation is available through the company's own resources. PCMI hosts the solution
  at a private data center and on MS Azure. A SaaS delivery model is available that includes
  hosting, license, maintenance and support, ongoing access to the latest version, and the
  implementation of upgrades.
- The company reports that the average time to initial go-live is nine months or less and that the average implementation cost is under \$100K.



# **Lines of Business Supported**

Personal auto:	Not currently supported
Homeowners:	Not currently supported
Personal umbrella:	Not currently supported
Dwelling fire:	Not currently supported
Boatowners:	Not currently supported
Personal package:	Not currently supported
Commercial property:	Not currently supported
General liability:	Not currently supported
BOP:	Not currently supported
Commercial crime:	Not currently supported
Commercial auto:	Not currently supported
E&O/D&O:	Not currently supported
Inland marine:	Not currently supported
Professional liability (including medical malpractice):	Not currently supported
Commercial package:	Not currently supported
Specialty:	Live clients offering this product in all 50 US states
Workers' comp:	Not currently supported
Surety:	Not currently supported
Other personal lines:	Not currently supported
Other commercial lines:	Not currently supported

## **Client Base**

Globally, the company has 51 clients live on PCRS, all of which are insurer clients (i.e., not MGAs, self-insureds). 48 of these insurer clients are live in North America. Most clients are smaller to midsized companies (under \$1B). All clients are using the solution to support specialty lines.

Publicly announced clients include AmTrust, EFG Companies, and Extend Warranty.

# **Key Functions and Differentiators**

PCMI cites the key functions of PCRS as:

- Policy administration
- Claims administration
- Field service dispatching
- BI reporting
- Insurer risk management

The company cites as its key differentiators that it offers a secure SaaS solution; that it is customizable per agency workforce needs; that it is scalable to accommodate small, mid-tier, and large organizations; automation capabilities to reduce companies' footprints; and continuous product development with semi-monthly feature releases.

# **Solution Architecture and History**

PCRS launched in 2011. The latest release was in 2021. The company reports that 90% of its customers are on the latest version and 10% are on a version less than three years old. All customers have been through at least one upgrade.

The solution requires Microsoft SQL Server databases and supports UNIX/Linux and Windows platforms. The solution is written in .NET (C#/VB.NET).

# **APIs and Integration**

The solution provides REST APIs and REST-based webhooks. The company notes that its APIs are highly available and can be throttled to scale.

# **Configurability and User Interface**

PCRS is browser-based for all user interface functions. Configuration for insurance products, screens, workflows, rules, and document authoring is via simple tools targeted for IT analysts or BAs. Integration to third-party service calls is configured via code.

# **Deployment Options**

PCMI hosts the solution at a private data center and on MS Azure. A SaaS delivery model is available that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades. The hosted solution is a multi-tenant app server and database with a single-tenant option available.

# **Average Implementation Length and Cost**

PCRS is implemented through the company's own resources. PCMI reports that the solution can be ready for initial go-live in nine months or less and fully rolled out in an additional 90 days or less. The company reports that the average implementation cost is under \$100K.

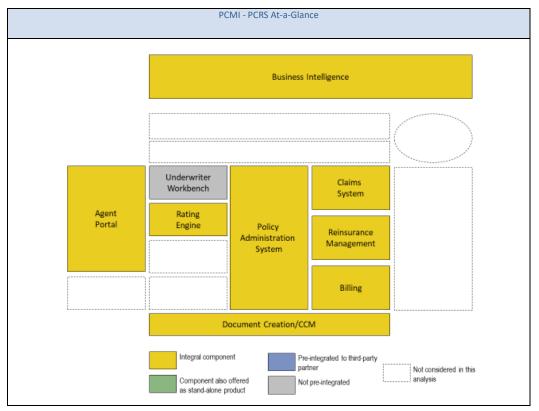
# Support

Of PCMI's 150 employees, over 100 are on the product design and engineering team, fewer than ten are on the implementation team (not counting partnerships), and between ten and 50 are on the support team. Support is located out of the US, Poland, Thailand, Ukraine, and India.

## Systems Integrator and Other Partners

Publicly announced technology partnerships include WEX, DealerSocket, DealerTrack, ALLDATA, and BerkOne.

# **Functionality**



# **Policy Administration Functions**

The solution includes policy issue, premium accounting, and manuscripted policies out of the box with no configuration necessary. Forms management is available with configuration using simple tools for IT analysts or BAs. Currently, the solution does not include out-of-sequence endorsement or bordereaux import.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

#### **Rating Functions**

Rating functions are an integral part of the suite and are not marketed as a stand-alone solution.

Quick quote option; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are all available out of the box with no configuration necessary. Currently, the solution does not include support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing or out-of-sequence endorsements.

Compliance and change control functions like versioning and update management, change control functions, and auditability of rate versioning are standard. An application and forms library with standard and customizable applications and forms is available out of the box with no configuration necessary.

Integration capabilities such as download to agency management systems and pre-integration to third-party data providers are also available out of the box with no configuration necessary.

Currently, the solution does not include ISO rates/rules support, NCCI/Bureau of Workers' Comp rates/rules support, ISO-formatted statistical data, or ISO ERC integration.

The ability to set carrier-specific defaults is standard. The solution does not currently include multi-carrier comparison. The ability to save/store an in-process or complete policy change transaction to allow issuance at a later date is standard. Product design and development tools are available out of the box with no configuration necessary.

Rule definition and management functions like maintaining rating algorithm definition and management separately from tables, rate table design and update management tools, import/export rating tables to/from spreadsheets, rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are standard.

The solution does not currently include displacement testing (i.e., the ability to run existing books of business through proposed rate/product changes to determine the impact) or testing, modeling, and product analysis.

#### **Underwriter Workbench Functions**

Underwriter workbench functions are not pre-integrated as part of the suite.

#### **Document Functions**

Document functions are integral to the suite and are not marketed stand-alone.

The solution supports mass-produced documents, e.g., statements, (the most common use case) and ad hoc documents, e.g., correspondence and manuscripted policies, (the less common use case).

The solution does not include any pre-packaged, pre-built forms, libraries, or templates from ACORD or ISO.

PCMI notes that PCRS offers a WYSWYG Editor to create communication templates that can be saved and called up later when required. Content is maintained by the average business user, while business rules are managed by business analysts. Schema mapping and data sources are designed to be maintained by technical resources.

The solution is designed to support print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is not currently available. Clients primarily use the toolset built into the solution for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository and content management tools are standard. Currently, the solution does not include archival capabilities for all documents generated. Industry-standard schemas are not supported out of the box.

#### **Agent Portal Functions**

Agent portal functions are integral to the suite and are not marketed as a stand-alone solution.

P/C portal functions including new business entry/submission, account clearance, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, integration and pre-fill with data services, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, agency management system upload, underwriter view and/or tools, and a rating engine are standard.

Currently, the solution does not include policy change entry/submission, online payment, proposal creation, ACORD application creation, side-by-side quote comparison, account or client view in addition to a policy view, or agent/underwriter collaboration.

Document creation, file attachment support, workflow and task management capabilities, and business intelligence and reporting are standard functions. A consumer portal is available with configuration using developer tools, XML manipulation, or a scripting language. Currently, the solution does not include support for e-signature or scheduling, diary, and calendar functions.

#### **Reinsurance Functions**

Reinsurance functions are integral to the suite and are not sold as a stand-alone solution.

Ceded reinsurance management functions like manual entry and tracking of cessions, reserves, and limits are available out of the box. Currently, the solution does not include automated notification if a reserve reaches a specific amount or treaties approach set limits or automated identification/calculation of accounts with applicable reinsurance.

Assumed reinsurance management functions such as manual entry/tracking of assumed reinsurance contracts, automated assumed reinsurance calculations based on reinsured data feeds/connections, and retrocession reinsurance management are standard.

The solution includes treaty management, facultative management, proportional support, non-proportional/excess of loss, multiple basis types (e.g., risks attaching, losses occurring, claims made), and retroactively processing late placements or midterm contract changes out of the box. The solution does not currently include configuration of contract rules, formulas, and types.

An end-user interface for manual entry of contracts and an end-user interface for manual flagging of premiums and claims subject to reinsurance are standard. The solution does not currently include an end-user interface for review and approval of assumed policies as part of facultative contracts.

Batch file import/export for integration to other systems, real-time data intake from core systems (PAS, claims) via API or other mechanism, and integration between other insurer/reinsurer systems are available out of the box with no configuration necessary. The solution does not currently include real-time integration to an underwriting system (e.g., to display limits/reserves).

A standard library of canned reports; automated Schedule F reporting; automated bordereau reporting; and hoc reporting; and integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc. are standard functions. Statutory and regulatory reporting are available with configuration using simple tools targeted for IT analysts or BAs.

The solution does not currently include claim management functions like automated recoverable claims identification or viewing the full history and status of claims and claim recovery.

Tracking reinsurance payables and receivables, document management and storage of the actual contracts, multi-currency support, and an audit trail for all transactions are standard functions. The solution does not currently include entity management (CRM) or multi-language support.

## **Business Intelligence Functions**

Business intelligence functions are integral to the suite and are not marketed as a stand-alone solution.

PCMI reports that PCRS provides BI reporting as well as dashboard solutions around policy, claims, field management, and other aspects. The company notes that it offers over 100 predefined reports as well as over ten dashboards, allowing clients to make data-driven decisions.

The solution includes a presentation/reporting component as well as standard, predefined reports and predefined insurance dashboards. Some ad hoc reporting tools are offered as a secondary part of the solution.

The solution supports data movement via batch ETL.

# **Billing Functions**

Billing is integral to the suite and is not marketed as a stand-alone solution. Payment and billing plan configurability is not available.

The table below shows the availability of other billing functions.

Direct bill:	Currently not available, but could be available with a system enhancement
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Not available
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Currently not available, but could be available with a system enhancement
Flexible and configurable payment plans:	Currently not available, but could be available with a system enhancement
Support for flexible payment types (e.g.,	Currently not available, but could be available with a
payment card, check, EFT, payroll deduction):	system enhancement
Automated rules for payment application and disbursements:	Not available
Real-time account and payment calculation, scheduling, recalculation, and rescheduling:	Available out of the box with no configuration necessary
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Not available
Equity billing support:	Not available
Automated workflow and task	Not available
management:	
Electronic bill presentment:	Not available
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Currently not available, but could be available with a
	system enhancement
Out-of-the-box integration with banks/credit card companies for token-based processing:	Yes
Payroll deduction:	Not available
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self- reporting:	Not available
Pay-as-you-report for workers' comp:	Not available
Invoice and correspondence:	Under development and will be available in less than 6 months
Check generation/production:	Not available
Billing for non-premium receivables (such	Currently not available, but could be available with a
as claims deductibles paid):	system enhancement
Payment of non-refund payables (such as policy dividends or mutual dividends):	Not applicable
Multi-currency support in a single instance of the application:	No

#### **Claims Functions**

Claims functions are an integral part of the suite and are not sold as a stand-alone claims component.

## **Adjudication**

Injury detail maintenance (coding), aggregate tracking (erosion of policy limits), and deductible tracking are standard. Automated coverage verification is available with configuration using developer tools, XML manipulation, or a scripting language. The solution does not include medical case management or disability management.

#### Catastrophe

The solution does not provide catastrophe functionality such as catastrophe definition, automatic identification of catastrophe claims, attaching multiple LOBs or casuses of loss to a single catastrophe, or mapping tools.

#### **Disbursements**

Combining multiple pending payments for a single client into one disbursement is a standard function. Check processing is available via out-of-the-box integration to a third-party system or service. Currently, the solution does not include calculating and scheduline recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), OFAC checking, or handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support, etc.).

#### **Documents**

Image and media management, a correspondence or forms library, state-specific claims reporting templates, document rendering, a content repository and content management tools, and multi-channel delivery and output of documents (including PDF, email, web, and print) are standard.

## **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry, handling of FROI/SROI EDI reporting, scripting for claims intake with reflexive questioning, customized question sets to prompt mandatory additional questions depending on the answers given (branch scripting), claim characteristics scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim), claimant contact management data capture, claim checking duplication, and integration with external vendors and services such as car rental companies or repair shops are standard functions. Mobile and smart device input is not currently available.

#### **Fraud**

Configurable business rules and tasks specific to fraud and special investigations along with provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims are standard functions.

#### Litigation

The ability to create separate tasks, workflow, diaries, or business rules for litigated cases to allow legal case management is available out of the box. Currently, the solution does not include litigation process tracking, including negotiation details and litigation costs.

#### **Multi-Channel**

An agent portal with self-service, call center integration for FNOL via telephony, and call center integration for claims status check via telephony are standard. A policyholder portal with self-service is available with configuration using developer tools, XML manipulation, or a scripting language. The solution does not currently support e-signature.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location, etc.) is standard. Currently the solution does not include assignment to reinsurance treaties or assignment to facultative arrangements.

#### Reporting

Standard reporting of claims performance monitoring (including claims handling and high-risk indicators, e.g., fatality, large losses, fraud), standard reporting of configurable metrics for claims reporting, dashboards, reporting that includes jurisdiction-specific reports and forms, and electronic reporting or automated state filings are available out of the box with no configuration necessary. Currently, the solution does not include ad hoc reports.

## Reserves, Recoveries, Subrogation

The solution does not include reserves, recoveries, and surogation functionality such as creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; subrogation billing and the production of current GL entries; granular tracking reserves and payments; automatic reserve calculations using business rules and risk characteristics; direct, case, average, factor, and expense reserve types; or jurisdictional wage and rate calculations integrated for workers' comp.

#### **Vendor Management**

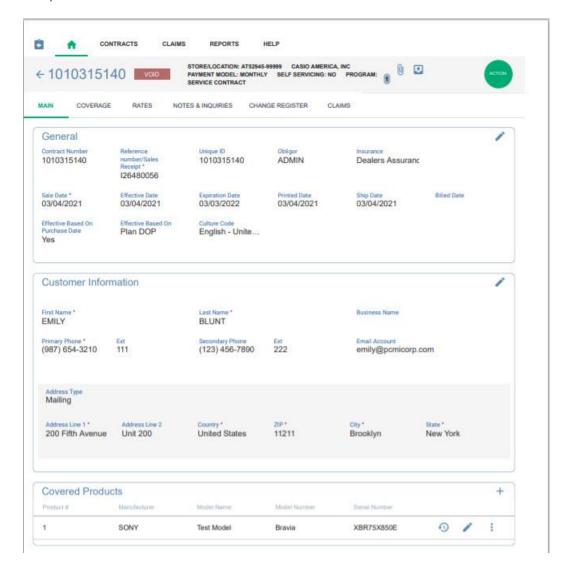
Vendor management functions and procesing required forms (including 1099s) are standard.

#### Workflow

Overriding automated processes and manually triggering workflow processes; generating notes, diaries, and reminders; inclusion of external documents (letters and pictures) in file notes; and assigning multiple adjusters to a single claim are standard functions. Automated workflow/task generation and automatic work assignment based on configurable rules are available with configuration using developer tools, XML manipulation, or a scripting language. Currently, the solution does not include OCR-triggered workflow, compliance with the Document Repository Interface (DRI) standards, processing claim workflow trigger (CWT) files at insurer-defined intervals, or full integration with electronic court filings (ECF2).

# **Screenshots**

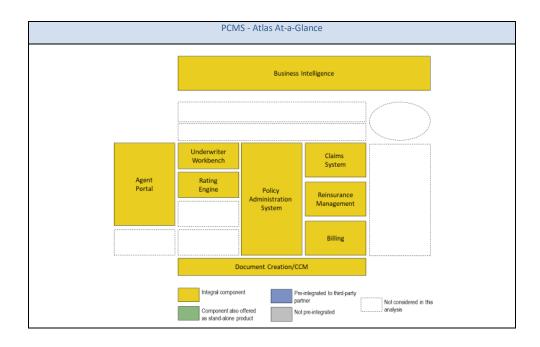
Policy UI



# **PCMS - Atlas**

## **Executive Summary**

- PCMS is a privately held company with headquarters in Dallas, TX. It employs 15 people and has an annual revenue in the range of \$5M-\$10M.
- Atlas is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims.
- It currently has 12 live US/Canadian insurer clients using the suite, all of which are smaller companies (under \$1B) using the solution to support a mix of personal and commercial lines.
- Publicly announced clients include Triangle Insurance, Palomar Specialty Insurance
   Company, United Home Insurance Company, Farmers Insurance Company of Flemington,
   and Amalgamated Casualty Insurance.
- The solution is browser-based for all user interface functions. It is written in .NET (C#, VB.NET).
- Configuration for insurance products, screens, workflows, rules, integration to third-party service calls, and document authoring is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's resources. PCMS deploys on a private data center. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades.
- The company reports that the average time to initial go-live is nine months or less and that the average implementation cost is \$100K-\$500K.



# **Lines of Business Supported**

Personal auto:	Live clients offering this product in 2-9 US states
Homeowners:	Live clients offering this product in 2-9 US states
Personal umbrella:	Live clients offering this product in 2-9 US states
Dwelling fire:	Live clients offering this product in 2-9 US states
Boatowners:	Live clients offering this product in 2-9 US states
Personal package:	Live clients offering this product in 2-9 US states
Commercial property:	Live clients offering this product in 10-49 US states
General liability:	Live clients offering this product in 10-49 US states
BOP:	Live clients offering this product in 10-49 US states
Commercial crime:	Live clients offering this product in 10-49 US states
Commercial auto:	Live clients offering this product in 10-49 US states
E&O/D&O:	Not currently supported
Inland marine:	Live clients offering this product in 10-49 US states
Professional liability (including medical malpractice):	Live clients offering this product in 10-49 US states
Commercial package:	Live clients offering this product in 10-49 US states
Specialty:	Live clients offering this product in 10-49 US states
Workers' comp:	Live clients offering this product in 10-49 US states
Surety:	Live clients offering this product in one US state
Other personal lines*:	Live clients offering this product in 2-9 US states
Other commercial lines†:	Live clients offering this product in 10-49 US states

<sup>\*</sup> Other personal lines include combination dwelling.

# **Client Base**

Globally, PCMS has 14 clients live on Atlas, 12 of which are US and Canadian insurer clients (i.e., not MGAs, self-insureds). These insurer clients are all smaller companies (under \$1B) using the solution to support a mix of personal and commercial lines. Two clients are using Atlas for workers' compensation.

Publicly announced clients include Triangle Insurance, Palomar Specialty Insurance Company, United Home Insurance Company, Farmers Insurance Company of Flemington, and Amalgamated Casualty Insurance.

<sup>†</sup> Other commercial lines include specialty commercial agriculture.

# **Key Functions and Differentiators**

PCMS cites the key functions of Atlas as:

- Policy administration
- Claims administration and reinsurance management
- Agent portal
- Receivables and billing
- Management, statutory, and ad hoc reporting

The company cites as its key differentiators fixed-priced implementation and "all-in" pricing for ongoing programming support; a redesigned, responsive UI/UX to support the home office, agents, and clients; a mobile app for customers; support for all personal and commercial lines on a system with no legacy code; as well as architecture that enables customization.

## **Solution Architecture and History**

Atlas launched in 1999 and was re-architected in 2019. The latest release was in February 2019. PCMS reports that all of the solution's customers are on the latest version and have been through at least one upgrade. The solution supports DB2/UDB, Oracle, and Microsoft SQL Server databases as well as Windows server platforms. The solution is written in .NET (C#, VB.NET).

# **APIs and Integration**

PCMS notes that it offers several APIs to comparative raters, payment processors, front-end sales tools, and e-signature vendors.

# **Configurability and User Interface**

Atlas is browser-based for all user interface functions. Configuration for insurance products, screens, workflows, rules, integration to third-party service calls, and document authoring is via developer tools, XML manipulation, or a scripting language.

## **Deployment Options**

PCMS deploys Atlas by hosting it at a private data center. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades. The solution is a single-tenant app server and database.

## **Average Implementation Length and Cost**

PCMS implements the solution through its own resources. It reports that Atlas can be ready for initial go-live in nine months or less and fully rolled out in an additional 90 days or less. The company reports that the average implementation cost is \$100K-\$500K.

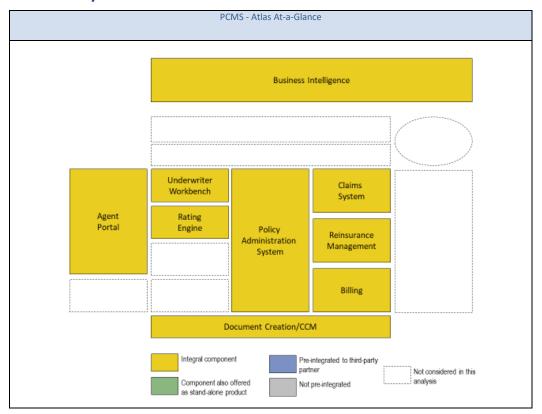
## Support

Of the 15 people employed at PCMS, there are fewer than 15 on the product design and engineering, implementation (not counting partnerships), and support teams. All support staff is located in the US. PCMS offers customer engagement activities such as online training.

# **Systems Integrator and Other Partners**

Publicly announced partnerships include Dell, Microsoft, ISO (strategic alliance partner), BluePay, and EZLynx.

# **Functionality**



## **Policy Administration Functions**

The solution includes policy issue, premium accounting, out-of-sequence endorsement, and forms management out of the box. Bordereaux import and manuscripted policies are available with configuration via developer tools, XML manipulation, or a scripting language.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

#### **Rating Functions**

Atlas's rating engine is integral to the suite and is not marketed as a stand-alone solution.

Core rating functions like a quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are standard.

Compliance and change control functions like versioning and update management, change control functions, and auditability of rate versioning are standard.

An applications and forms library with standard and customizable applications and forms is available out of the box. Integration functions like download to agency management systems and pre-integration to third-party data providers are standard.

NCCI/Bureau of Workers' Comp rates/rules support is available out of the box. ISO rates/rules support and ISO-formatted statistical data are available with configuration via tools for IT analysts or BAs. The solution does not currently include ISO ERC integration.

Multi-carrier comparison and setting insurer-specific defaults are available with configuration via developer tools, XML manipulation, or a scripting language. Product design and development tools are standard.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are standard functions.

Displacement testing (ability to run existing book of business through proposed rate/product changes to determine impact) is standard. Testing, modeling, and product analysis are available with configuration via tools for IT analysts or BAs.

#### **Underwriter Workbench Functions**

Underwriting functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing submission data from a structured data feed is a standard function. The solution does not currently include uploading/importing submission information from documents (OCR-like functionality).

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, cancellation transactions, and underwriting multiple submissions as one work portfolio is standard.

The ability to combine individual quotes for different lines into a single proposal; capturing underwriting analysis and underwriter loss analysis; underwriter checklists that can validate information and process completeness; submission rating; pricing analysis and scheduled rating information; and providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are standard.

Document storage is available out of the box. Document creation (proposals, applications, correspondence) is available with configuration via tools for IT analysts or BAs. A rules engine that applies underwriting, workflow, and general business rules automatically; a rules engine that interfaces to order specific data conditionally; inline reports/dashboards on tasks/work/work status; and inline reports/dashboards to support underwriting analysis are standard.

Workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries) and displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) are available with configuration via tools for IT analysts or BAs.

IM collaboration with other underwriters, proposal co-authoring with other underwriters, screensharing with other underwriters, agent-facing capabilities, and support for variable binding/approval authority by role are standard functions. Support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) is available with configuration via tools for IT analysts or BAs.

Preconfigured interfaces with policy admin systems, agent portals, and third-party data services as well as preconfigured integration with business intelligence environments are standard. Preconfigured interfaces with external predictive scoring models are available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include natively calculated predictive scores.

#### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution. The solution supports mass-produced documents (e.g., statements) and ad hoc documents (e.g., correspondence, manuscripted policies).

The suite includes pre-packaged, pre-built forms, libraries, and templates from ACORD. The primary authoring environment is a custom environment, MS Word, Adobe Creative Suite, or a non-Microsoft/Adobe solution. Content, schema mapping, and data sources are designed to be managed by technical resources; business rules are maintained by the average business user.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is available with configuration via tools for IT analysts or BAs. Clients must use the solution's built-in toolset for document authoring and content management workflow.

A content repository, content management tools, and archival capabilities for all documents generated are standard. The solution supports industry-standard schemas for ACORD XML, ebXML, and XBRL out of the box.

#### **Agent Portal Functions**

AgenTree is part of the suite and is not sold as a stand-alone agent portal.

P/C portal functionality like new business entry/submission, account clearance, quick quote, integration and pre-fill with data services, policy change entry/submission, online payment, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, proposal creation, ACORD application creation, side-by-side quote comparison, agency management system upload, underwriter view and/or tools, agent/underwriter collaboration, and a rating engine are standard.

Account or client view in addition to policy view is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include uploading/importing data from Excel (e.g., locations, cars, drivers). Document creation; file attachment support; scheduling, diary, and calendar functions; workflow and task management capabilities; business intelligence and reporting; and a consumer portal are available out of the box. Support for e-signature is available with configuration via developer tools, XML manipulation, or a scripting language.

#### **Reinsurance Functions**

Reinsurance is integral to the suite and is not marketed as a stand-alone solution.

Ceded reinsurance management functions like the manual entry and tracking of cessions, reserves, and limits; automated notification if a reserve reaches a specific amount or treaties approach set limits; and automated identification/calculation of accounts with applicable reinsurance are available out of the box.

Assumed reinsurance management functions like the manual entry and tracking of assumed reinsurance contracts, automated assumed reinsurance calculations based on reinsured data feeds/connections, and retrocession reinsurance management are available out of the box.

Treaty management, facultative management, proportional support, non-proportional/excess of loss, multiple basis types (risks attaching, losses occurring, and claims made), and retroactively processing late placements or midterm contract changes are standard contract management functions. Configuration of contract rules, formulas, and types are available with configuration via developer tools, XML manipulation, or a scripting language.

Interfaces for manual entry of contracts, for manual flagging of premiums and claims subject to reinsurance, and for review and approval of assumed policies as part of facultative contracts are available out of the box.

Batch file import/export for integration to other systems, real-time data intake from core systems (PAS, claims) via API or another mechanism, real-time integration to an underwriting system (e.g., to display limits/reserves), and integration between other insurer/reinsurer systems are available with configuration via developer tools, XML manipulation, or a scripting language.

Statutory and regulatory reporting, a standard library of canned reports, automated Schedule F reporting, automated bordereau reporting, and ad hoc reporting are all standard functions. Integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc. are available via out-of-the-box integration to a third-party system or service.

Automated recoverable claims identification and the ability to view the full history and status of claims and claim recovery are available out of the box. Tracking reinsurance payables and receivables, entity management (CRM), document management and storage of the actual contracts, and audit trail for all transactions are standard. Multi-currency support and multi-language support are available with configuration via tools for IT analysts or BAs.

#### **Business Intelligence Functions**

Business intelligence functions are integral to the suite and are not marketed as a stand-alone solution. The BI component offers customizable, real-time management/statutory reporting business intelligence.

The solution includes an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes; a presentation/reporting component; standard predefined reports and predefined insurance dashboards; an ad hoc reporting tool; and data mining and analytics tools. The solution supports data movement via batch ETL.

# **Billing Functions**

Billing is integral to the suite and is not marketed as a stand-alone solution. Payment and billing plan configurability is available with configuration via developer tools, XML manipulation, or a scripting language. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available out of the box with no configuration necessary
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available with configuration using developer tools, XML
management:	manipulation, or a scripting language
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Available with configuration using developer tools, XML
	manipulation, or a scripting language
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Available with configuration using developer tools, XML
reporting	manipulation, or a scripting language
Pay-as-you-report for workers' comp:	Available out of the box with no configuration necessary
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available out of the box with no configuration necessary
Billing for non-premium receivables (such	Available out of the box with no configuration necessary
as claims deductibles paid):	
Payment of non-refund payables (such as	Available out of the box with no configuration necessary
policy dividends or mutual dividends):	
Multi-currency support in a single instance	Yes
of the application:	

#### **Claims Functions**

Claims is integral to the suite and is not marketed as a stand-alone solution.

#### **Adjudication**

Injury detail maintenance (coding), automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard functions. Medical case management and disability management are available with configuration via developer tools, XML manipulation, or a scripting language.

#### Catastrophe

Catastrophe definition, automatic identification of catastrophe claims, attaching multiple LOBs and multiple causes of loss to a single catastrophe, and mapping tools are standard.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) are all standard. OFAC checking is available via out-of-the-box integration to a third-party system or service.

#### **Documents**

Image and media management, a correspondence or forms library, state-specific claims reporting templates, document rendering, a content repository and content management tools, and multi-channel delivery and output of documents (e.g., PDF, email, web, and print) are standard functions.

#### **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; handling of FROI/SROI EDI reporting; mobile and smart device input; claim characteristics scoring (to calculate alerts, trigger workflow, assign a claims handler, or otherwise segment the claim); claimant contact management data capture; and checking for duplicate claims are standard functions. Scripting for claims intake with reflexive questioning and custom question sets that prompt additional, mandatory questions depending on given answers (branch scripting) are available with configuration via developer tools, XML manipulation, or a scripting language. Integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) is available via out-of-the-box integration to a third-party system or service.

#### **Fraud**

The provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims is standard. Configurable business rules and tasks (specific to fraud and special investigations) are available with configuration via developer tools, XML manipulation, or a scripting language.

#### Litigation

Litigation process tracking, including negotiation details and litigation costs, and creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management are standard functions.

#### **Multi-Channel**

An agent portal with self-service and a policyholder portal with self-service are standard functions. E-signature, call center integration for FNOL via telephony, and call center integration for claims status check via telephony are available via out-of-the-box integration to a third-party system or service.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, and assignment to facultative arrangements are standard functions.

#### Reporting

Standard reporting of claims performance monitoring, including claims handling, and high-risk indicators such as fatality, large losses, and fraud; standard reporting of configurable metrics for claims reporting; ad hoc reports; and dashboards are standard. Reporting that includes jurisdiction-specific reports/forms and electronic reporting/automated state filings are available with configuration via developer tools, XML manipulation, or a scripting language.

## Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; subrogation billing and the production of correct GL entries; granular tracking of reserves and payments; automatic reserve calculations using business rules and risk characteristics; direct, case, average, factor, and expense reserve types; and jurisdictional wage and rate calculations integrated for workers' compensation are standard functions.

## **Vendor Management**

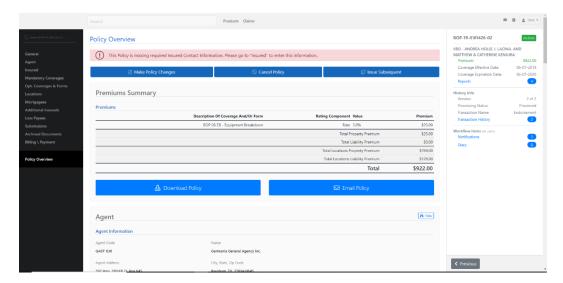
Vendor management functions and processing required forms (including 1099s) are standard.

#### Workflow

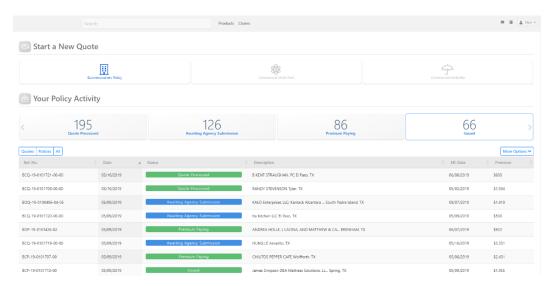
Automated workflow/task generation; overriding automated processes and manually triggering workflow processes; generating notes, diaries, and reminders; inclusion of external documents (letters and pictures) in file notes; assigning multiple adjusters to a single claim; compliance with Document Repository Interface (DRI) standards; and processing claim workflow trigger (CWT) files at insurer-defined intervals are standard functions. Automatic work assignments based on configurable rules and full integration with electronic court filings (ECF2) are available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include OCR-triggered workflow.

# **Screenshots**

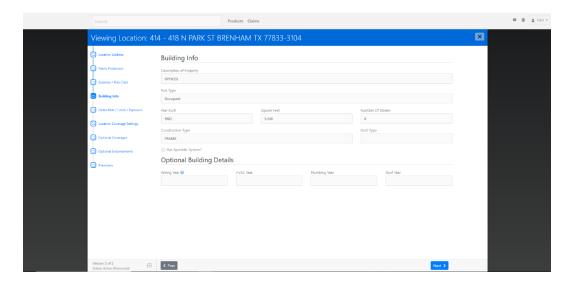
**UI Policy Overview** 



# Sample Agent Dashboard

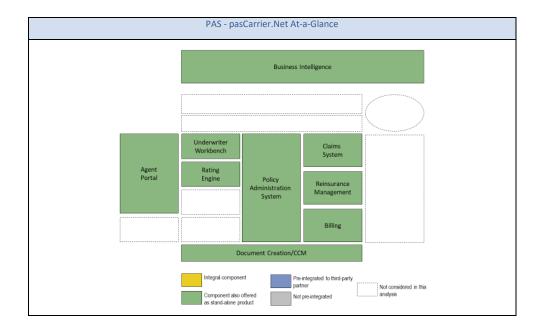


## Unit-at-Risk Modal View



# Policy Administration Solutions - pasCarrier.Net Executive Summary

- Policy Administration Solutions (PAS) is privately owned by Peter Pantelides, president and CEO. The company has headquarters in Westchester, NY and employs 53 people. Its annual revenue is in the range of \$5M-\$10M.
- pasCarrier.Net is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent and customer portals, reinsurance, business intelligence, billing, and claims components.
- It currently has 19 live US/Canadian insurer clients using the suite, most of which are smaller companies (under \$1B) using the solution to support a mix of personal and commercial lines.
- Publicly announced clients include Public Service Mutual; Hudson Insurance; Progressive, CY;
   Paramount Insurance; and AXA XL.
- The solution is browser-based for all user interface functions. It is written primarily in .NET/VB.NET with some Java.
- Configuration for insurance products, workflows, rules, and document authoring is via tools
  intended for BAs and non-IT staff. Configuration for screens and integration to third-party
  service calls is not available; changes are done by the vendor.
- Implementation is available through the company's own resources. The company deploys
  pasCarrier.Net on-prem and hosted at a private/managed data center. The company offers a
  SaaS delivery model that includes hosting, license, maintenance and support, ongoing access
  to the latest version, and the implementation of upgrades.
- The company reports that the average time to go-live is 180 days or less and that the average implementation cost is \$100K-\$500K.



# **Lines of Business Supported**

Personal auto:	Live clients offering this product in 2-9 US states
Homeowners:	Live clients offering this product in 2-9 US states
Personal umbrella:	Live clients offering this product in all 50 US states
Dwelling fire:	Live clients offering this product in 2-9 US states
Boatowners:	Live clients offering this product in 2-9 US states
Personal package:	Live clients offering this product in 2-9 US states
Commercial property:	Live clients offering this product in 2-9 US states
General liability:	Live clients offering this product in 2-9 US states
BOP:	Live clients offering this product in 10-49 US states
Commercial crime:	Live clients offering this product in 2-9 US states
Commercial auto:	Live clients offering this product in 10-49 US states
E&O/D&O:	Live clients offering this product in all 50 US states
Inland marine:	Live clients offering this product in 2-9 US states
Professional liability (including medical malpractice):	Live clients offering this product in all 50 US states
Commercial package:	Live clients offering this product in 2-9 US states
Specialty:	Live clients offering this product in 2-9 US states
Workers' comp:	Live clients offering this product in all 50 US states
Surety:	Live clients offering this product in all 50 US states
Other personal lines*:	Live clients offering this product in all 50 US states
Other commercial lines†:	Live clients offering this product in 2-9 US states

<sup>\*</sup> Other personal lines include umbrella, excess umbrella, farm, excess farm, CPL, and excess CPL.

# **Client Base**

Globally, PAS has 24 clients live on pasCarrier.Net, 21 of which are insurer clients (i.e., not MGAs, self-insureds). There are 19 insurer clients in the US and Canada, most of which are smaller companies (under \$1B) using the solution to support a mix of personal and commercial lines. Most of the clients use the solution as a stand-alone system (rather than as part of a suite).

Publicly announced clients include Public Service Mutual; Hudson Insurance; Progressive, CY; Paramount Insurance; and AXA XL.

<sup>†</sup> Other commercial lines include subcontractor default.

# **Key Functions and Differentiators**

PAS cites the key functions of pasCarrier.Net as:

- English-based rating engine, which supports all LOBs and has its own UI for defining rates, rules, and actions
- Rating, underwriting eligibility, and workflow
- Agent portal
- Agency and direct bill functions as well as claims offering
- Predictive modeling and an AI component

The company cites as key differentiators its rating and underwriting engines; its web portal (MVC, HTML5, jQuery); that pasCarrier.Net is a complete solution with stand-alone components; policy, claims, billing, and collections; as well as its agent and insured portals, BI, and reinsurance components.

# **Solution Architecture and History**

pasCarrier.Net launched in 1998 and was re-architected in 2009. The latest release was in 2020. PAS reports that all of its customers are on the latest version and have been through at least one upgrade.

The solution supports Oracle, Microsoft SQL Server, and DB2 on AS/400 databases as well as UNIX/Linux and Windows server platforms. The solution is written primarily in .NET/VB.NET with some Java.

# **APIs and Integration**

The solution provides REST and SOAP APIs. For all submission, quote, and policy functionality provided by pasCarrier.Net, APIs are provided so the user has the choice of using the pasCarrier.Net UI or using any other UI and moving the data to pastCarrier.Net using existing APIs.

## **Configurability and User Interface**

pasCarrier.Net is browser-based for all user interface functions.

Configuration for insurance products, workflows, rules, and document authoring is via tools intended for BAs and non-IT staff. Configuration for screens and integration to third-party service calls is not available; changes are done by the vendor.

# **Deployment Options**

PAS offers the solution on-prem and hosted at a private/managed data center. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades. The SaaS version is hosted on MS Azure or at Cohere Communications, an independent co-location that is SAS level II certified. The hosted solution is a single-tenant app server and database.

# **Average Implementation Length and Cost**

PAS implements the solution through the company's own resources. It reports that pasCarrier.Net can be ready for initial go-live in 180 days or less and fully rolled out in an additional nine months or less. The company reports that the average implementation cost of license plus implementation services for the middle 50% of customers is \$100K-\$500K.

## **Support**

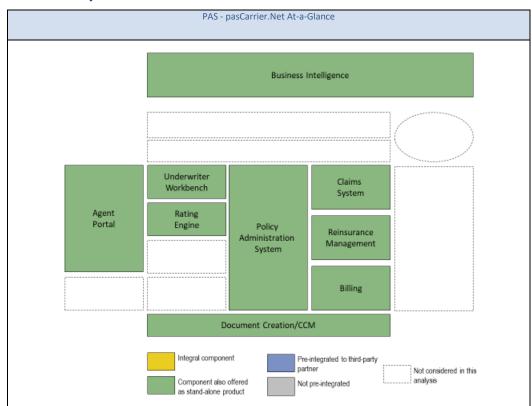
Of the 53 people employed at PAS, there are two admin staff, five project managers, seven business analysts, five help desk employees, and 33 software engineers. Support resources are located in New York and New Jersey.

PAS offers customer engagement activities such as an online community, online training, a customer advisory committee, and training seminars.

# **Systems Integrator and Other Partners**

Publicly announced technology partnerships include Oracle, Microsoft, Objecutive, and Info724.

# **Functionality**



#### **Policy Administration Functions**

The solution includes policy issue, premium accounting, out-of-sequence endorsement, bordereaux import, forms management, and manuscripted policies out of the box.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

#### **Rating Functions**

pasRater.Net is part of the suite and is also sold as a stand-alone rating engine.

Core rating functions like quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are standard.

Compliance and change control functions like versioning and update management, change control functions, and auditability of rate versioning are standard. An application and forms library with standard and customizable applications and forms is available out of the box. Integration functions like download to agency management systems and pre-integration to third-party data providers are standard.

ISO rates/rules support, NCCI/Bureau of Workers' Comp rates/rules support, and ISO-formatted statistical data are standard functions. The solution does not currently include ISO ERC integration. Setting insurer-specific defaults and multi-carrier comparison are standard. Product design and development tools are available out of the box.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are standard. Testing, modeling, and product analysis are standard functions. Displacement testing (i.e., the ability to run existing book of business through proposed rate/product changes to determine impact) is available with configuration via developer tools, XML manipulation, or a scripting language.

#### **Underwriter Workbench Functions**

pasRater.Net is integral to the suite and is also marketed as a stand-alone solution.

Uploading/importing the submission data from a structured data feed and uploading/importing the submission information from documents (OCR-like functionality) are standard functions. Support for new business transactions/underwriting, policy change transactions/underwriting, non-renewal transactions, cancellation transactions, and underwriting multiple submissions as one work portfolio is standard. Support for renewal transactions/underwriting is available with configuration via simple tools targeted for IT analysts or BAs.

The ability to combine individual quotes for different lines into a single proposal; capturing underwriting analysis; capturing an underwriter's loss analysis; underwriter checklists that can validate information and process completeness; submission rating; pricing analysis and scheduled rating information; and providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are standard functions. Document creation (proposals, applications, correspondence) and document storage are standard.

A rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); a rules engine that interfaces to conditionally order specific

data; inline reports/dashboards on tasks/work/work status; inline reports/dashboards to support underwriting analysis; and displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) are standard functions.

IM collaboration, proposal co-authoring, and screen sharing with other underwriters as well as agent-facing capabilities are standard. Support for variable binding/approval authority by role and support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) are standard.

Preconfigured interfaces with policy admin systems, agent portals, third-party data services, and external predictive scoring models as well as preconfigured integration with business intelligence environments and natively calculated predictive scores are standard.

#### **Document Functions**

pasCE.Net is part of the suite and is also sold as a stand-alone document creator.

The solution supports mass-produced documents (e.g., statements) and ad hoc documents (e.g., correspondence, manuscripted policies).

The suite includes pre-packaged, pre-built forms, libraries, and templates from ACORD and ISO. The primary authoring environment is MS Word or Adobe Creative Suite. Content and business rules are designed to be managed by the average business user; schema mapping and data sources are maintained by technical resources. The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is available out of the box. Clients must use the solution's built-in toolset for document authoring and content management workflow.

A content repository, content management tools, and archival capabilities for all generated documents are standard. The solution supports industry-standard schemas like ACORD XML out of the box.

#### **Agent Portal Functions**

pasAgentPortal.Net is integral to the suite and is also marketed as a stand-alone solution.

New business entry/submission, account clearance, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, integration and pre-fill with data services, policy change entry/submission, online payment, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, proposal creation, ACORD application creation, side-by-side quote comparison, agency management system upload, account or client view (in addition to a policy view), underwriter view and/or tools, agent/underwriter collaboration, and a rating engine are standard functions.

E-signature; document creation; file attachment support; workflow and task management capabilities; business intelligence and reporting; a consumer portal; and scheduling, diary, and calendar functions are available out of the box.

#### **Reinsurance Functions**

pasRe.Net is part of the suite and is also sold as a stand-alone reinsurance component.

Ceded reinsurance management functions like automated notifications if a reserve reaches a specific amount or treaties approach set limits; automated identification/calculation of accounts with applicable reinsurance; and the manual entry and tracking of cessions, reserves, and limits are standard. Assumed reinsurance management functions like the manual entry and tracking of assumed reinsurance contracts, automated assumed reinsurance calculations based on reinsured data feeds/connections, and retrocession reinsurance management are standard.

Treaty management; facultative management; proportional support; non-proportional/excess of loss; multiple basis types (risks attaching, losses occurring, and claims made); retroactive processing of late placements or mid-term contract changes; and the configuration of contract rules, formulas, and types are standard functions. End-user interfaces for manual entry of contracts, for manual flagging of premiums and claims subject to reinsurance, and for review and approval of assumed policies as part of facultative contracts are standard.

Batch file import/export for integration to other systems, real-time data intake from core systems (e.g., PAS, claims) via API or another mechanism, real-time integration to an underwriting system (e.g., to display limits/reserves), and integration between other insurer/reinsurer systems are available out of the box.

Statutory and regulatory reporting; a standard library of canned reports; automated Schedule F reporting; automated bordereau reporting; ad hoc reporting; and integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc. are standard functions. Out-of-the-box claim management functions include automated recoverable claims identification and viewing the full history and status of claims and claim recovery. Tracking reinsurance payables and receivables, entity management (CRM), document management and storage of the actual contracts, multi-currency support, and an audit trail for all transactions are standard. The solution does not currently include multi-language support.

#### **Business Intelligence Functions**

pasExecutive.Net is part of the suite and is also sold as a stand-alone business intelligence component. The solution includes data warehouse, data models, and support for drill-down analysis and management, as well as user-defined and predefined reporting tools. It supports ISO reporting for all lines of business and products along with NCCI reporting for NCCI and independent states.

The solution includes tools to support data governance, dictionaries, quality, and validation; an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes; a data lake to support schema on read and unstructured data; a presentation/reporting component; standard predefined reports and predefined insurance dashboards; an ad hoc reporting tool; and data mining and analytics tools.

PAS reports that clients are not required to use its insurance data model and databases; they can export data to any existing structure they may use and use any tool to report on that data.

The solution supports real-time streaming data movement (e.g., use of Kafka).

# **Billing Functions**

pasBilling.Net is part of the suite and is also sold as a stand-alone billing component. Payment and billing plan configurability are standard. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available out of the box with no configuration necessary
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Available out of the box with no configuration necessary
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Available out of the box with no configuration necessary
reporting	
Pay-as-you-report for workers' comp:	Available out of the box with no configuration necessary
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available out of the box with no configuration necessary
Billing for non-premium receivables (such	Available out of the box with no configuration necessary
as claims deductibles paid):	
Payment of non-refund payables (such as	Available out of the box with no configuration necessary
policy dividends or mutual dividends):	-
Multi-currency support in a single instance	No

#### **Claims Functions**

pasClaims. Net is part of the suite and is also sold as a stand-alone claims component.

#### **Adjudication**

Medical case management, injury detail maintenance (coding), disability management, automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard functions.

#### Catastrophe

Catastrophe definition, automatic identification of catastrophe claims, attaching multiple LOBs and multiple causes of loss to a single catastrophe, and mapping tools are standard functions.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) are standard functions. The solution does not currently include OFAC checking.

#### **Documents**

Image and media management, a correspondence or forms library, state-specific claims reporting templates, document rendering, a content repository and content management tools, and multi-channel document output/delivery (e.g., PDF, email, web, print) are standard.

#### **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; handling of FROI/SROI EDI reporting; scripting for claims intake with reflexive questioning; custom question sets that prompt additional, mandatory questions depending on given answers (branch scripting); claim characteristics scoring (to calculate alerts, trigger workflow, assign a claims handler, or otherwise segment the claim); claimant contact management data capture; and checking for duplicate claims are standard functions. The solution does not currently include mobile and smart device input or integration with external vendors and services (e.g., car rental companies, car/equipment repair shops).

#### Fraud

Configurable business rules and tasks (specific to fraud and special investigations) and the provision of multiple search and reporting criteria for fraud detection (via the ability to track common clients across multiple claims) are standard.

## Litigation

Litigation process tracking, including negotiation details and litigation costs, and creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management are standard functions.

# **Multi-Channel**

E-signature, an agent portal with self-service, and a policyholder portal with self-service are standard. The solution does not currently include call center integration for FNOL via telephony or call center integration for claims status check via telephony.

## Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, and assignment to facultative arrangements are standard functions.

#### Reporting

Standard reporting of claims performance monitoring (including claims handling and high-risk indicators, e.g., fatality, large losses, fraud), standard reporting of configurable metrics for claims reporting, ad hoc reports, dashboards, reporting that includes jurisdiction-specific reports and forms, and electronic reporting or automated state filings are standard functions.

## Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; subrogation billing and the production of correct GL entries; granular tracking of reserves and payments; automatic reserve calculations using business rules and risk characteristics; direct, case, average, factor, and expense reserve types; and jurisdictional wage and rate calculations integrated for workers' comp are standard functions.

## **Vendor Management**

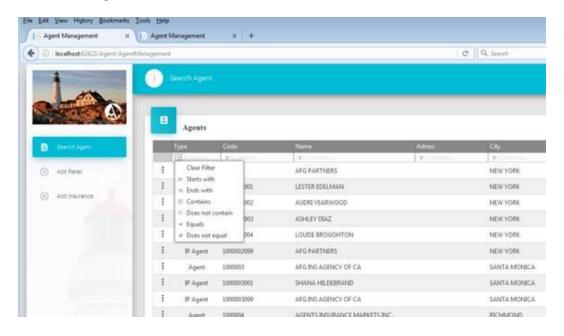
Vendor management functions and processing required forms (including 1099s) are standard.

#### Workflow

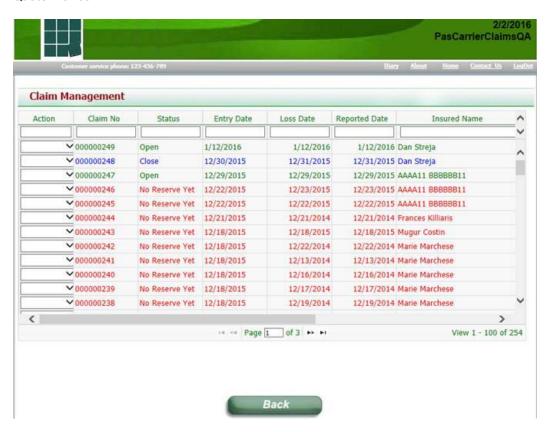
Automated workflow/task generation; OCR-triggered workflow; overriding automated processes and manually triggering workflow processes; automatic work assignment based on configurable rules; generating notes, diaries, and reminders; inclusion of external documents (e.g., letters, pictures) in file notes; assigning multiple adjusters to a single claim; compliance with the Document Repository Interface (DRI) standards; and processing claim workflow trigger (CWT) files at insurer-defined intervals are standard functions. The solution does not currently include full integration with electronic court filings (ECF2).

## **Screenshots**

Print Screen—Agent Portal



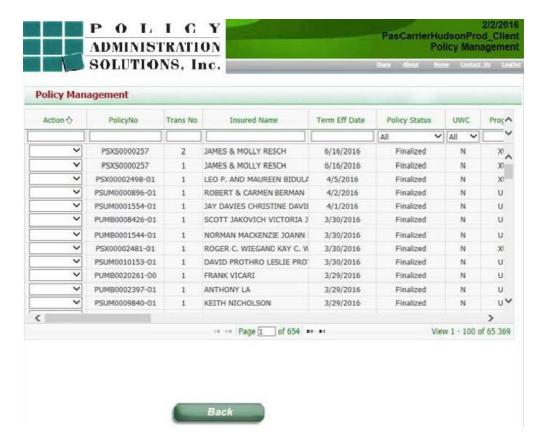
#### **Quote Browse**



Policy Browse



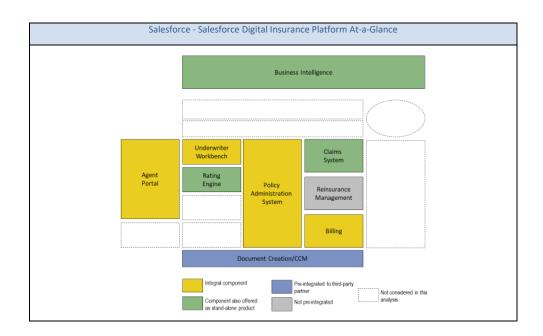
#### Claim Browse



## Salesforce - Salesforce Digital Insurance Platform

## **Executive Summary**

- Salesforce (NYSE: CRM) is a global provider of customer relationship management software
  founded in 1999. The company reports that it enables companies of every size and industry
  to take advantage of technologies including cloud, mobile, social, IoT, AI, voice, and
  blockchain to create a 360-degree view of their customers. The company has headquarters
  in San Francisco, CA and employs 50,000 people. Its annual revenue is over \$10B.
- Salesforce Digital Insurance Platform is an integrated suite of solutions that includes core
  policy features, rating, underwriter workbench, an agent portal, business intelligence, billing,
  and claims components.
- Salesforce does not disclose client information.
- Publicly announced clients include Ascot US, Liberty Mutual, MetLife, Movinx (by Swiss Re and Daimler Insurance Services), and New York Life Seguros Monterey.
- The solution is browser-based for all user interface functions. It is written in Salesforce Apex with some JavaScript for the UX Lightning web component layer.
- Configuration for insurance products, workflow, and rules is via simple tools targeted for BAs
  and non-IT staff. Configuration for screens, integration to third-party service calls, and
  document authoring is via simple tools targeted for IT analysts.
- Implementation is available through the company's own resources or a partner. The solution
  is deployed on Salesforce's own cloud. The company offers a SaaS delivery model that
  includes hosting, license, maintenance and support, ongoing access to the latest version, and
  the implementation of upgrades.
- The company reports that the average time to go-live varies according to complexity; it may
  range from one to two months for a simple pilot to nine months for a complex project.
   Salesforce does not disclose financials such as implementation cost.



## **Lines of Business Supported**

Personal auto:	Clients currently in implementation for this line/product
Homeowners:	Clients currently in implementation for this line/product
Personal umbrella:	Solution is designed to support, but no clients live or implementing
Dwelling fire:	Clients currently in implementation for this line/product
Boatowners:	Clients currently in implementation for this line/product
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Live clients offering this product in 2-9 US states
General liability:	Live clients offering this product in 2-9 US states
BOP:	Live clients offering this product in 2-9 US states
Commercial crime:	Live clients offering this product in 2-9 US states
Commercial auto:	Live clients offering this product in 2-9 US states
E&O/D&O:	Live clients offering this product in 2-9 US states
Inland marine:	Live clients offering this product in 2-9 US states
Professional liability (including medical malpractice):	Solution is designed to support, but no clients live or implementing
Commercial package:	Live clients offering this product in 2-9 US states
Specialty:	Live clients offering this product in 2-9 US states
Workers' comp:	Solution is designed to support, but no clients live or implementing
Surety:	Solution is designed to support, but no clients live or implementing
Other personal lines:	Not available
Other commercial lines:	Not available

## **Client Base**

Salesforce does not disclose client information.

Publicly announced clients include Ascot US, Liberty Mutual, MetLife, Movinx (by Swiss Re and Daimler Insurance Services), and New York Life Seguros Monterrey.

## **Key Functions and Differentiators**

Salesforce cites the key functions of Salesforce Digital Insurance Platform as:

- New business rating, quoting, and underwriting
- Policy administration and billing
- Claims management
- Omni-channel service
- Customer and business intelligence

The company cites as a key differentiator its customer-centric digital capabilities that help insurers and MGAs transform their ability to compete. These include tightly integrated core-to-digital processes that let users rapidly configure products without code and provide customers and those serving them with modern, omni-channel experiences; seamless integration with Salesforce's CRM capabilities and analytics that let insurers act on real-time customer 360 insights, tailor solutions, and automate end-to-end customer and agent journeys; and a cloud-native design that delivers fast customer value, high scalability and security, low overall cost of ownership, and rapid delivery of new functionality with three automatic major releases per year.

## **Solution Architecture and History**

Salesforce Digital Insurance Platform launched in 2018 as Vlocity; the latest version was released in February 2021. Salesforce reports that all of its customers are on the latest version and that 90% have been through at least one upgrade. The solution is hosted on Salesforce Cloud. It is written primarily in Salesforce Apex, with JavaScript used for the UX Lightning web component layer.

## **APIs and Integration**

The solution provides REST and SOAP APIs.

## **Configurability and User Interface**

Salesforce Digital Insurance Platform is browser-based for all user interface functions.

Configuration for insurance products, workflows, and rules is via simple tools targeted for BAs and non-IT staff. Configuration for screens, integration to third-party service calls, and document authoring is via simple tools targeted for IT analysts.

#### **Deployment Options**

The solution is deployed on Salesforce Cloud. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades. The hosted solution is a multi-tenant app server and database.

## Average Implementation Length and Cost

Salesforce implements the solution through the company's own resources or an SI partner. The company reports that the average time to go-live varies according to complexity; it may range from one to two months for a simple pilot to nine months for a complex project. Salesforce does not disclose financials such as implementation cost.

## **Support**

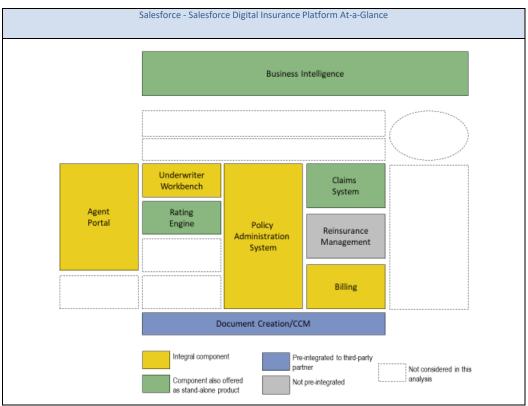
Salesforce does not disclose employee statistics such as departmental breakdown.

Salesforce offers customer engagement activities such as an online community, online training, a customer advisory committee, a user event, and training seminars.

## **Systems Integrator and Other Partners**

Publicly announced technology partnerships include DocuSign, Smart Communications, One Inc., LexisNexis, and NTT DATA. Publicly announced SI partnerships include Accenture, Deloitte, Cognizant, IBM, and Silverline.

## **Functionality**



#### **Policy Administration Functions**

The solution includes policy issue and out-of-sequence endorsement out of the box. Manuscripted policies are available with configuration using simple tools targeted for IT analysts or BAs. Currently, the solution does not include premium accounting, bordereaux import, or forms management.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

#### **Rating Functions**

Rating functionality is integral to the platform. Salesforce notes that it can also be licensed separately by customers through the Quote, Rate, & Apply module.

Core rating functions like quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are standard.

Compliance and change control functions like versioning and update management, change control functions, and auditability of rate versioning are standard. An application and forms library with standard and customizable applications and forms is not currently available.

Integration functions like pre-integration to third-party data providers are available with configuration using simple tools targeted for IT analysts or BAs. Currently, the solution does not include download to agency management systems.

Currently, the solution does not include ISO rates/rules support, NCCI/Bureau of Workers' Comp rates/rules support, ISO-formatted statistical data, or ISO ERC integration. Setting insurer-specific defaults and multi-carrier comparison are available with configuration using simple tools targeted for IT analysts or BAs. Saving/storing an in-process or completed policy change is standard. Product design and development tools are available out of the box.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are standard. Testing, modeling, and product analysis as well as displacement testing (i.e., the ability to run existing book of business through proposed rate/product changes to determine impact) are available with configuration using simple tools targeted for IT analysts or BAs.

## **Underwriter Workbench Functions**

Underwriter workbench functionality is integral to the platform and not marketed as a standalone solution.

Uploading/importing the submission data from a structured data feed and uploading/importing the submission information from documents (OCR-like functionality) are available with configuration using simple tools targeted for IT analysts or BAs.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, and cancellation transactions is available with configuration using simple tools targeted for IT analysts or BAs. Underwriting multiple submissions as one work portfolio and allowing individual quotes for different lines to be combined into a single proposal are available out of the box.

Capturing underwriting analysis and providing a single current and historical view of the insured's account across the enterprise, lines of business, and policy systems are available out of the box with no configuration necessary.

Capturing an underwriter's loss analysis, underwriter checklists that can validate information and process completeness, submission rating, pricing analysis and scheduled rating information are available with configuration using simple tools targeted for IT analysts or BAs.

Document creation (proposals, applications, correspondence) is also available with configuration using simple tools targeted for IT analysts or BAs. Document storage is standard.

A rules engine that automatically applies underwriting, workflow, and general business rules is standard. Workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries), a rules engine that interfaces to conditionally order specific data, inline reports/dashboards on tasks/work/work status, and inline reports/dashboards to support underwriting analysis are available with configuration using simple tools targeted for IT analysts or BAs.

Displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) is available via out-of-the-box integration to a third-party system or service.

IM collaboration and proposal co-authoring with other underwriters are available with configuration using simple tools targeted for IT analysts or BAs. Currently, the solution does not support screen sharing with other underwriters. Agent-facing capabilities are standard.

Support for variable binding/approval authority by role and support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) are available with configuration using simple tools targeted for IT analysts or BAs.

Preconfigured interfaces with policy admin systems, agent portals, and third-party data services; preconfigured integration with business intelligence environments; and natively calculated predictive scores are available with configuration using simple tools targeted for IT analysts or BAs. Preconfigured interfaces with external predictive scoring models are available through low-code integration to other systems.

## **Document Functions**

Salesforce partners with Smart Communications for insurance document management as well as with DocuSign for e-signature.

#### **Agent Portal Functions**

An agent portal is integral to the platform. Salesforce notes that portals and mobile applications for external agents, brokers, and policyholders are also offered and can be independently deployed.

Uploading/importing data from Excel (e.g., locations, cars, drivers), policy transaction history inquiry, billing inquiry, claims inquiry, side-by-side quote comparison, agency management system upload, account or client view in addition to a policy view, underwriter view and/or tools, and a rating engine are all available out of the box with no configuration necessary.

New business entry/submission, account clearance, quick quote, integration and pre-fill with data services, policy change entry/submission, renewal quote entry/submission, policy inquiry, proposal creation, and agent/underwriter collaboration are all available with configuration using simple tools targeted for IT analysts or BAs. Online payment and ACORD application creation are supported by low-code integration.

File attachment support and a consumer portal are available out of the box with no configuration necessary. E-signature, document creation, workflow and task management capabilities, and business intelligence and reporting are available with configuration using simple tools targeted for IT analysts or BAs. Currently, the solution does not include scheduling, diary, or calendar functions out of the box; however, calendar integration is supported by Service Cloud.

#### **Reinsurance Functions**

Salesforce notes that adding reinsurance functionality is planned; it also supports low-code integration with third-party solutions where needed.

## **Business Intelligence Functions**

Salesforce notes that business intelligence dashboards and reporting functionality are provided as part of the platform. Customers can also license Tableau CRM for detailed configurable visualization of their data. Salesforce asserts that Tableau CRM (formerly Einstein Analytics) provides visual analytics and AI to help business users discover opportunities, project future trends, and proactively respond to business challenges.

The solution includes tools to support data governance, dictionaries, quality, and validation; an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes; a data lake to support schema on read and unstructured data; a presenation/reporting component; standard predefined reports and predefined insurance dashboards; an ad hoc reporting tool; and data mining and analytics tools.

The solution leverages a scalable, cloud-based MPP solution, Big Objects, and it supports real-time streaming data movement (e.g., use of Kafka).

## **Billing Functions**

Salesforce notes that billing features to manage payment plans, payment scheduling, and transactions resulting from policy activity are integrated with the platform. Additional features for reconciliation, AR, and collections are available through Revenue Cloud.

Payment and billing plan configurability is available with simple tools targeted for IT analysts or BAs. The table below shows the availability of other billing functions.

Direct bill:	Available with configuration using simple tools targeted for IT analysts or BAs
Agency bill:	Currently not available, but could be available with integration to another system or service
Account or list bill:	Available with configuration using simple tools targeted for IT analysts or BAs
Third-party (i.e., mortgagee) bill:	Available with configuration using simple tools targeted for IT analysts or BAs

Split or multi-payer bill:	Currently not available, but could be available with integration to another system or service
Flexible and configurable payment plans:	Available with configuration using simple tools targeted for IT analysts or BAs
Support for flexible payment types (e.g., payment card, check, EFT, payroll deduction):	Available with configuration using simple tools targeted for IT analysts or BAs
Automated rules for payment application and disbursements:	Available with configuration using simple tools targeted for IT analysts or BAs
Real-time account and payment calculation, scheduling, recalculation, and rescheduling:	Available with configuration using simple tools targeted for IT analysts or BAs
Commission calculation and payment:	Under development and will be available in less than six months
Collections activities and interfaces:	Currently not available, but could be available with integration to another system or service
Equity billing support:	Currently not available, but could be available with integration to another system or service
Automated workflow and task management:	Available with configuration using simple tools targeted for IT analysts or BAs
Electronic bill presentment:	Available with configuration using simple tools targeted for IT analysts or BAs
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available with configuration using simple tools targeted for IT analysts or BAs
Out-of-the-box integration with banks/credit card companies for token-based processing:	Yes
Payroll deduction:	Currently not available, but could be available with integration to another system or service
Billing dashboarding/reporting:	Available with configuration using simple tools targeted for IT analysts or BAs
Workers' compensation monthly self- reporting	Currently not available, but could be available with integration to another system or service
Pay-as-you-report for workers' comp:	Currently not available, but could be available with integration to another system or service
Invoice and correspondence:	Available with configuration using simple tools targeted for IT analysts or BAs
Check generation/production:	Currently not available, but could be available with integration to another system or service
Billing for non-premium receivables (such	Currently not available, but could be available with
as claims deductibles paid):	integration to another system or service
Payment of non-refund payables (such as policy dividends or mutual dividends):	Currently not available, but could be available with
	integration to another system or service

## **Claims Functions**

Claims functionality is part of the platform and is also sold as a stand-alone claims component.

#### **Adjudication**

Automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard functions. Medical case management, injury detail maintenance (coding), and disability management are available with configuration using simple tools targeted for IT analysts or BAs.

#### Catastrophe

Catastrophe definition is a standard function. Automatic identification of catastrophe claims, attaching multiple LOBs and multiple causes of loss to a single catastrophe, and mapping tools are available with configuration using simple tools targeted for IT analysts or BAs.

#### **Disbursements**

Calculating partial or one-off payments and accommodating multiple pay parties (e.g., garnishments) are available out of the box with no configuration necessary. Calculating and scheduling recurring payments, combining multiple pending payments for a single client into one disbursement, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) are available with configuration using simple tools targeted for IT analysts or BAs. Currently the solution does not include check processing or OFAC checking.

#### **Documents**

Image and media management, a correspondence or forms library, and state-specific claims reporting templates are available with configuration using simple tools targeted for IT analysts or BAs. Document rendering, a content repository and content management tools, and multichannel document output/delivery (e.g., PDF, email, web, print) are available via out-of-the-box integration with Smart Communications.

## **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; mobile and smart device input; scripting for claims intake with reflexive questioning; custom question sets that prompt additional, mandatory questions depending on given answers (branch scripting); and claimant contact management data capture are all standard functions. Handling of FROI/SROI EDI reporting, claim characteristics scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim), and checking for duplicate claims are all available with configuration using simple tools targeted for IT analysts or BAs. The solution does not currently include integration with external vendors and services (e.g., car rental companies, car/equipment repair shops).

## Fraud

Currently, the solution does not include configurable business rules and tasks (specific to fraud and special investigations) or the provision of multiple search and reporting criteria for fraud detection (via the ability to track common clients across multiple claims). Salesforce asserts that the platform supports low-code integration with fraud detection solutions and access to solutions on the Salesforce AppExchange. Fraud analytics are also provided through integration with Tableau.

## Litigation

Creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management is available with configuration using simple tools targeted for IT analysts or BAs. Currently, the solution does not include litigation tracking.

#### Multi-Channel

An agent portal with self-service and a policyholder portal with self-service are standard. Esignature, call center integration for FNOL via telephony, and call center integration for claims status check via telephony are available via out-of-the-box integration with DocuSign.

#### Reinsurance

Currently, the solution does not include reisurance functionality like identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, or assignment to facultative arrangements. Salesforce notes that adding reinsurance functionality is planned; it also supports low-code integration with third-party solutions where needed.

#### Reporting

Standard reporting of claims performance monitoring (including claims handling and high-risk indicators, e.g., fatality, large losses, fraud), standard reporting of configurable metrics for claims reporting, ad hoc reports, dashboards, reporting that includes jurisdiction-specific reports and forms, and electronic reporting or automated state filings are available with configuration using simple tools targeted for IT analysts or BAs.

#### Reserves, Recoveries, Subrogation

Granular tracking of reserves and payments is a standard function. Creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; subrogation billing and the production of correct GL entries; automatic reserve calculations using business rules and risk characteristics; direct, case, average, factor, and expense reserve types; and jurisdictional wage and rate calculations integrated for workers' comp are available with configuration using simple tools targeted for IT analysts or BAs.

#### **Vendor Management**

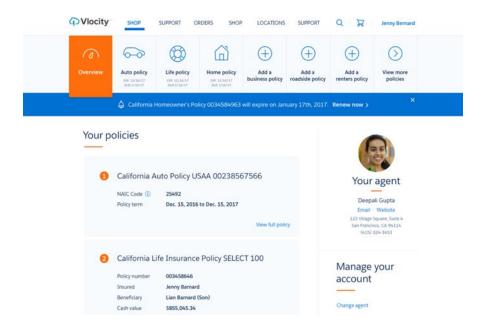
Vendor management functions and processing required forms (including 1099s) are available with configuration using simple tools targeted for IT analysts or BAs.

## Workflow

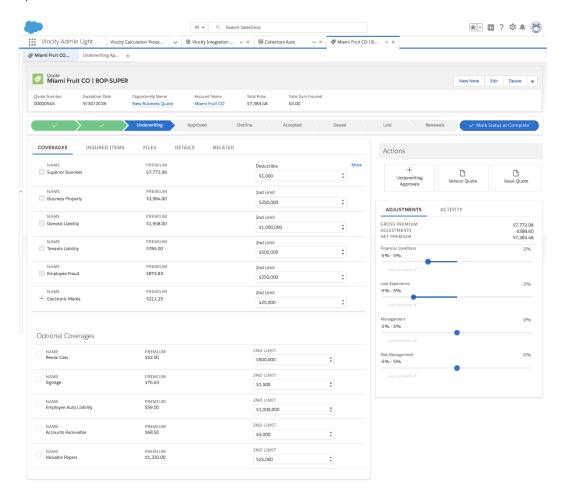
Automated workflow/task generation; OCR-triggered workflow; overriding automated processes and manually triggering workflow processes; automatic work assignment based on configurable rules; generating notes, diaries, and reminders; and inclusion of external documents (e.g., letters, pictures) in file notes are all standard functions. Assigning multiple adjusters to a single claim, compliance with the Document Repository Interface (DRI) standards, processing claim workflow trigger (CWT) files at insurer-defined intervals, and full integration with electronic court filings (ECF2) are available with configuration using simple tools targeted for IT analysts or BAs.

## **Screenshots**

P/C Policyholder Portal



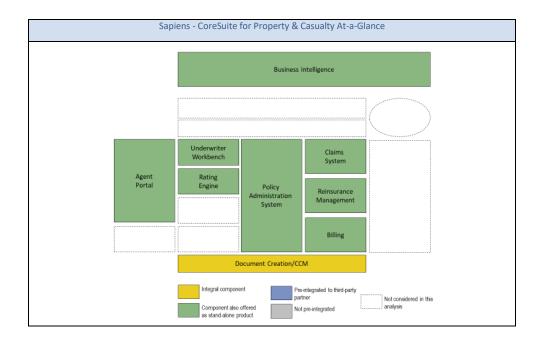
## P/C Underwriter Workbench



## Sapiens - CoreSuite for Property & Casualty

## **Executive Summary**

- Sapiens International Corporation (NASDAQ and TASE: SPNS) is a global provider of software solutions for the insurance industry with a 30-year track record of delivering to more than 600 organizations. The company offers software platforms, solutions, and services, including a full digital suite for the P/C, life/pension/annuities, and reinsurance markets.
- Sapiens has global headquarters in Holon, Israel and US headquarters in Raleigh, NC. It employs 4,000 people and has an annual revenue in the range of \$250M-\$500M.
- CoreSuite for Property & Casualty is a suite of solutions that currently includes core policy features, rating, underwriter workbench, agent portal, billing, claims, reinsurance, and business intelligence components.
- It currently has ten live US/Canadian insurer clients using the suite, most of which are larger companies (over \$1B) using the solution to support personal and commercial lines.
- Publicly announced clients include Travelers, Starr, Arch, Country Financial, and Canal Insurance.
- The solution is browser-based for all user interface functions. It is written in Java.
- Configuration for insurance products, screens, workflows, rules, and document authoring is
  via tools for BAs and non-IT staff. Configuration for integration to third-party service calls is
  via tools for IT analysts.
- Implementation is available through the company's own resources or a partner. Sapiens
  deploys the suite on-prem and hosted on AWS. The company offers a SaaS delivery model
  that includes hosting, license, maintenance and support, ongoing access to the latest
  version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is nine months or less and that the average implementation cost is \$1M-\$2M.



## **Lines of Business Supported**

Personal auto:	Live clients offering this product in all 50 US states
Homeowners:	Live clients offering this product in all 50 US states
Personal umbrella:	Live clients offering this product in all 50 US states
Dwelling fire:	Clients currently in implementation for this line/product
Boatowners:	Solution is designed to support, but no clients live or implementing
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Live clients offering this product in all 50 US states
General liability:	Live clients offering this product in all 50 US states
BOP:	Live clients offering this product in 10-49 US states
Commercial crime:	Live clients offering this product in all 50 US states
Commercial auto:	Live clients offering this product in 10-49 US states
E&O/D&O:	Live clients offering this product in all 50 US states
Inland marine:	Clients currently in implementation for this line/product
Professional liability (including medical malpractice):	Live clients offering this product in all 50 US states
Commercial package:	Live clients offering this product in 10-49 US states
Specialty:	Live clients offering this product in all 50 US states
Workers' comp:	Live clients offering this product in 10-49 US states
Surety:	Solution is designed to support, but no clients live or implementing
Other personal lines*:	Live clients offering this product in all 50 US states
Other commercial lines:	Solution is designed to support, but no clients live or implementing

<sup>\*</sup>Other personal lines include pet insurance.

## **Client Base**

Globally, Sapiens has ten clients live on CoreSuite for Property & Casualty, all of which are US/Canadian insurer clients (i.e., not MGAs, self-insureds, etc.). Most of these are large companies (over \$1B) using the solution to support personal and commercial lines.

Publicly announced clients include Travelers, Starr, Arch, Country Financial, and Canal Insurance.

## **Key Functions and Differentiators**

Sapiens cites the key functions of CoreSuite for Property & Casualty as:

- Business-oriented configuration capabilities that require no scripting or coding and support
   P/C insurance products, data capture, and application behavior
- Transactions that support rules-based features such as out-of-sequence processing, straightthrough renewal processing, and channel-specific rules
- Integration points that can be configured as needed within the application flow to extend the capabilities of CoreSuite without requiring code changes (even after upgrades)
- Automatic reconciliation and remediation of policy data against configured rules which can be applied to conversion, renewal, upload from third-party solutions, and policy changes
- Comprehensive rules management allowing for configuration of functions including user interface presentation rules, rating formulas and lookup tables, and system integrations

The company cites as its key differentiators business user configurability of the solution using a web user interface without requiring database changes or programming; seamless out-of-sequence endorsements, multi-quote comparisons, and versioning; functionality that includes business intelligence, document management, task manager, customer and producer portals, security, distribution, reinsurance, and more; rule governance features that enable parallel development, automated rule resequencing, and merging; and rapid deployment with out-of-the-box templates for lines of business.

## **Solution Architecture and History**

CoreSuite launched in 2002 and was re-architected in 2013. The latest release was in December 2020. Sapiens reports that all clients are on the latest version and have been through at least one upgrade. The solution supports Oracle and MS SQL databases, as well as UNIX/Linux and Windows platforms. The solution is written in Java.

## **APIs and Integration**

Sapiens notes that it offers REST APIs as well as web services which are available for all actions within the solution. Sapiens notes that it can provide for clients that require other methods such as SOAP or file-based as well.

## **Configurability and User Interface**

CoreSuite is browser-based for all user interface functions.

Configuration for insurance products, screens, workflows, rules, and document authoring is via tools for BAs and non-IT staff. Configuration for integration to third-party service calls is via tools for IT analysts.

## **Deployment Options**

Sapiens deploys the suite on-prem and hosted on AWS. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades. The hosted solution is a single-tenant app server and database.

## **Average Implementation Length and Cost**

Sapiens implements the solution through internal resources or a partner. It reports that CoreSuite can be ready for initial go-live in nine months or less and fully rolled out in an additional 18 months or less. The average implementation cost is \$1M-\$2M.

## **Support**

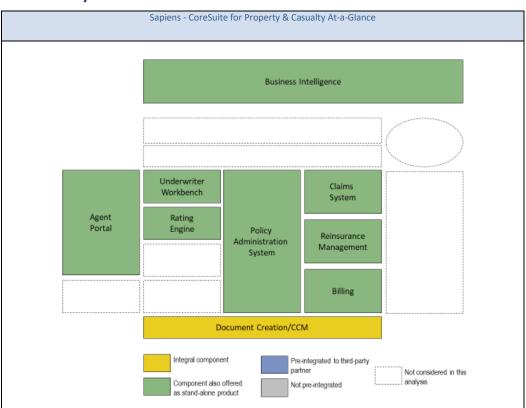
Of the 4,000 people employed at Sapiens, there are between 50 and 100 on each of the product design and engineering, implementation (not counting partnerships), and support teams.

Sapiens offers customer engagement activities such as a customer advisory committee, a user event, and training seminars.

## **Systems Integrator and Other Partners**

Publicly announced technology partnerships include ISO, IBM Watson, LexisNexis, HazardHub, and IVANS. Sapiens notes that it offers a partner marketplace for customers to access its expanding list of partnerships and alliances.

## **Functionality**



#### **Policy Administration Functions**

The solution includes policy issue, premium accounting, out-of-sequence endorsement, and manuscripted policies out of the box. Forms management is available with configuration via tools for IT analysts or BAs. Bordereaux import is available with configuration via developer tools, XML manipulation, or a scripting language.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

## **Rating Functions**

Sapiens RatingPro is integral to the suite and is also marketed as a stand-alone solution.

Quick quote; support for after-inception policy rating for endorsements, cancellations, reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on single policies are available with configuration via tools for IT analysts or BAs.

Versioning and update management, change control functions, and auditability of rate versioning are standard. Sapiens reports that, if a customer selects optional ISO licensing, an application and forms library with standard and customizable applications and forms would be applicable and available. Download to agency management systems and pre-integration to third-party data providers are available with configuration via developer tools, XML manipulation, or a scripting language.

ISO rates/rules support, NCCI/Bureau of Workers' Comp rates/rules support, ISO-formatted statistical data, and ISO ERC integration are available with configuration via developer tools, XML manipulation, or a scripting language.

Product design and development tools as well as saving/storing an in-process or completed policy change transaction to allow issuance at a later date are standard. Setting insurer-specific defaults is available with configuration using simple tools targeted for IT analysts or BAs. Multicarrier comparison is available via out-of-the-box integration to a third-party system or service.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are standard functions.

Displacement testing (i.e., the ability to run the existing book of business through proposed rate/product changes to determine impact) as well as testing, modeling, and product analysis are available with configuration via tools for IT analysts or BAs.

#### **Underwriter Workbench Functions**

Sapiens WorkManagerPro is integral to the suite and is also marketed as a stand-alone solution. Uploading/importing the submission data from a structured data feed is available with configuration via tools for IT analysts or BAs. Uploading/importing the submission information from documents (OCR-like functionality) is available with configuration via developer tools, XML manipulation, or a scripting language.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, and cancellation transactions are standard functions. Supporting underwriting multiple submissions as one work portfolio is available with configuration via tools for IT analysts or BAs.

The ability to combine individual quotes for different lines into a single proposal; capturing underwriting analysis; capturing underwriter loss analysis; underwriter checklists that can validate information and process completeness; providing a single current and historical view of the insured's account across the enterprise, lines of business, and policy systems; and document storage are standard functions.

Pricing analysis and scheduled rating information as well as document creation (proposals, applications, and correspondence) are available with configuration via tools for IT analysts or BAs. Submission rating is available via out-of-the-box integration to a third-party system or service.

A rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); a rules engine that interfaces to order specific data conditionally; and inline reports/dashboards on tasks/work/work status are standard functions.

Inline reports/dashboards to support underwriting analysis are available with configuration via developer tools, XML manipulation, or a scripting language. Displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) is available via out-of-the-box integration to a third-party system or service.

Proposal co-authoring with other underwriters and agent-facing capabilities are standard. Sapiens asserts IM collaboration with other underwriters is under development and should be available in less than six months. The solution does not currently include screen sharing with other underwriters. Support for variable binding/approval authority by role and support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) are standard.

Preconfigured interfaces with agent portals, third-party data services, and external predictive scoring models are standard. Preconfigured integration with business intelligence environments is available with configuration via developer tools, XML manipulation, or a scripting language. Preconfigured interfaces with policy admin systems and natively calculated predictive scores are available via out-of-the-box integration to a third-party system or service.

#### **Document Functions**

Document functionality is integral to the suite and is not marketed as a stand-alone solution. The company notes that suite can also be pre-integrated with any document system clients might want for different functions.

The solution supports mass-produced documents, e.g., statements, (the most common use case) and ad hoc documents, e.g., correspondence and manuscripted policies (the less common use case).

The solution includes pre-packaged, pre-built forms, libraries, and templates from ISO. The primary authoring environment is a custom environment, MS Word, Adobe Creative Suite, or a non-Microsoft/Adobe solution. Content, business rules, schema mapping, and data sources are designed to be managed by the average business user.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is available with configuration via tools for IT analysts or BAs. Clients must use an external tool for document authoring and content management workflow. A content repository, content management tools, and archival capabilities for all generated documents are standard. The solution supports industry-standard schemas from ACORD XML out of the box.

## **Agent Portal Functions**

Sapiens Agent PortalPro is part of the suite and is also sold as a stand-alone agent portal.

New business entry/submission, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, integration and pre-fill with data services, policy change entry/submission, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, proposal creation, side-by-side quote comparison, account or client view in addition to a policy view, underwriter view and/or tools, agent/underwriter collaboration, and a rating engine are standard functions.

Account clearance, claims inquiry, and ACORD application creation are available with configuration via tools for IT analysts or BAs. Agency management system upload is available with configuration using developer tools, XML manipulation, or a scripting language. Online payment is available via out-of-the-box integration to a third-party system or service.

File attachment support; workflow and task management capabilities; business intelligence and reporting; a consumer portal; and scheduling, diary, and calendar functions are standard. Document creation is available with configuration via tools for IT analysts or BAs. E-signature is available via out-of-the-box integration to a third-party system or service.

#### **Reinsurance Functions**

Base reinsurance functionality is integral to the suite; Sapiens notes that there are three products marketed stand-alone: Reinsurance Go, Reinsurance Pro, and Reinsurance Master.

Ceded reinsurance management functions like the manual entry and tracking of cessions, reserves, and limits as well as automated notification if a reserve reaches a specific amount or treaties approach set limits are available with configuration via tools for IT analysts or BAs. Automated identification/calculation of accounts with applicable reinsurance is available with configuration via developer tools, XML manipulation, or a scripting language.

Assumed reinsurance management functions like the manual entry and tracking of assumed reinsurance contracts, automated assumed reinsurance calculations based on reinsured data feeds/connections, and retrocession reinsurance management are available with configuration via tools for IT analysts or BAs.

Treaty management and facultative management are standard. Proportional support; retroactive processing of late placements or midterm contract changes; and configuration of contract rules, formulas, and types are available with configuration via tools for IT analysts or BAs. Non-proportional/excess of loss and multiple basis types (e.g., risks attaching, losses occurring, claims made) are available via out-of-the-box integration to a third-party system or service.

End-user interfaces for manual contract entry, for manual flagging of premiums and claims subject to reinsurance, and for review and approval of assumed policies as part of facultative contracts are available via out-of-the-box integration to a third-party system or service.

Batch file import/export for integration to other systems and real-time integration to an underwriting system (e.g., to display limits/reserves) are standard. Real-time data intake from core systems (e.g., PAS, claims) via API/other mechanism is available with configuration via tools for IT analysts or BAs. Integration between other insurer/reinsurer systems is available with configuration via developer tools, XML manipulation, or a scripting language.

Statutory and regulatory reporting; a standard library of canned reports; automated Schedule F reporting; automated bordereau reporting; ad hoc reporting; and integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc. are available via out-of-the-box integration to a third-party system or service. Automated recoverable claims identification along with viewing the full history and status of claims and claim recovery are available via out-of-the-box integration to a third-party system or service.

Multi-currency support and an audit trail for all transactions are standard. Multi-language support is available with configuration via tools for IT analysts or BAs. Tracking reinsurance payables and receivables, entity management (CRM), and document management and the storage of the actual contracts are available via out-of-the-box integration to a third-party system or service.

## **Business Intelligence Functions**

Sapiens IntelligencePro is integral to the suite and is also marketed as a stand-alone business intelligence solution.

Sapiens reports that it can integrate with clients' BI solutions, but it also offers IntelligencePro, which includes standard reports out of the box and drag-and-drop capabilities. The solution offers reporting tools and data cubes for beginners and advanced users. Sapiens reports that the solution's data cubes provide access to hundreds of data elements for ad hoc reporting, descriptive attributes and measures, and data aggregation and summary in various time frames.

Sapiens notes that the solution includes a full data warehouse and ETL process, including tools which can replace (and do, in most instances) existing EDW, ODS, and/or OLAP cubes. While the solution does not incorporate a data lake, Sapiens asserts that it can support one.

The solution includes tools to support data governance, dictionaries, quality, and validation; a presentation/reporting component; standard predefined reports and predefined insurance dashboards; and an ad hoc reporting tool. The solution includes some data mining and analytics tools/features as a secondary part of the offering. The solution supports data movement via batch ETL, which the company reports the solution uses to update the data warehouse nightly.

## **Billing Functions**

Sapiens BillingPro is part of the suite and is also sold as a stand-alone billing component. Payment and billing plan configurability is available out of the box. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available with configuration using simple tools targeted for IT analysts or BAs
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Available with configuration using simple tools targeted
reporting	for IT analysts or BAs
Pay-as-you-report for workers' comp:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available via out-of-the-box integration to a third-party
	system or service
Billing for non-premium receivables (such	Available out of the box with no configuration necessary
as claims deductibles paid):	
Payment of non-refund payables (such as	Available out of the box with no configuration necessary
policy dividends or mutual dividends):	
Multi-currency support in a single instance	Yes
of the application:	

#### **Claims Functions**

Sapiens ClaimsPro is integral to the suite and is also sold as a stand-alone claims component.

#### **Adjudication**

Medical case management, injury detail maintenance (coding), disability management, aggregate tracking (erosion of policy limits), and deductible tracking are standard functions. Automated coverage verification is available with configuration via tools for IT analysts or BAs.

#### Catastrophe

Catastrophe definition and automatic identification of catastrophe claims are standard. Attaching multiple LOBs and causes of loss to a single catastrophe is available with configuration via tools for IT analysts or BAs. Mapping tools are available with configuration via developer tools, XML manipulation, or a scripting language.

#### **Disbursements**

Calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support, etc.) are standard functions. Check processing and OFAC checking are available with configuration via tools for IT analysts or BAs.

#### **Documents**

Image and media management, a correspondence or forms library, and state-specific claims reporting templates are standard functions. Document rendering, a content repository, content management tools, and multi-channel delivery and output of documents (e.g., PDF, email, web, print) are available with configuration via tools for IT analysts or BAs.

## **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; mobile and smart device input; claimaint contact management data capture; and checking for duplicate claims are standard. Scripting for claims intake with reflexive questioning, customized question sets to prompt mandatory additional questions depending on the answers given (branch scripting), and claim characteristics scoring (to calculate alerts, trigger workflow, assign a claims handler, or otherwise segment the claim) are available with configuration via tools for IT analysts or BAs. Integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) is available with configuration via developer tools, XML manipulation, or a scripting language. Handling FROI/SROI EDI reporting is available via out-of-the-box integration to a third-party system or service.

#### **Fraud**

Configurable business rules and tasks (specific to fraud and special investigations) and the provision of multiple search/reporting criteria for fraud detection via the ability to track common clients across multiple claims are available with configuration via tools for IT analysts or BAs.

#### Litigation

Litigation process tracking, including negotiation details and litigation costs, and creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management are standard functions.

#### **Multi-Channel**

E-signature, an agent portal with self-service, and a policyholder portal with self-service are standard functions. Call center integration for FNOL via telephony and call center integration for claims status check via telephony are available via out-of-the-box integration to a third-party system or service.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, and assignment to facultative arrangements are available with configuration via developer tools, XML manipulation, or a scripting language.

#### Reporting

Standard reporting of claims performance monitoring, including claims handling, and high-risk indicators, e.g., fatality, large losses, fraud; standard reporting of configurable metrics for claims reporting; ad hoc reports; and dashboards are standard. Electronic reporting or automated state filings are available with configuration via tools for IT analysts or BAs. Reporting that includes jurisdiction-specific reports and forms is available via out-of-the-box integration to a third-party system or service.

## Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; granular tracking of reserves and payments; and direct, case, average, factor, and expense reserve types are standard functions. Automatic reserve calculations using business rules and risk characteristics along with jurisdictional wage and rate calculations integrated for workers' comp are available with configuration via tools for IT analysts or BAs. Subrogation billing and the production of correct GL entries are available with configuration via developer tools, XML manipulation, or a scripting language.

#### **Vendor Management**

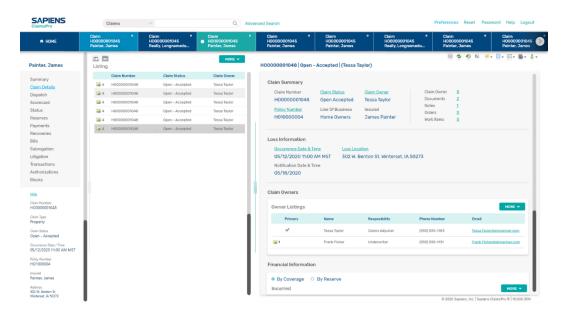
Vendor management functions are standard. Processing required forms (including 1099s) is available via out-of-the-box integration to a third-party system or service.

#### Workflow

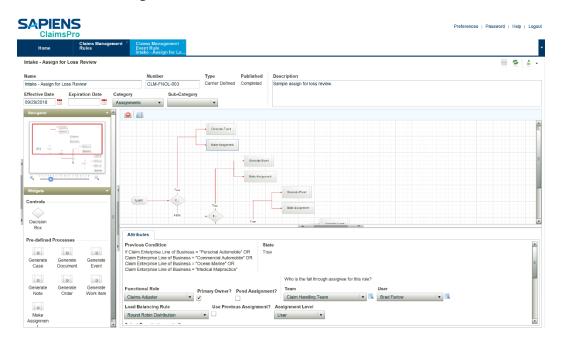
Automated workflow/task generation; generating notes, diaries, and reminders; inclusion of external documents (letters and pictures) in file notes; and assigning multiple adjusters to a single claim are standard functions. Automatic work assignments based on configurable rules and processing claim workflow trigger (CWT) files at insurer-defined intervals are available with configuration via tools for IT analysts or BAs. OCR-triggered workflow, overriding automated processes and manually triggering workflow processes, and full integration with electronic court filings (ECF2) are available with configuration via developer tools, XML manipulation, or a scripting language. Compliance with the Document Repository Interface (DRI) standards is available via out-of-the-box integration to a third-party system or service.

## **Screenshots**

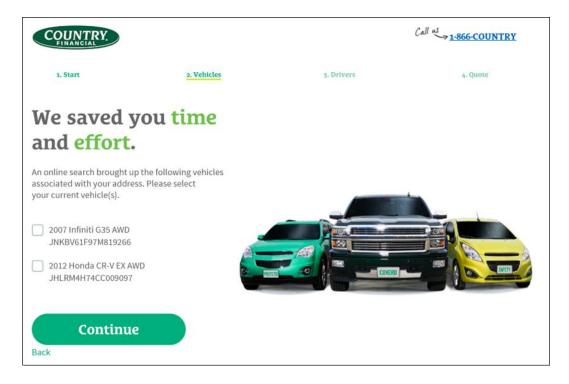
Claims Homepage



## Claims Workflow Configuration



## Country Direct to Consumer



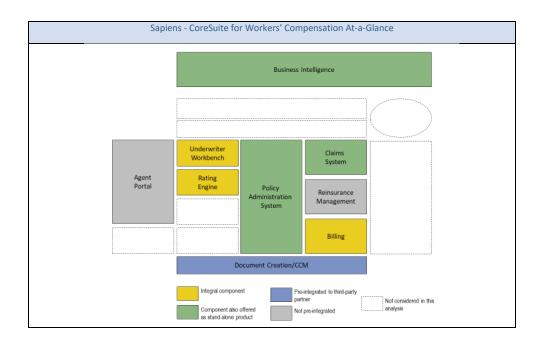
#### CoreSuite Landing Page



# Sapiens - CoreSuite for Workers' Compensation Executive Summary

## Sapiens International Corporation (NASDAQ and TASE: SPNS) is a global provider of software solutions for the insurance industry with a 30-year track record of delivering to more than 600 organizations. The company offers software plaforms, solutions, and services, including a full digital suite for the P/C, life/pension/annuities, and reinsurance markets.

- Sapiens has global headquarters in Holon, Israel and US headquarters in Raleigh, NC. It employs 4,000 people and has an annual revenue in the range of \$250M-\$500M.
- Sapiens CoreSuite for Workers' Compensation is a suite of solutions that currently includes core policy features, rating, underwriter workbench, billing, claims, and business intelligence components.
- It currently has 16 live US/Canadian insurer clients using the suite, most of which are smaller (under \$1B) companies using the solution to support workers' compensation.
- Publicly announced clients include Encova Insurance, W.R. Berkley, Wyoming Workers' Safety and Compensation Division, Ohio Bureau of Workers' Compensation, and Midwest Insurance.
- The solution is browser-based for all user interface functions. It is written in Java.
- Configuration for insurance products, workflows, rules, and document authoring is via tools
  intended for BAs and non-IT staff. Configuration for screens and integration to third-party
  service calls is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's resources or a partner. Sapiens deploys
  the solution on-prem, hosted at a private data center, and hosted on MS Azure. The
  company offers a SaaS delivery model that includes hosting, license, maintenance and
  support, ongoing access to the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is nine months or less and that the average implementation cost is \$2M-\$5M.



## **Lines of Business Supported**

Personal auto:	Not currently supported
Homeowners:	Not currently supported
Personal umbrella:	Not currently supported
Dwelling fire:	Not currently supported
Boatowners:	Not currently supported
Personal package:	Not currently supported
Commercial property:	Not currently supported
General liability:	Not currently supported
BOP:	Not currently supported
Commercial crime:	Not currently supported
Commercial auto:	Not currently supported
E&O/D&O:	Not currently supported
Inland marine:	Not currently supported
Professional liability (including medical malpractice):	Not currently supported
Commercial package:	Not currently supported
Specialty:	Not currently supported
Workers' comp:	Live clients offering this product in 10-49 US states
Surety:	Not currently supported
Other personal lines:	Not currently supported
Other commercial lines:	Not currently supported
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## **Client Base**

Globally, Sapiens has 16 clients live on CoreSuite for Workers' Compensation, all of which are US/Canadian insurer clients (i.e., not MGAs, self-insureds). These are mostly smaller (under \$1B) companies using the solution to support workers' compensation.

Publicly announced clients include Encova Insurance, W.R. Berkley, Wyoming Workers' Safety and Compensation Division, Ohio Bureau of Workers' Compensation, and Midwest Insurance.

## **Key Functions and Differentiators**

Sapiens cites the key functions of CoreSuite for Workers' Compensation as:

- Case tool component for capture and maintenance of ancillary functions of claim and policy life cycles (e.g., loss prevention, risk management, subrogation, investigations)
- Customizable user interface with one-click access to information with a 360-degree view and hyperlinks to core areas and external systems
- Rules-driven automation, including straight-through processing of claims and quoting, exception-based underwriting, work item notifications, etc.
- Premium calculation engine that supports complex policies (e.g., PEOs, federal coverages, loss-sensitive rating plans)
- Jurisdiction-based benefit calculation engine that calculates indemnity benefits, e.g., waiting period rules, state average wages, minimum and maximum thresholds, etc.

The company cites as key differentiators that it provides a fully integrated suite built on architecture by over 100 seasoned insurance/technology professionals with strong domain knowledge and expertise in workers' compensation; over 30 years of experience providing workers' comp solutions with a proven track record of successful implementations using industry best practices; ease for upgrades via externalized, client-specific functionality and configuration that preserve client-specific features with low cost and risk; integration to the Sapiens Digital Platform providing completely configurable portal functionality and ease of integration with other products and/or Sapiens partners; as well as flexible deployment options including SaaS, on-prem, and cloud for better speed to market.

## **Solution Architecture and History**

Sapiens CoreSuite for Workers' Compensation launched in 1995 and was re-architected in 2006 and 2016. The latest release was in March 2021. 12.5% of the solution's customers are on the latest major release, 12.5% of clients are on a version less than three years old, and 75% are on a version older than three years old. 20% of clients have been through at least one upgrade. The company notes that it releases updates quarterly.

The solution supports DB2/UDB, Oracle, and MS SQL Server databases as well as UNIX/Linux and Windows server platforms. The solution is written in Java.

## **APIs and Integration**

CoreSuite for Workers' Compensation has an open architecture that facilitates communication with and data transfer in and out of CoreSuite through configuration and extension of exposed base application service and data layers. Sapiens notes that the application also provides a substantial set of out-of-the-box SOAP and RESTful APIs, designed to be used for third-party and portal integration, while the open architecture allows for easy addition to these capabilities.

Sapiens asserts that CoreSuite for Workers' Compensation further provides the ability to generate, propagate, and consume its own events and to exchange these events with other applications within the enterprise. New events plus their payload can be created through configuration alone.

## **Configurability and User Interface**

CoreSuite for Workers' Compensation is browser-based for all user interface functions.

Configuration for insurance products, workflows, rules, and document authoring is via tools for BAs and non-IT staff. Configuration for screens and integration to third-party service calls is via developer tools, XML manipulation, or a scripting language.

## **Deployment Options**

Sapiens deploys the suite on-prem, hosted at a private data center, and hosted on MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades. The hosted solution is a single-tenant app server and database.

## **Average Implementation Length and Cost**

Sapiens implements the solution through its own resources or a partner. It reports that CoreSuite for Workers' Compensation can be ready for initial go-live in nine months or less and fully rolled out in an additional 18 months or less. The average implementation cost is \$2M-\$5M.

## Support

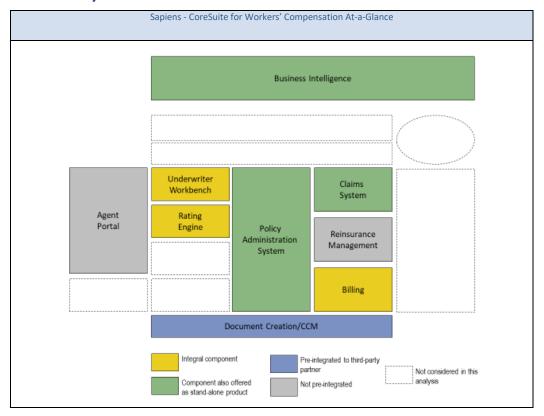
Of the 4,000 people employed at Sapiens, there are 200 dedicated to the workers' compensation teams. There are between 100 and 200 on the product design and engineering team, between 50 and 100 on the implementation team (not counting partnerships), and between 50 and 100 on the support team. Support is provided primarily from Denver, CO, with some resources in remote offices.

Sapiens offers customer engagement activities such as an online community, a customer advisory committee, user events, and training seminars.

## Systems Integrator and Other Partners

Publicly announced technology partnerships include Clara Analytics (predictive analytics), ECHO (payment processing), TruthMD (real-time data aggregation), Rising Medical (medical bill review), and AssureSign (e-signature).

## **Functionality**



## **Policy Administration Functions**

Policy issue, premium accounting, and out-of-sequence endorsement are available out of the box. Manuscripted policies are available with configuration via tools for IT analysts or BAs.

Forms management is available via out-of-the-box integration to a third-party system or service. The solution does not currently include bordereaux import, but the company notes this could be available with integration to another system or service.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

## **Rating Functions**

Rating functions are integral to the suite and are not marketed as a stand-alone solution.

Support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are available out of the box. Quick quote is available with configuration via tools for IT analysts or BAs.

Versioning and update management, change control functions, and auditability of rate versioning are standard functions. An application and forms library is available via out-of-the-box integration to a third-party system or service.

Pre-integration to third-party data providers is standard. The solution does not currently include download to agency management systems.

NCCI/Bureau of Workers' Comp rates/rules support is standard. The solution does not currently include ISO rates/rules support, ISO-formatted statistical data, or ISO ERC integration.

Multi-carrier comparison is a standard function. Setting insurer-specific defaults is available with configuration via tools for IT analysts or BAs.

Product design and development tools are standard. The solution does not currently include saving/storing in-process or complete policy change transactions to allow issuance at a later date, but the company notes that this could be available with a system enhancement.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, import/export rating tables to/from spreadsheets (e.g., Excel), rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are standard.

Testing, modeling, and product analysis are available with configuration via tools for IT analysts or BAs. The solution does not currently include displacement testing (i.e., the ability to run the existing book of business through proposed rate/product changes to determine impact), but the company notes that this could be available with a system enhancement.

#### **Underwriter Workbench Functions**

Sapiens PolicyPro for Workers' Compensation is integral to the suite and is also sold as a standalone solution.

Uploading/importing submission data from a structured data feed is a standard function. Uploading/importing the submission information from documents (OCR-like functionality) is available via out-of-the-box integration to a third-party system or service.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, cancellation transactions, and underwriting multiple submissions as one work portfolio is standard.

The solution does not currently include the ability to combine individual quotes for different lines of business into a single proposal.

Capturing underwriting analysis; capturing underwriter loss analysis; underwriter checklists that can validate information and process completeness; submission rating; pricing analysis and scheduled rating information; and providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are standard functions.

Document creation (e.g., proposals, applications, correspondence) and document storage are available via out-of-the-box integration to a third-party system or service.

A rules engine that automatically applies underwriting, workflow, and general business rules is available with configuration via tools for IT analysts or BAs.

Workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries), a rules engine that interfaces to order specific data conditionally, inline reports/dashboards on tasks/work/work status, and inline reports/dashboards to support underwriting analysis are standard functions.

Displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of the existing book and proposed risk) is available via out-of-the-box integration to a third-party system or service.

Agent-facing capabilities and proposal co-authoring with other underwriters are standard functions. Screen sharing with other underwriters is available via out-of-the-box integration to a third-party system or service. The solution does not currently include IM collaboration with other underwriters.

Support for variable binding/approval authority by role is available with configuration via tools for IT analysts or BAs. Support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) is not currently available.

Preconfigured integration with business intelligence environments is standard. Natively calculated predictive scores and preconfigured interfaces with agent portals, third-party data services, and external predictive scoring models are available via out-of-the-box integration to a third-party system or service.

#### **Document Functions**

CoreSuite for Workers' Compensation is pre-integrated with Scriptura Engage, Adobe, Quadient, and GhostDraft for document functions.

## **Agent Portal Functions**

Sapiens reports that Sapiens CustomerConnect, Sapiens AgentConnect, and Sapiens DigitalHub are part of the Sapiens Digital Platform, but that they are not included in CoreSuite for Workers' Compensation.

#### **Reinsurance Functions**

Sapiens ReinsurancePro is offered as an optional integrated module to the suite and is also marketed as a stand-alone solution.

Ceded reinsurance management functions like automated notification if a reserve reaches a specific amount or treaties approach set limits; automated identification/calculation of accounts with applicable reinsurance; and the manual entry and tracking of cessions, reserves, and limits are standard.

Assumed reinsurance management functions like the manual entry and tracking of assumed reinsurance contracts, automated assumed reinsurance calculations based on reinsured data feeds/connections, and retrocession reinsurance management are standard.

Treaty management; facultative management; proportional support; non-proportional/excess of loss; multiple basis types (e.g., risks attaching, losses occuring, claims made); retroactive processing of late placements or midterm contract changes; and configuration of contract rules, formulas, and types are standard functions.

End-user interfaces for the manual entry of contracts, for manual flagging of premiums and claims subject to reinsurance, and for review and approval of assumed policies as part of facultative contracts are standard.

Batch file import/export for integration to other systems is a standard function. Real-time data intake from core systems (e.g., PAS, claims) via API or other mechanism and real-time integration to an underwriting system (e.g., to display limits/reserves) are available with configuration via tools for IT analysts or BAs. Integration between other insurer/reinsurer systems is available with configuration via developer tools, XML manipulation, or a scripting language.

Statutory and regulatory reporting; a standard library of canned reports; automated Schedule F reports; automated bordereau reporting; ad hoc reporting; and integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc. are standard functions.

Automated recoverable claims identification and viewing the full history and status of claims and claim recovery are standard functions.

Tracking reinsurance payables and receivables, entity management (CRM), multi-currency support, and an audit trail for all transactions are standard functions. Document management and storage of the actual contracts are available via out-of-the-box integration to a third-party system or service. The solution does not currently include multi-language support.

## **Business Intelligence Functions**

Sapiens Intelligence for Workers' Compensation is available as an optional integrated module and is also sold as a stand-alone solution.

Sapiens reports that its ETL process loads data from the OLTP system to the ODS and data marts; it also provides over 150 KPIs and 100 reports out of the box.

The solution incorporates a data lake to support schema on read and unstructured data.

The solution includes a presentation/reporting component; standard predefined reports and dashboards; an ad hoc reporting tool; and data mining and analytics tools.

The solution supports data movement via batch ETL.

## **Billing Functions**

Billing functionality is part of the suite and is not sold as a stand-alone billing component. Payment and billing plan configurability is available out of the box. The table on the following page shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Currently not available, but could be available with a
3000	system enhancement
Account or list bill:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Third-party (i.e., mortgagee) bill:	Not applicable
Split or multi-payer bill:	Currently not available, but could be available with a
- P	system enhancement
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Currently not available, but could be available with
	integration to another system or service
Equity billing support:	Currently not available, but could be available with a
	system enhancement
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Currently not available, but could be available with a
	system enhancement
Consumer portal:	Available with configuration using simple tools targeted
O.P	for IT analysts or BAs
Online payment:	Available with configuration using simple tools targeted
Out of the how integration with	for IT analysts or BAs No
Out-of-the-box integration with banks/credit card companies for token-	NO
based processing:	
Payroll deduction:	Currently not available, but could be available with a
ayron academin	system enhancement
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Available with configuration using simple tools targeted
reporting:	for IT analysts or BAs
Pay-as-you-report for workers' comp:	Available with configuration using simple tools targeted
, , , , , , , , , , , , , , , , , , ,	for IT analysts or BAs
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available via out-of-the-box integration to a third-party
	system or service
Billing for non-premium receivables (such	Available out of the box with no configuration necessary
as claims deductibles paid):	,
Payment of non-refund payables (such as	Available with configuration using simple tools targeted
policy dividends or mutual dividends):	for IT analysts or BAs
Multi-currency support in a single instance	No

#### **Claims Functions**

Sapiens ClaimsPro for Workers' Compensation is pre-integrated as part of the suite and is also sold as a stand-alone claims component.

## **Adjudication**

Medical case management, injury detail maintenance (coding), disability management, and automated coverage verification are standard functions. Aggregate tracking (erosion of policy limits) and deductible tracking are available with configuration via tools for IT analysts or BAs.

#### Catastrophe

Catastrophe definition, automatic identification of catastrophe claims, and mapping tools are standard. The solution does not include attaching multiple LOBs or causes of loss to a single catastrophe.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) are standard. Currently, the solution does not include OFAC checking.

#### **Documents**

Image and media management, a correspondence or forms library, state-specific claims reporting templates, document rendering, a content repository, content management tools, and multi-channel delivery and output of documents (e.g., PDF, email, web, and print) are available via out-of-the-box integration to a third-party system or service.

## **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; claimant contact management data capture; and checking for duplicate claims are standard functions. Mobile and smart device input, scripting for claims intake with reflexive questioning, custom question sets to prompt mandatory additional questions depending on given answers (branch scripting), and claim characteristics scoring (to calculate alerts, trigger workflow, assign a claims handler, or otherwise segment the claim) are available with configuration via tools for IT analysts or BAs. The solution does not currently include FROI/SROI EDI reporting.

#### Fraud

The provision of multiple search and reporting criteria (for fraud detection via the ability to track common clients across multiple claims) is standard. Configurable business rules and tasks specific to fraud and special investigations are available with configuration via tools for IT analysts or BAs.

#### Litigation

Litigation process tracking, including negotiation details and litigation costs, is standard. Creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management is available with configuration via tools for IT analysts or BAs.

#### **Multi-Channel**

An agent portal with self-service and a policyholder portal with self-service are provided via Sapiens Digital Platform, which Sapiens CoreSuite for Workers' Comp is integrated with. Esignature, call center integration for FNOL via telephony, and call center integration for claims status check via telephony are available via out-of-the-box integration to a third-party system or service.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location) is available with configuration via tools for IT analysts or BAs. Assignment to reinsurance treaties or facultative arrangements can be available with integration to a reinsurance system.

#### Reporting

Standard reporting of configurable metrics for claims reporting is a standard function. Ad hoc reports and dashboards are available with configuration using simple tools targeted for IT analysts or BAs. The solution does not currently include standard reporting of claims performance monitoring (including claims handling and high-risk indicators, e.g., fatality, large losses, fraud), reporting that includes jurisdiction-specific reports/forms, or electronic reporting or automated state filings.

## Reserves, Recoveries, Subrogation

Automatic subrogation identification; subrogation billing and the production of correct GL entries; granular tracking of reserves and payments; jurisdictional wage and rate calculations integrated for workers' comp; direct, case, average, factor, and expense reserve types; and jurisdictional wage and rate calculations for workers' comp are standard functions. Creating separate tasks, workflow, diaries, and business rules for subrogated cases as well as automatic reserve calculations using business rules and risk characteristics are available with configuration using simple tools targeted for IT analysts or BAs.

#### **Vendor Management**

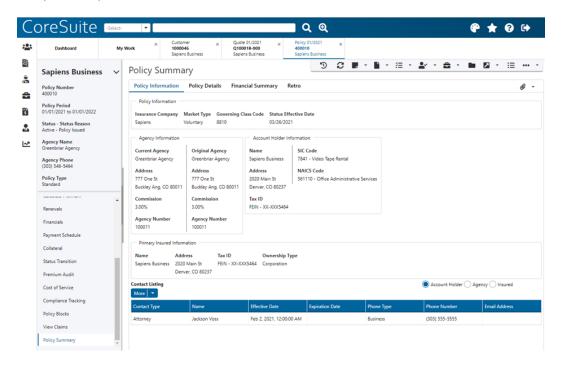
Vendor management functions and processing required forms (including 1099s) are standard.

## Workflow

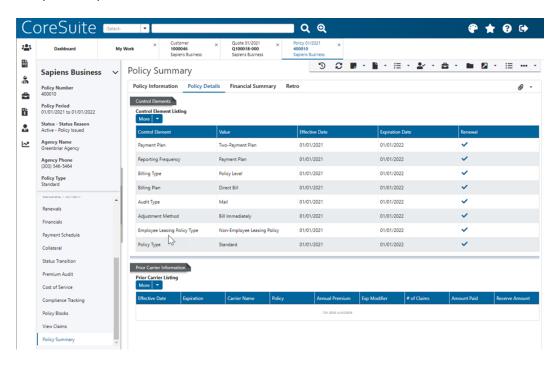
Automated workflow/task generation; overriding automated processes and manually triggering workflow processes; automatic work assignment based on configurable rules; assigning multiple adjusters to a single claim; processing claim workflow trigger (CWT) files at insurer-defined intervals; and generating notes, diaries, and reminders are standard functions. Full integration with electronic court filings (ECF2) is available with configuration via developer tools, XML manipulation, or a scripting language. OCR-triggered workflow and the inclusion of external documents (letters and pictures) in file notes are available via out-of-the-box integration to a third-party system or service. Currently, the solution does not include compliance with the Document Repository Interface (DRI) standards.

## **Screenshots**

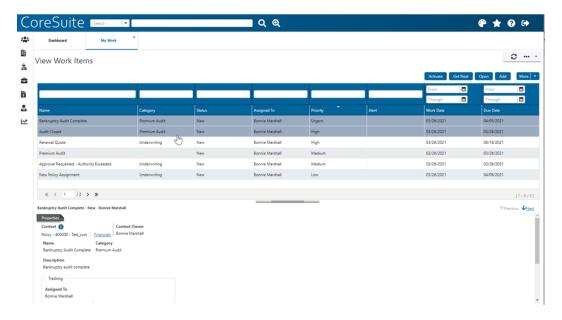
**Policy Summary Information** 



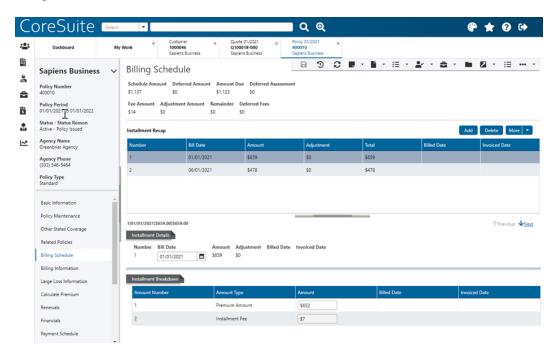
**Policy Summary Details** 



#### **Underwriter Task List**

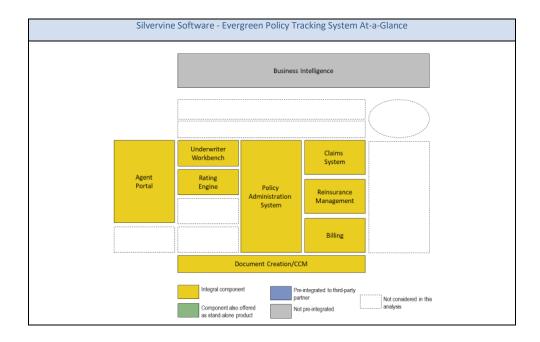


## **Billing Schedule**



# Silvervine Software - Evergreen Policy Tracking System Executive Summary

- Silvervine Software was acquired in 2013 by Constellation Software. Constellation allows Silvervine to operate as an independent entity.
- Silvervine has headquarters in Warner Robins, GA and has 86 employees. The company's annual revenue is just under \$20M.
- Evergreen Policy Tracking System (Evergreen) includes core policy, rating, underwriter workbench, document creation, agent portal, reinsurance, billing, and claims components.
- It currently has 12 live US/Canadian insurer clients using the suite, all of which are smaller companies (under \$1B) using the solution to support personal and commercial lines.
- Publicly announced clients include FedNat, People's Trust, Traders, and Home Owners of America
- The solution is browser-based for all user interface functions. It is written in .NET (C#/VB.NET), Java, ColdFusion, Scala, SQL, CSS, HTML, and JavaScript.
- Configuration for workflow is via simple tools for IT analysts. Configuration for insurance
  products, screens, rules, document authoring, and integration to third-party service calls is
  not available; changes are done by the vendor.
- Implementation is available through the company's own resources. Silvervine deploys the solution hosted at a private data center.
- A SaaS delivery model is available that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades.
- The company reports that the average time to initial go-live is 180 days or less and that the average implementation cost is \$100K-\$500K.



## **Lines of Business Supported**

Personal auto:	Live clients offering this product in 10-49 US states
Homeowners:	Live clients offering this product in 10-49 US states
Personal umbrella:	Live clients offering this product in 2-9 US states
Dwelling fire:	Live clients offering this product in 10-49 US states
Boatowners:	Live clients offering this product in 2-9 US states
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Live clients offering this product in 2-9 US states
General liability:	Live clients offering this product in 2-9 US states
BOP:	Solution is designed to support, but no clients live or implementing
Commercial crime:	Not currently supported
Commercial auto:	Live clients offering this product in 2-9 US states
E&O/D&O:	Live clients offering this product in 2-9 US states
Inland marine:	Live clients offering this product in 2-9 US states
Professional liability (including medical malpractice):	Not currently supported
Commercial package:	Live clients offering this product in one US state
Specialty:	Live clients offering this product in 2-9 US states
Workers' comp:	Not currently supported
Surety:	Not currently supported
Other personal lines*:	Live clients offering this product in 10-49 US states
Other commercial lines†:	Live clients offering this product in 2-9 US states
	<del>-</del>

<sup>\*</sup> Other personal lines include aviation.

## **Client Base**

Globally, the company has 30 clients live on Evergreen, 12 of which are insurer clients (i.e., not MGAs, self-insureds) in the US and Canada. These clients are smaller companies (under \$1B) using the solution to support personal and commercial lines.

Publicly announced clients include FedNat, People's Trust, Traders, and Home Owners of America.

## **Key Functions and Differentiators**

Silvervine cites the key functions of Evergreen as:

- End-to-end policy admin system, including rating, underwriting, billing, claims, reporting, and document generation
- Out-of-the-box customer and agent portals with POS and self-service capabilities
- Reporting and data analytics
- Partner APIs and pre-built integrations with third-party providers for the deployment of additional capabilities and data services
- Multi-tenant

<sup>†</sup> Other commercial lines include aviation.

The company cites as its key differentiators the speed of implementation, cloud deployment with managed IT services, Agile business model that allows for continual enhancement to the core system, configurable architecture that accommodates individual customer requests, as well as public company stability with small company agility to focus on quality and customer services.

## **Solution Architecture and History**

Evergreen Policy Tracking System launched in 1996 and was re-architected in 2019. The latest release was in August 2019. The company reports that 10% of the solution's customers are on the latest version, 10% are on an older version released in the last three years, and 80% are on a version that is more than three years old. Approximately 60% of customers have been through at least one upgrade.

It is written in .NET (C#/VB.NET), Java, ColdFusion, Scala, SQL, CSS, HTML, and JavaScript.

## **APIs and Integration**

The solution provides REST APIs.

## **Configurability and User Interface**

Evergreen is browser-based for all user interface functions.

Configuration for workflow is via simple tools for IT analysts. Configuration for insurance products, screens, rules, document authoring, and integration to third-party service calls is not available; changes are done by the vendor.

## **Deployment Options**

Silvervine deploys the solution hosted at a private data center. A SaaS delivery model is available that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades. The hosted solution is a multi-tenant app server and a single-tenant database.

## **Average Implementation Length and Cost**

Evergreen is implemented through the company's own resources. The company reports that the average time to initial go-live is 180 days or less and fully rolled out in an additional 30 days or less. The average implementation cost is \$100K-\$500K.

## Support

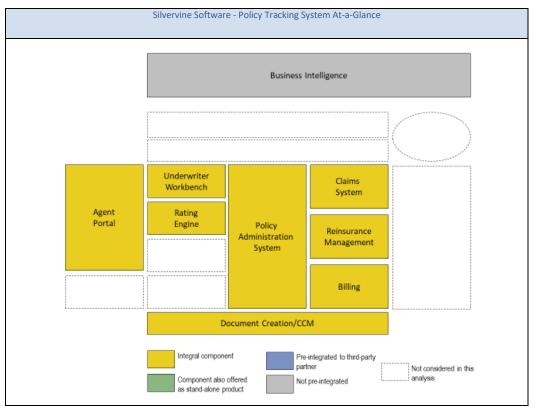
Of the 86 people employed at Silvervine, there are between ten and 50 on each of the product design and engineering, implementation (not counting partnerships), and support teams. The company provides support out of its offices in Warner Robins and Atlanta, GA as well as Orlando, FL.

The company offers customer engagement activities such as online training, a customer advisory committee, a user event, and training seminars.

## **Systems Integrator and Other Partners**

Publicly announced technology partnerships include LexisNexis, ISO/Verisk, Kaboodle, and Xemplar.

## **Functionality**



## **Policy Administration Functions**

The solution includes policy issue, premium accounting, and out-of-sequence endorsement out of the box. Bordereaux import is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include forms management or manuscripted policies.

The following are independent objects in the solution's data model: policy, product, and insured.

## **Rating Functions**

Rating functions are integral to the suite and are not provided as a stand-alone solution.

Quick quote; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and support for after-inception policy rating for endorsements, cancellations, reinstatements, and renewal processing are standard functions. The solution does not currently include multi-line, multi-state, or multi-location rating on a single policy.

Auditability of rate versioning is standard. The solution does not currently include change control functions. The company reports that versioning and update management is under development and should be available within less than six months.

Download to agency management systems and pre-integration to third-party data providers are available via out-of-the-box integration to a third-party system or service.

The solution does not currently include an application/forms library with standard and customizable applications and forms. The solution does not currently include ISO rates/rules support, NCCI/Bureau of Workers' Comp rates/rules support, ISO-formatted statistical data, or ISO ERC integration.

Multi-carrier comparison is available with configuration via tools for IT analysts or BAs. The solution does not currently include setting insurer-specific defaults, product design/development tools, or saving/storing an in-process or completed policy change transaction to allow issuance at a later date.

Rating and rule definition and management (e.g., automatic driver assignment) is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include maintaining rating algorithm definition and management separately from rate tables, import/export rating tables to/from spreadsheets (e.g., Excel), or date management capabilities, but the company reports these are under development and should be available in less than six months. The solution does not currently include rate table design/update management tools.

The solution does not currently include displacement testing (i.e., the ability to run the existing book of business through proposed rate/product changes to determine the impact) or testing, modeling, or product analysis.

## **Underwriter Workbench Functions**

Underwriter workbench functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing submission data from a structured data feed is standard. Uploading/importing submission from information from documents (OCR-like functionality) is available via out-of-the-box integration to a third-party system or service.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, cancellation transactions, and underwriting multiple submissions as one work portfolio is standard.

Capturing underwriting analysis, capturing underwriter loss analysis, underwriter checklists that can validate information and process completeness, submission rating, and pricing analysis and scheduled rating information are standard functions. The solution does not currently include the ability to combine individual quotes for different lines into a single proposal or a single current and historical view of the insured's account across the enterprise, lines of business, and policy systems, but the company reports that these functions are under development and should be available in less than six months.

Document creation (e.g., proposals, applications, correspondence); document storage; a rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); a rules engine that interfaces to order specific data conditionally; inline reports/dashboards on tasks/work/work status; and inline reports/dashboards to support underwriting analysis are standard functions.

The solution does not currently include displaying aggregate risk accumulations for the existing book at a granular location level, but the company reports that this function is under development and should be available within less than six months.

IM collaboration with other underwriters, agent-facing capabilities, preconfigured interfaces with policy admin systems, preconfigured interfaces with agent portals, and support for variable binding/approval authority by role are standard functions.

The solution does not currently include proposal co-authoring with other underwriters, screen sharing with other underwriters, preconfigured integration with business intelligence environments, preconfigured interfaces with third-party data services, natively calculated predictive scores, preconfigured interfaces with external predictive scoring models, or support for email notification/communication with agents and underwriters within the systems (retaining a record of all emails), but the company reports that these functions are under development and should be available in less than six months.

#### **Document Functions**

Document functions are integral to the suite and are not marketed stand-alone.

The solution supports mass-produced documents (e.g., statements) and ad hoc documents (e.g., correspondence, manuscripted policies).

ISO/ACORD forms are not included. The primary authoring environment is a custom environment or a non-Microsoft/non-Adobe platform. Content, business rules, schema mapping, and data sources are maintained by technical resources.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is standard. Clients must use an external tool for document authoring and content management workflow.

A content repository, content management tools, and archival capabilities for all documents generated are standard. The solution supports industry-standard schemas (e.g., ACORD XML, ebXML, XBRL) out of the box.

## **Agent Portal Functions**

Agent portal functions are integral to the suite and are not marketed as a stand-alone solution.

New business entry/submission, account clearance, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, integration and pre-fill with data services, policy change entry/submission, online payment, and renewal quote entry/submission are standard functions.

Policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, proposal creation, ACORD application creation, side-by-side quote comparison, agency management system upload, account/client view (in addition to a policy view), underwriter view and/or tools, a rating engine, and agent/underwriter collaboration are standard functions.

E-signature; document creation; file attachment support; workflow and task management capabilities; business intelligence and reporting; a consumer portal; and scheduling, diary, and calendar functions are standard.

#### **Reinsurance Functions**

Reinsurance is integral to the suite and is not marketed as a stand-alone solution.

Ceded reinsurance functions like automated notifications if reserves reach a specific amount or treaties approach set limits; automated identification/calculation of accounts with applicable reinsurance; and manual entry and tracking cessions, reserves, and limits are available out of the box.

Manual entry and tracking of assumed reinsurance contracts are standard. The solution does not currently include automated assumed reinsurance calculations based on reinsured data feeds/connections or retrocession reinsurance management.

Treaty management and facultative management are standard functions. Contract rules, formulas, and types are available with configuration via tools for IT analysts or BAs. Retroactive processing of late placements or midterm contract changes is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include proportional support, non-proportional/excess of loss, or multiple basis types (e.g., risks attaching, losses occurring, and claims made).

End-user interfaces for manual contract entry and manual flagging of premiums and claims subject to reinsurance are standard functions. The solution does not currently include an end-user interface for review and approval of assumed policies as part of facultative contracts.

The solution does not currently include batch file import/export for integration to other systems, real-time data intake from core systems (e.g., PAS, claims) via API or another mechanism, real-time integration to an underwriting system (e.g., to display limits/reserves), or integration between other insurer or reinsurer systems.

A standard library of canned reports and automated bordereau reporting are standard. Ad hoc reporting is available via out-of-the-box integration to a third-party system or service. The solution does not currently include statutory reporting; regulatory reporting; automated Schedule F reporting; or integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc.

Automated recoverable claims identification and viewing the full history and status of claims and claim recovery are standard. The solution does not currently include tracking reinsurance payables and receivables, entity management (CRM), document management and storage of the actual contracts, multi-currency support, multi-language support, or an audit trail for all transactions.

## **Business Intelligence Functions**

The solution does not currently include business intelligence functions. Silvervine reports that it provides clients with access to a report database with policy data and a data dictionary so that they can use third-party products and BI tools to extract necessary information.

## **Billing Functions**

Billing is integral to the suite and is not marketed as a stand-alone solution. Payment and billing plan configurability is standard. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Under development and will be available in less than 6 months
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g., payment card, check, EFT, payroll deduction):	Available out of the box with no configuration necessary
Automated rules for payment application and disbursements:	Available out of the box with no configuration necessary
Real-time account and payment calculation, scheduling, recalculation, and rescheduling:	Available out of the box with no configuration necessary
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with banks/credit card companies for token- based processing:	Yes
Payroll deduction:	Currently not available, but could be available with a system enhancement
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-reporting:	Not available
Pay-as-you-report for workers' comp:	Not available
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available out of the box with no configuration necessary
Billing for non-premium receivables (such as claims deductibles paid):	Available out of the box with no configuration necessary
Payment of non-refund payables (such as policy dividends or mutual dividends):	Available out of the box with no configuration necessary
Multi-currency support in a single instance of the application:	No

#### **Claims Functions**

Claims functions are integral to the suite and are not sold as a stand-alone claims component.

## **Adjudication**

Medical case management, injury detail maintenance (coding), disability management, automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard functions.

#### Catastrophe

Catastrophe definition and attaching multiple LOBs and causes of loss to single catastrophes are standard functions. Mapping tools are available via out-of-the-box integration to a third-party system or service. The solution does not currently include automatic identification of catastrophe claims.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) are standard functions. OFAC checking is available via out-of-the-box integration to a third-party system or service.

#### **Documents**

Image and media management, a correspondence or forms library, state-specific claims reporting templates, document rendering, a content repository, and content management tools are standard. The solution does not currently include multi-channel delivery and output of documents (e.g., PDF, email, web, print), but the company reports that this functionality is under development and should be available in less than six months.

#### **FNOL**

FROI/SROI EDI reporting; mobile and smart device input; claim characteristics scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim); claimant contact management data capture; claim checking duplication; and recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry are standard functions. Integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) is available via out-of-the-box integration to a third-party system or service. The solution does not currently include scripting for claims intake with reflexive questioning or custom question sets to prompt additional, mandatory questions depending on given answers (branch scripting).

#### Fraud

Configurable business rules and tasks (specific to fraud and special investigations) are standard. The provision of search/reporting criteria for fraud detection via the ability to track common clients across claims is available via out-of-the-box integration to a third-party system or service.

#### Litigation

Litigation process tracking, including negotiation details and litigation costs, and creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management are standard functions.

#### **Multi-Channel**

E-signature, an agent portal with self-service, a policyholder portal with self-service, call center integration for FNOL via telephony, and call center integration for claims status check via telephony are standard functions.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location) is standard. Assignment to reinsurance treaties and assignment to facultative arrangements are available with configuration via tools for IT analysts or BAs.

#### Reporting

Standard reporting of configurable metrics for claims reporting; ad hoc reports; dashboards; reporting that includes jurisdiction-specific reports and forms; and standard reporting of claims performance monitoring, including claims handling and high-risk indicators, e.g., fatality, large losses, and fraud, are standard functions. Electronic reporting or automated state filings are available via out-of-the-box integration to a third-party system or service.

#### Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; subrogation billing and the production of correct GL entries; granular tracking reserves and payments; automatic reserve calculations using business rules and risk characteristics; and direct, case, average, factor, and expense reserve types are standard functions. The solution does not currently include jurisdictional wage and rate calculations integrated for workers' comp.

## **Vendor Management**

Vendor management functions and processing required forms (including 1099s) are standard.

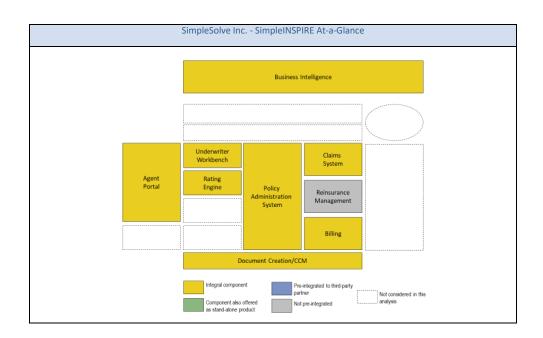
## Workflow

Automated workflow/task generation; overriding automated processes and triggering workflow processes manually; automatic work assignment based on configurable rules; the inclusion of external documents (e.g., letters, pictures) in file notes); assigning multiple adjusters to a single claim; and generating notes, diaries, and reminders are standard functions. OCR-triggered workflow is available via out-of-the-box integration to a third-party system or service. The solution does not currently include compliance with the Document Repository Interface (DRI) standards, processing claim workflow trigger (CWT) files at insurer-defined intervals, or full integration with electronic court filings (ECF2).

## SimpleSolve Inc. - SimpleINSPIRE

## **Executive Summary**

- SimpleSolve is a subchapter of a C Corporation, incorporated in 2000. The company's
  headquarters are in Pennington, NJ. SimpleSolve employs 65 people (including employees at
  a fully owned offshore development center in India) and reports an annual revenue of under
  \$5M. SimpleSolve notes that it is debt free.
- SimpleINSPIRE is a suite that includes core policy features, rating, underwriter workbench, agent portal, document creation, billing, claims, and business intelligence components.
- It currently has seven live US insurer clients using the suite, all of which are smaller to midsized companies (under \$1B) using the solution to support personal and commercial lines.
- Publicly announced clients include GEICO Marine Insurance Co., Specialty Risk of America,
   Baltimore Equitable Insurance, Colorado School Districts Self Insurance Pool, and California
   Mutual Insurance Co.
- SimpleINSPIRE is a web-based, scalable solution written in Angular, Elastic Search, .NET Core, Redis Cache, and .NET (C#/VB.NET). It is a windows client for admin functions. The company asserts that the solution includes intelligent and interactive BOTs, elastic search, and cognitive services.
- Configuration for screens, workflow, rules, integration to third-party service calls, and document authoring is via developer tools, XML manipulation, or a scripting language.
   Configuration for insurance products is via code.
- Implementation is available through the company's own resources. SimpleSolve deploys the
  solution on-prem and hosted on a private or public cloud (MS Azure, AWS, or other). A SaaS
  delivery model is available that includes hosting, license, maintenance and support, ongoing
  access to the latest version, and the implementation of upgrades.
- The company reports that the average time to initial go-live is 180 days or less and that the average implementation cost is \$100K-\$500K.



## **Lines of Business Supported**

Personal auto:	Live clients offering this product in one US state
Homeowners:	Live clients offering this product in 2-9 US states
Personal umbrella:	Live clients offering this product in 2-9 US states
Dwelling fire:	Live clients offering this product in 2-9 US states
Boatowners:	Live clients offering this product in all 50 US states
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Live clients offering this product in 2-9 US states
General liability:	Live clients offering this product in 2-9 US states
BOP:	Live clients offering this product in one US state
Commercial crime:	Live clients offering this product in 2-9 US states
Commercial auto:	Live clients offering this product in one US state
E&O/D&O:	Solution is designed to support, but no clients live or implementing
Inland marine:	Live clients offering this product in 2-9 US states
Professional liability (including medical malpractice):	Solution is designed to support, but no clients live or implementing
Commercial package:	Live clients offering this product in 2-9 US states
Specialty:	Live clients offering this product in one US state
Workers' comp:	Not currently supported
Surety:	Live clients offering this product in one US state
Other personal lines:	Solution is designed to support, but no clients live or implementing
Other commercial lines†:	Live clients offering this product in all 50 US states

<sup>†</sup> Other commercial lines include excess and surplus commercial property.

SimpleSolve offers boat insurance on demand; one client is in production with the line in all 50 US states. The company notes that it can custom develop the consumer on-demand purchase portal for any personal insurance line of business.

## **Client Base**

Globally, the company has seven clients live on SimpleINSPIRE, all of which are insurer clients (e.g., not MGAs, self-insureds) in the US. Clients are smaller to midsized companies (under \$1B) using the solution to support personal and commercial lines.

Publicly announced clients include GEICO Marine Insurance Co., Specialty Risk of America, Baltimore Equitable Insurance, Colorado School Districts Self Insurance Pool, and California Mutual Insurance Co.

## **Key Functions and Differentiators**

SimpleSolve cites the key functions of SimpleINSPIRE as:

- Rate, quote, and issue functionality including auto-renew, auto-cancel, Smart BOT underwriting assistant, integrated workflow, email, voice to text, e-services, and more
- Configurable installment billing and integrated accounting module, including accounts
  receivable, payable, equity cancel, auto notices and CNPP, payment gateway, and auto pay
- · Claims management including payables processing, recoveries, and litigation management
- Agency/producer full-service portal as well as agency commission payments
- Multi-device-compatible policyholder self-service portal including a payment gateway

The company cites as its key differentiators its company-managed implementations staffed by a team knowledgeable in many P/C insurance LOBs, its UI design with a workflow for small to midsized carriers, a fully integrated system, that it is based on the latest technologies so it is ready to adapt to the future of insurance, and a verifiable record for a short, successful implementation period.

## **Solution Architecture and History**

SimpleINSPIRE launched in 2004 and was re-architected in 2019. The latest release was in January 2021. The company reports that 30% of its customers are on the latest version and 70% are on a version less than three years old. All customers have been through at least one upgrade.

The solution requires Microsoft SQL Server databases and supports UNIX/Linux and Windows platforms. The solution is written in Angular, Elastic Search, .NET Core, Redis Cache, and .NET (C#/VB.NET).

## **APIs and Integration**

The solution provides REST and SOAP APIs.

## **Configurability and User Interface**

SimpleINSPIRE is a Windows client for admin functions and browser-based for user interface functions. Configuration for screens, workflow, rules, integration to third-party service calls, and document authoring is via developer tools, XML manipulation, or a scripting language. Configuration for insurance products is via code.

## **Deployment Options**

SimpleSolve deploys the solution on-prem and hosted on a private or public cloud (MS Azure, AWS, or other). A SaaS delivery model is available that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades. SimpleSolve notes that single-tenant vs. multi-tenant hosting is based on the type of client and LOBs.

## **Average Implementation Length and Cost**

SimpleINSPIRE is implemented through the company's own resources. SimpleSolve reports that the solution can be ready for initial go-live in 180 days or less and fully rolled out in an additional 12 months or less. The company reports that the average implementation cost is \$100K-\$500K.

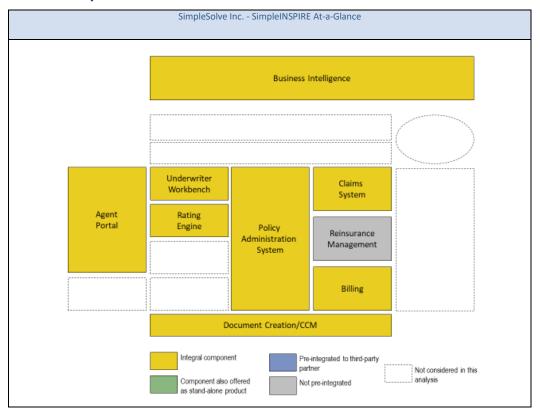
## **Support**

Of SimpleSolve's 65 employees, about 40 are engaged in product design and development. About 15 are engaged in implementations and customer support. The rest are officers and admin staff. Support is located domestically in Pennington, NJ and at an offshore center in Chennai, India.

## **Systems Integrator and Other Partners**

Publicly announced technology partnerships include Invoice Cloud (payment gateway), One Inc. (payment gateway), HelloSign (e-signature), DocuSign (e-signature), and e2Value (replacement cost estimator).

## **Functionality**



## **Policy Administration Functions**

The company asserts that SimpleINPSIRE includes the full range of policy transactions for new business and post-issuance. The solution includes policy issue, premium accounting, and out-of-sequence endorsement out of the box with no configuration necessary. Forms management and manuscripted policies are available with configuration via tools for IT analysts or BAs. Bordereaux import/export is available with configuration via developer tools, XML manipulation, or a scripting language.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

#### **Rating Functions**

Rating functions are an integral part of the suite and are not marketed as a stand-alone solution.

Out-of-sequence endorsements; multi-line, multi-state, multi-location rating on a single policy; and the ability rate multiple coverage/quote alternatives are standard functions.

Quick quote and support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing are available with configuration using simple tools targeted for IT analysts or BAs.

Compliance and change control functions like versioning and update management, change control functions, and auditability of rate versioning are standard. An application and forms library with standard and customizable applications and forms is available with configuration via simple tools for IT analysts or BAs.

Integration capabilities such as download to agency management systems and pre-integration to third-party data providers are available with configuration via simple tools for IT analysts or BAs.

ISO rates/rules support, NCCI/Bureau of Workers' Comp rates/rules support, and ISO ERC integration are not currently available, but ISO-formatted statistical data is available with configuration using developer tools, XML manipulation, or a scripting language.

The solution does not currently include multi-carrier comparison. The ability to save/store an inprocess or complete policy change transaction to allow issuance at a later date is standard. Product design and development tools are available with configuration using simple tools targeted for IT analysts or BAs.

Rule definition and management functions like rate table design and update management tools, import/export rating tables to/from spreadsheets, and date management capabilities are available with configuration via tools for IT analysts or BAs.

The ability to maintain rating algorithm definition and management separately from rate tables and rating and rule definition and management (e.g., automatic driver assignment) are available with configuration via developer tools, XML manipulation, or a scripting language.

The solution does not currently include displacement testing (i.e., the ability to run existing books of business through proposed rate/product changes to determine the impact) or testing, modeling, and product analysis.

#### **Underwriter Workbench Functions**

Underwriter workbench functions are integral to the suite and are not marketed as a stand-alone solution.

The ability to upload/import submission data form a structured data feed is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include the ability to upload/import submission information from documents (i.e., OCR-like functionality).

Support for policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transaction, cancellation transaction, and underwriting multiple submissions as one work portfolio are standard functions. Support for new business transactions/underwriting is available with configuration using simple tools targeted for IT analysts or BAs.

The solution does not currently include the ability to allow individual quotes for different lines to be combined into a single proposal. The company asserts, however, that the solution allows creating and rating multi-line package policies, which are quoted as a single policy.

Capturing underwriting analysis and an underwriters' loss analysis, submission rating, and pricing analysis and scheduled rating information are standard functions. Underwriter checklists that can validate information completeness and process completeness are available with configuration via developer tools, XML manipulation, or a scripting language.

Providing a single current and historical views of insured accounts across the enterprise, lines of business and, policy systems is a standard function. Document storage is also a standard function. Document creation (proposals, applications, correspondence) is available with configuration via tools for IT analysts or BAs.

A rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (e.g., inbox, predefined workflows by transaction/line of business, automatic task assignment, diaries); a rules engine that interfaces to conditionally order specific data; inline reports/dashboards on tasks/work/work status; and inline reports/dashboards to support underwriting analysis are available with configuration via tools for IT analysts or BAs.

SimpleSolve notes that geo-mashup of existing book and proposed risk is available through its PowerBI presentation and that risk concentration of proposed risk is available through its integrated bot that uses native data.

IM collaboration with other underwriters is available through the company's diary function, and screensharing with other underwriters is available out of the box. SimpleSolve reports that multiple underwriters can view a proposal, with only one allowed to edit. , proposal coauthoring with other underwriters are not currently available, and screen sharing with other underwriters are not currently available.

Agent-facing capabilities are standard. Preconfigured interfaces with agent portals and third-party data services are available with configuration via tools for IT analysts or BAs.

SimpleSolve notes that its business intelligence dashboards are built on Microsoft PowerBI, with data feeding into the database in an overnight update process; the client's PowerBI technical resource can maintain the business intelligence module.

Preconfigured interfaces with policy admin systems and natively calculated predictive scores are not currently available. The company notes that SimpleSOLVE can interface with external systems and services via developer tools, XML manipulation, or a scripting language.

Support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) is a standard function. Support for variable binding/approval authority by role is available with configuration via tools for IT analysts or BAs.

#### **Document Functions**

Document functions are integral to the suite and are not marketed stand-alone. The solution supports mass-produced documents (e.g., statements) and ad hoc documents (e.g., correspondence, manuscripted policies).

The solution includes pre-packaged, pre-built forms, libraries, and templates from ACORD, ISO, and AAIS. SimpleSolve notes that it lists the forms used by the customer during the analysis phase and configures just the forms each customer requires.

The primary authoring environment is a custom environment, MS Word, Adobe Creative Suite, or other platforms. Content, schema mapping, and data sources are designed to be maintained by business analysts. Business rules are typically maintained by technical resources.

The solution is designed to support print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is standard. Clients must use the toolset built into the solution for document authoring and content management workflow.

A content repository, content management tools, and archival capabilities for all documents generated are standard. The solution is designed to support ACORD XML schemas out of the box.

#### **Agent Portal Functions**

Agent portal functions are integral to the suite and are not marketed as a stand-alone solution.

P/C portal functions including new business entry/submission, account clearance, quick quote, policy change entry/submission, online payment, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, ACORD application creation, side-by-side quote comparison, account or client view in addition to policy view, underwriter view and/or tools, and agent/underwriter collaboration are standard.

Integration and pre-fill with data services, proposal creation, agency management system upload, and a rating engine are available with configuration using simple tools targeted for IT analysts or BAs. Uploading/importing data (e.g., locations, cars, drivers) from Excel is available with configuration using developer tools, XML manipulation, or a scripting language.

Support for e-signature; document creation; file attachment support; scheduling, diary, and calendar functions; workflow and task management capabilities; business intelligence and reporting; and a consumer portal are standard functions.

#### **Reinsurance Functions**

The solution does not currently include reinsurance functionality.

## **Business Intelligence Functions**

Business intelligence functions are integral to the suite and are not marketed as a stand-alone solution.

SimpleSolve reports that its BI solution's database is an extract coming from its PAS. It has dashboards showing KPIs for the company, policy book, accounts, and claims.

The solution includes a presentation/reporting component; standard, predefined reports and predefined insurance dashboards; tools to support data governance, dictionaries, quality, and validation; and an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes.

The solution supports real-time streaming data movement (e.g., use of Kafka).

## **Billing Functions**

Billing is integral to the suite and is not marketed as a stand-alone solution. Payment and billing plan configurability is available via tools for IT analysts or BAs.

The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Not available
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Not available
reporting:	
Pay-as-you-report for workers' comp:	Not available
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available out of the box with no configuration necessary
Billing for non-premium receivables (such	Available with configuration using simple tools targeted
as claims deductibles paid):	for IT analysts or BAs
Payment of non-refund payables (such as	Available with configuration using simple tools targeted
policy dividends or mutual dividends):	for IT analysts or BAs
Multi-currency support in a single instance	No
of the application:	

# Claims Functions

Claims functions are an integral part of the suite and are not sold as a stand-alone claims component.

## **Adjudication**

Injury detail maintenance (coding), automated coverage verification, and aggregate tracking (erosion of policy limits) are standard. Deductible tracking is available with configuration using sipmle tools targeted for IT analysts or BAs. The solution does not currently include medical case management or disability management.

#### Catastrophe

Catastrophe definition and automatic identification of catastrophe claims are standard functions. The ability to attach multiple LOBs and causes of loss to a single catastrophe as well as mapping tools are available with configuration using simple tools targeted for IT analysts or BAs.

#### **Disbursements**

Check processing is standard. The ability to calculate and schedule recurring payments and the ability to calculate partial or one-off payments are available with configuration using developer tools, XML manipulation, or a scripting language. The solution does not currently include the ability to accommodate multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, OFAC checking, or the ability to handle multiple offsets and deductions against benefits (e.g., wage garnishments, child support).

#### **Documents**

Image and media management are standard. A correspondence or forms library, state-specific claims reporting templates, document rendering, and a content repository and content management tools are available via integration to a third-party system or service. The solution does not currently support multi-channel delivery and output of documents (including PDF, email, web, and print).

#### **FNOL**

Claimant contact management data capture and claim checking duplication are standard. The ability to record and store new loss notices from a web portal, email, fax, or manual entry is available with configuration via tools for IT analysts or BAs. Scripting for claims intake with reflexive questioning; custom question sets to prompt mandatory additional questions depending on the answers given (branch scripting); and claim characteristics scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim) are available with configuration using developer tools, XML manipulation, or a scripting language. The solution does not currently include handling of FROI/SROI EDI reporting, mobile and smart device input, or integration with external vendors and services (e.g., car rental companies, car/equipment repair shops).

## Fraud

The solution does not currently include configurable business rules and tasks specific to fraud and special investigations or provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims.

## Litigation

Litigation process tracking, including negotiation details and litigation costs, is available with configuration using simple tools targeted for IT analysts or BAs. The ability to create separate tasks, workflow, diaries, or business rules for litigated cases to allow legal case management is available with configuration using developer tools, XML manipulation, or a scripting language.

#### **Multi-Channel**

E-signature capability and a policyholder portal with self-service are available with configuration using developer tools, XML manipulation, or a scripting language. An agent portal with self-service is available via out-of-the-box integration to a third-party system or service. The solution does not currently include call center integration for FNOL via telephony or call center integration for claim status check via telephony.

#### Reinsurance

Assignment to reinsurance treaties and assignment to facultative arrangements are available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include the ability to identify claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location).

#### Reporting

Standard reporting of claims performance monitoring (including claims handling and high-risk indicators, e.g., fatality, large losses, fraud), standard reporting of configurable metrics for claims reporting, ad hoc reports, dashboards, reporting that includes jurisdiction-specific reports and forms, and electronic reporting or automated state filings are available with configuration via tools for IT analysts or BAs.

#### Reserves, Recoveries, Subrogation

Granular tracking reserves and payments and direct, case, average, factor, and expense reserve types are available out of the box with no configuration necessary. Automatic reserve calculations using business rules and risk characteristics are available with configuration using simple tools for IT analysts or BAs.

The solution does not currently include the ability to create separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; subrogation billing and the production of correct GL entries; or jurisdictional wage and rate calculations integrated for workers' compensation.

## **Vendor Management**

Vendor management functions are standard. The ability to process required forms (including 1099s) is available with configuration using simple tools targeted for IT analysts or BAs.

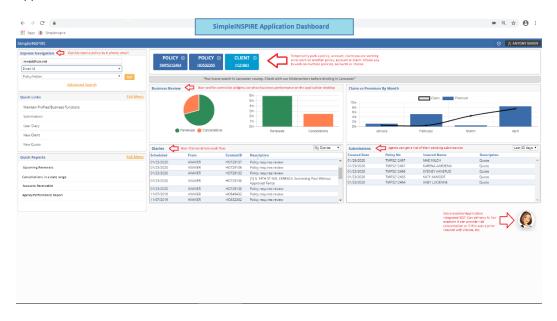
#### Workflow

Generating notes, diaries, and reminders; inclusion of external documents (letters and pictures) in file notes; and assigning multiple adjusters to a single claim are standard functions. Processing claim workflow trigger (CWT) files at insurer-defined intervals is available with configuration via tools for IT analysts or BAs.

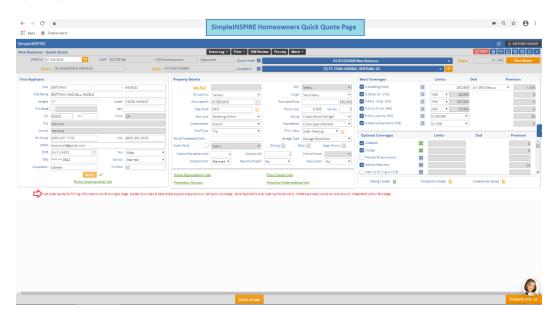
Automated workflow/task generation is available with configuration via developer tools, XML manipulation, or a scripting language. OCR-triggered workflow and compliance with the document repository interface (DRI) standards are available via out-of-the-box integration to a third-party system or service. The solution does not currently include overriding automated processes and manually triggering workflow processes, automatic work assignment based on configurable rules, or full integration with electronic court filings (ECF2).

## **Screenshots**

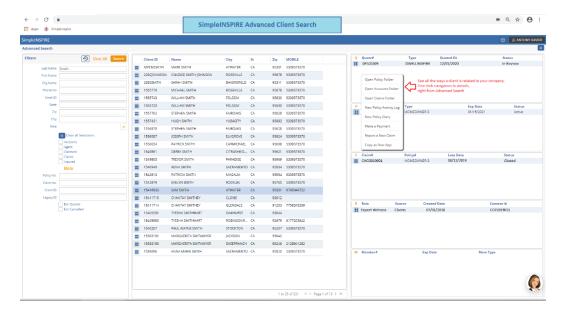
**Application Dashboard** 



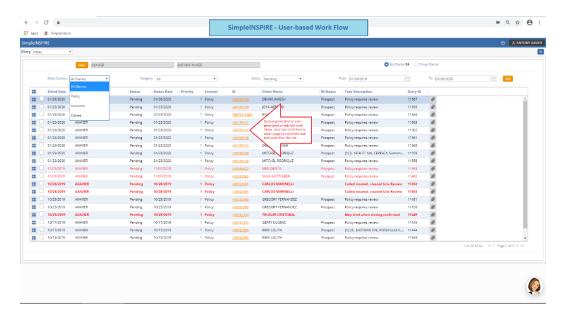
#### Quick Quote



## Advanced Client Search



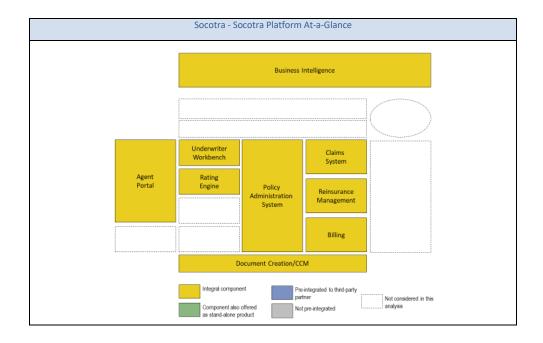
#### User-Based Workflow



## Socotra - Socotra Platform

## **Executive Summary**

- Socotra is a modern, enterprise-grade core system that the company asserts enables global insurers to accelerate product development, reduce maintenance costs, and improve customer experiences.
- Socotra is a privately held company with headquarters in San Francisco, CA that employs 52 people. The company declined to disclose annual revenue.
- Socotra Platform includes core policy, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has four live US/Canadian insurer clients using the suite, most of which are larger companies (over \$1B) using the solution to support personal lines with some commercial.
- Publicly announced clients include Nationwide, AXA, Mutual of Omaha, IAG, and MS Amlin.
- The solution is browser-based for all user-interface functions. The company declined to
  disclose the programming languages that comprise the solution since it is a platform with
  open APIs. The company reports that, as the Socotra Platform is cloud-based, clients can use
  their choice of technologies to interact with the platform.
- Configuration for insurance products, rules, and document authoring is via tools for BAs and non-IT staff. Workflow and integration to third-party service calls are configurable via developer tools, XML manipulation, or a scripting language. Screen configuration is via code.
- Implementation is available through the company's resources or a partner. Socotra deploys
  the solution hosted on AWS. The company offers a SaaS delivery model that includes
  hosting, license, maintenance and support, ongoing access to the latest version, and
  implementation of the upgrades.
- The company reports that the average time to initial go-live is 90 days or less and that the average implementation cost is \$500K-\$1M.



## **Lines of Business Supported**

Personal auto:	Live clients offering this product in 10-49 US states
Homeowners:	Clients currently in implementation for this line/product
Personal umbrella:	Clients currently in implementation for this line/product
Dwelling fire:	Clients currently in implementation for this line/product
Boatowners:	Solution is designed to support, but no clients live or implementing
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Live clients offering this product in 10-49 US states
General liability:	Live clients offering this product in 10-49 US states
BOP:	Live clients offering this product in 10-49 US states
Commercial crime:	Live clients offering this product in 10-49 US states
Commercial auto:	Live clients offering this product in 10-49 US states
E&O/D&O:	Live clients offering this product in 10-49 US states
Inland marine:	Solution is designed to support, but no clients live or implementing
Professional liability (including medical malpractice):	Live clients offering this product in 10-49 US states
Commercial package:	Live clients offering this product in 10-49 US states
Specialty:	Solution is designed to support, but no clients live or implementing
Workers' comp:	Solution is designed to support, but no clients live or implementing
Surety:	Solution is designed to support, but no clients live or implementing
Other personal lines:	Solution is designed to support, but no clients live or implementing
Other commercial lines:	Solution is designed to support, but no clients live or implementing

Socotra offers income protection and personal auto on demand; both are in production internationally, and one line is in implementation domestically for 10-49 US states.

## **Client Base**

Globally, the company has nine clients live on Socotra Platform, eight of which are insurer clients (i.e., not MGAs, self-insureds). The solution has three live insurer clients in the US and Canada, most of which are larger companies (over \$1B) using the solution to support personal and commercial lines.

Publicly announced clients include Nationwide, AXA, Mutual of Omaha, IAG, and MS Amlin.

## **Key Functions and Differentiators**

Socotra cites the key functions of Socotra Platform as:

- Customers can try Socotra for 30 days
- Creation of nearly any type of insurance product
- Integrations with existing systems via an open suite of APIs
- The company constantly improves the platform with zero downtime
- Features for one customer instantly a feature for all

The company asserts as its key differentiators that it is a true product; that customers can try Socotra for thirty days using its configuration studio; integration via readily-available API documentation; its data model, which enables insurers to create any line of business; as well as its cloud-native platform, which allows the company to add features and enhancements across clients weekly.

## **Solution Architecture and History**

Socotra platform launched in 2014. The company reports that it provides zero-downtime upgrades weekly. All solution users are on the latest platform and have been through at least one upgrade.

The company declined to disclose the programming languages that comprise the solution since it is a platform with open APIs. The company reports that, as the Socotra Platform is cloud-based, clients can use their choice of technologies to interact with the platform.

## **APIs and Integration**

The solution provides REST APIs. The company notes that its APIs are open at docs.socotra.com.

## **Configurability and User Interface**

Socotra Platform is browser-based for all user interface functions.

Configuration for insurance products, rules, and document authoring is via tools for BAs and non-IT staff. Workflow and integration to third-party service calls are configurable via developer tools, XML manipulation, or a scripting language. Screen configuration is via code.

## **Deployment Options**

Socotra deploys the solution hosted on AWS. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades.

The hosted solution is a multi-tenant app server and database with single-tenant options available.

## **Average Implementation Length and Cost**

Implementation is available through Socotra's own resources or a partner. Socotra reports that the average time to initial go-live is 90 days or less and that the solution can be fully rolled out in an additional 180 days or less. The average implementation cost is \$500K-\$1M.

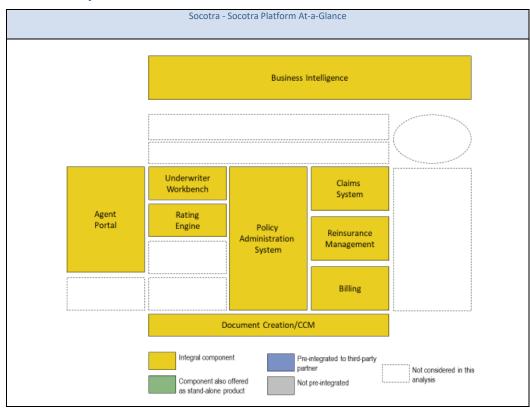
## **Support**

Of the 52 people employed at Socotra, there are around 24 in R&D and around 15 working on implementation and support. Support resources are located in the US, Australia, and Europe. The company offers customer engagement activities such as online training, a customer advisory committee, and training seminars.

## **Systems Integrator and Other Partners**

Publicly announced SI partnerships include Ernst and Young, Deloitte, and PwC.

## **Functionality**



## **Policy Administration Functions**

The solution includes policy issue, premium accounting, out-of-sequence endorsement, and forms management out of the box. The solution does not currently include bordereaux import or manuscripted policies.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

#### **Rating Functions**

Rating functions are integral to the suite and are not marketed as a stand-alone solution.

Out-of-sequence endorsements and rating multiple coverage/quote alternatives are standard functions. A quick quote option; support for after-inception policy rating (for endorsements, cancellations, reinstatements, and renewal processing); and multi-line, multi-state, and multi-location rating on single policies are available with configuration via tools for IT analysts or BAs.

Versioning and update management, change control functions, and auditability of rate versioning are standard functions. An application and forms library with standard and customizable applications and forms is available with configuration via tools for IT analysts or BAs.

Download to agency management systems and pre-integration to third-party data providers are available with configuration via developer tools, XML manipulation, or a scripting language.

ISO rates/rules support, NCCI/Bureau of Workers' Comp rates/rules support, ISO-formatted statistical data, and ISO ERC integration are available with configuration via developer tools, XML manipulation, or a scripting language.

Saving/storing an in-process or completed policy change transaction to allow issuance at a later date is a standard function. Product design and development tools are available with configuration via tools for IT analysts or BAs. Multi-carrier comparison and setting insurer-specific defaults are available with configuration via developer tools, XML manipulation, or a scripting language.

Date management capabilities are standard. Maintaining rating algorithm definition and management as well as rate table design and update management tools are available with configuration via tools for IT analysts or BAs. Import/export rating tables to/from spreadsheets (e.g., Excel) along with rating and rule definition and management (e.g., automatic driver assignment) are available with configuration via developer tools, XML manipulation, or a scripting language.

Displacement testing (i.e., the ability to run existing books fo business through proposed rate/product changes to determine impact) and testing, modeling, and product analysis are available with configuration via developer tools, XML manipulation, or a scripting language.

## **Underwriter Workbench Functions**

Underwriter workbench functions are integral to the suite and are not sold as a stand-alone solution.

Uploading/importing the submission data from a structured data feed as well as uploading/importing the submission information from documents (OCR-like functionality) are available with configuration using developer tools, XML manipulation, or a scripting language.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, and cancellation transactions is standard.

Supporting underwriting multiple submissions as one work portfolio, combining individual quotes for different lines into a single proposal, capturing underwriting analysis, and capturing underwriter loss analysis are available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include underwriter checklists that can validate information or process completeness.

Document storage and a rules engine that applies underwriting, workflow, and general business rules automatically are standard functions. Document creation (e.g., proposals, applications, correspondence) and a rules engine that interfaces to order specific data conditionally are available with configuration via tools for IT analysts or BAs.

Pricing analysis and scheduled rating information and providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include submission rating or workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries).

Displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of the existing book and proposed risk) is a standard function. Inline reports/dashboards to support underwriting analysis is available with configuration via simple tools targeted for IT analysts or BAs. The solution does not currently include inline reports/dashboards on tasks/work/work status.

Proposal co-authoring with other underwriters, screen sharing with other underwriters, and agent-facing capabilities are standard functions. The solution does not currently include IM collaboration with other underwriters.

Preconfigured interfaces with policy admin systems are standard. Preconfigured interfaces with third-party data services are available with configuration via tools for IT analysts or BAs. Preconfigured interfaces with external predictive scoring models are available via developer tools, XML manipulation, or a scripting language. The solution does not currently include preconfigured interfaces with agent portals, preconfigured integration with business intelligence environments, or natively calculated predictive scores.

Support for variable binding/approval authority by role and support for email notification/ communication with agents and underwriters within the system (retaining a record of all emails) are available with configuration via developer tools, XML manipulation, or a scripting language.

## **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents, e.g., statements (most common use case) and ad hoc documents, e.g., correspondence and manuscripted policies (less common use case).

The solution does not include ISO or ACORD forms. The primary authoring environment is a non-Microsoft/non-Adobe platform. Content is maintained by the average business user. Business rules, schema mapping, and data sources are maintained by business analysts.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is available with configuration using simple tools targeted for IT analysts or BAs. Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository, content management tools, and archival capabilities for all generated documents are available out of the box. The solution supports industry-standard schemas like ACORD XML, ebXML, and XBRL out of the box.

#### **Agent Portal Functions**

Agent portal functions are integral to the suite and are not marketed as a stand-alone solution.

Quick quote, policy change entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, proposal creation, side-by-side quote comparison, account or client view (in addition to a policy view), underwriter view and/or tools, agent/underwriter collaboration, and a rating engine are standard functions. The solution does not currently include account clearance.

New business entry/submission, renewal quote entry/submission, and ACORD application creation are available with configuration via tools for IT analysts or BAs. Uploading/importing data from Excel (e.g., locations, cars, drivers), integration and pre-fill with data services, and agency management system upload are available with configuration via developer tools, XML manipulation, or a scripting language. Online payment is available via out-of-the-box integration to a third-party system or service.

Business intelligence and reporting are standard. Document creation and file attachment support are available with configuration via tools for IT analysts or BAs. Scheduling, diary, and calendar functions are available with configuration via developer tools, XML manipulation, or a scripting language. E-signature is available via out-of-the-box integration to a third-party system or service. The solution does not currently include workflow and task management capabilities or a consumer portal.

#### **Reinsurance Functions**

Reinsurance is integral to the suite and is not marketed as a stand-alone solution.

Ceded reinsurance management functions like manually entering and tracking cessions, reserves, and limits are available with configuration via tools for IT analysts or BAs. Automated notifications if reserve reaches a specific amount or treaties approach set limits are available with configuration via developer tools, XML manipulation, or a scripting language. Automated identification/calculation of accounts with applicable reinsurance is available via out-of-the-box integration to a third-party system or service.

The solution does not currently include assumed reinsurance management functions like manually entering and tracking assumed reinsurance contracts, automated assumed reinsurance calculations based on reinsured data feeds/connections, or retrocession reinsurance management.

The solution does not currently include treaty management; facultative management; proportional support; non-proportional/excess of loss; multiple basis types; retroactive processing of late placements or midterm contract changes; or the configuration of contract rules, formulas, and types.

End-user interfaces for manual contract entry, manual flagging of premiums and claims subject to reinsurance, and review and approval of assumed policies as part of facultative contracts are available with configuration via tools for IT analysts or BAs.

Batch file import/export for integration to other systems, real-time data intake from core systems (e.g., PAS, claims) via API or another mechanism, real-time integration to an underwriting system (e.g., to display limits/reserves), and integration between other insurer or reinsurer systems are available with configuration via developer tools, XML manipulation, or a scripting language.

Statutory and regulatory reporting; a standard library of canned reports; automated Schedule F reporting; automated bordereau reporting; ad hoc reporting; and integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc. are available with configuration via developer tools, XML manipulation, or a scripting language.

Viewing the full history and status of claims and claim recovery is a standard function. The solution does not currently include automated recoverable claims identification.

Document management and storage of the actual contracts and an audit trail for all transactions are standard. Multi-currency and multi-language support is available via out-of-the-box integration to a third-party system or service. The solution does not currently include tracking reinsurance payables and receivables or entity management (CRM).

### **Business Intelligence Functions**

Business intelligence functions are integral to the suite and are not marketed stand-alone.

Socotra allows insurers to drive analytical insights by extracting data from its APIs and leveraging the company's pre-canned reports. It notes that an extensive dashboard for analytics is also on its roadmap for 2021.

The solution includes an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes; a presentation/reporting component; standard predefined reports and predefined insurance dashboards; and an ad hoc reporting tool. The solution also includes some tools to support data governance, dictionaries, quality, and validation as a secondary part of the offering. The solution supports real-time streaming data movement (e.g., use of Kafka).

## **Billing Functions**

Billing is integral to the suite and is not marketed as a stand-alone solution. Payment and billing plan configurability is available with configuration via tools for IT analysts or BAs. The table on the following page shows the availability of other billing functions.

Available with configuration using simple tools targeted for IT analysts or BAs
Available with configuration using developer tools, XML manipulation, or a scripting language
Available with configuration using developer tools, XML manipulation, or a scripting language
Available with configuration using simple tools targeted for IT analysts or BAs
Currently not available, but could be available with a system enhancement
Available out of the box with no configuration necessary
Available out of the box with no configuration necessary
Currently not available, but could be available with
integration to another system or service
Available out of the box with no configuration necessary
Available with configuration using simple tools targeted
for IT analysts or BAs
Currently not available, but could be available with
integration to another system or service
Currently not available, but could be available with
integration to another system or service
Available via out-of-the-box integration to a third-party system or service
Available out of the box with no configuration necessary
Available out of the box with no configuration necessary
Available via out-of-the-box integration to a third-party
system or service
Available via out-of-the-box integration to a third-party system or service
No
Available via out-of-the-box integration to a third-party system or service
Available out of the box with no configuration necessary
Available via out-of-the-box integration to a third-party system or service
Available via out-of-the-box integration to a third-party system or service
Available out of the box with no configuration necessary
Currently not available, but could be available with integration to another system or service
Available out-of-the-box with no configuration necessary
,
Currently not available, but could be available with
integration to another system or service
No

#### **Claims Functions**

Claims functions are integral to the suite and are not marketed as a stand-alone solution.

#### **Adjudication**

Automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard. Injury detail maintenance (coding) is available via tools for IT analysts or BAs. Medical case management and disability management are available via out-of-the-box integration to a third-party system or service.

#### Catastrophe

Catastrophe definition and attaching multiple LOBs and multiple causes of loss to a single catastrophe are available with configuration via tools for IT analysts or BAs. Automatic identification of catastrophe claims is available with configuration via developer tools, XML manipulation, or a scripting language. Mapping tools are available via out-of-the-box integration to a third-party system or service.

#### **Disbursements**

Calculating partial or one-off payments and accommodating multiple pay parties (e.g., garnishments) are standard. Calculating and scheduling recurring payments are available with configuration via developer tools, XML manipulation, or a scripting language.

Check processing, combining multiple pending payments for a single client into one disbursement, and OFAC checking are available via out-of-the-box integration to a third-party system or service. The solution does not currently include handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support).

#### **Documents**

Image and media management, document rendering, a content repository, content management tools, and multi-channel delivery and output of documents (e.g., PDF, email, web, print) are standard functions. State-specific claims reporting templates are available with configuration via tools for IT analysts or BAs. A correspondence or forms library is available via out-of-the-box integration to a third-party system or service.

## **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; custom question sets to prompt additional, mandatory questions depending on given answers (branch scripting); and claimant contact management data capture are available with configuration via tools for IT analysts or BAs.

Handling of FROI/SROI EDI reporting and checking for duplicate claims are available with configuration via developer tools, XML manipulation, or a scripting language. Mobile and smart device input, scripting for claims intake with reflexive questioning, claim characteristics scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim), and integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) are available via out-of-the-box integration to a third-party system or service.

#### **Fraud**

Configurable business rules and tasks (specific to fraud and special investigations) and the provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims are available with configuration via developer tools, XML manipulation, or a scripting language.

## Litigation

Litigation process tracking, including negotiation details and litigation costs, is available via out-of-the-box integration to a third-party system or service. The solution does not currently include creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management.

#### Multi-Channel

E-signature, an agent portal with self-service, a policyholder portal with self-service, call center integration for FNOL via telephony, and call center integration for claims status check via telephony are available via out-of-the-box integration to a third-party system or service.

#### Reinsurance

Assignment to reinsurance treaties and assignment to facultative arrangements are available with configuration via tools for IT analysts or BAs. Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location) is available via out-of-the-box integration to a third-party system or service.

#### Reporting

Standard reporting of claims performance monitoring, including claims handling, and high-risk indicators such as fatality, large losses, and fraud; standard reporting of configurable metrics for claims reporting; ad hoc reports; dashboards; reporting that includes jurisdiction-specific reports and forms; and electronic reporting or automated state filings are available with configuration via developer tools, XML manipulation, or a scripting language.

#### Reserves, Recoveries, Subrogation

Granular tracking reserves and payments and direct, case, average, factor, and expense reserve types are standard functions. Creating separate tasks, workflow, diaries, and business rules for subrogated cases and automatic reserve calculations using business rules and risk characteristics are available out-of-the-box integration to a third-party system or service.

The solution does not currently include automatic subrogation identification, subrogation billing and the production of correct GL entries, or jurisdictional wage and rate calculations integrated for workers' comp.

#### **Vendor Management**

Vendor management is available via out-of-the-box integration to a third-party system or service. The solution does not currently include processing required forms (including 1099s).

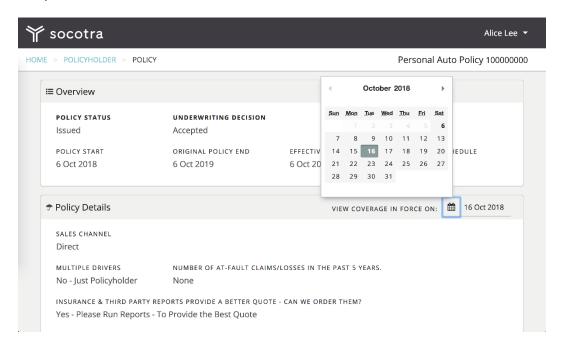
## Workflow

The inclusion of external documents (e.g., letters, pictures) in file notes is standard. Assigning multiple adjusters to a single claim is available with configuration via tools for IT analysts or BAs.

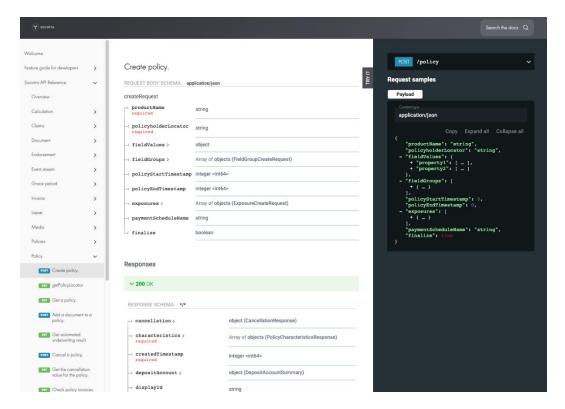
Overriding automated processes and triggering workflow processes manually along with automatic work assignments based on configurable rules are available with configuration via developer tools, XML manipulation, or a scripting language. Automated workflow/task generation; OCR-triggered workflow; generating notes, diaries, and reminders; and processing claim workflow trigger (CWT) files at insurer-defined intervals are available via out-of-the-box integration to a third-party system or service. The solution does not currently include compliance with the Document Repository Interface (DRI) standards or full integration with electronic court filings (ECF2).

## **Screenshots**

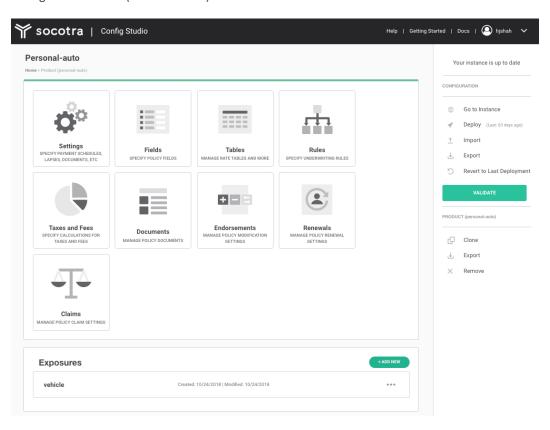
**Policy Overview** 



## **Policy Creation**



## Configuration Studio (Personal Auto)



#### Socotra Documentation



Docs » Welcome to Socotra!

## Welcome to Socotra!



Socotra's open platform supports easy configuration and extension of its core capabilities. Our documentation is separated into three main sections:

- The Configuration Guide can be used by a business analyst to specify data capture, pricing, forms, taxes, fees, and underwriting guidelines, and more.
- The Feature Guide explains Socotra's product capabilities.
- The API Reference details Socotra's RESTful APIs, which make it simple to integrate Socotra into your IT ecosystem.

See our Release Notes for the lastest improvements, and the API Changelog for changes that affect the API and integration.

#### **Getting Started**

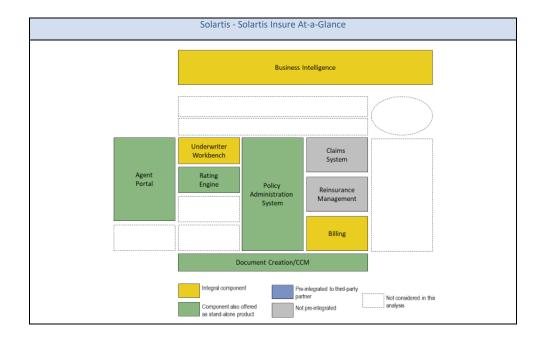
- Object Model
- · Configuration Walkthrough
- Testing Configuration
- Getting Started Guide

Configuration Guide

# **Solartis - Solartis Insure**

# **Executive Summary**

- Solartis is a privately owned organization. The company reports that it operates profitably
  and has grown 10% per year for the past five years. It has headquarters in Manhattan Beach,
  CA and employs 800 people. The company's annual revenue is in the range of \$10M-\$20M.
- Solartis Insure is a cloud-based platform based on a microservices framework that includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, and billing APIs.
- It currently has seven live US/Canadian insurer clients using the suite, most of which are smaller companies (under \$1B) using the solution to support commercial lines with some personal.
- Publicly announced clients include Liberty Mutual, Starr Companies, National Independent Truckers Insurance Company, W.R. Berkley, and CHIC (Commercial HireCar Insurance Company).
- The solution is browser-based for all user interface functions. It is written in Java and Python.
- Configuration for insurance product functions and document authoring is via tools for BAs and non-IT staff. Configuration for screens, workflows, and rules is via tools for IT analysts. Configuration for integration to third-party service calls is via developer tools, XML manipulation, or a scripting language.
- Implementation is available through the company's resources. Solartis deploys the solution
  hosted on Oracle Cloud and at a private data center. The company offers a SaaS delivery
  model that includes hosting, license, maintenance and support, ongoing access to the latest
  version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is 90 days or less and that the average implementation cost is \$100K-\$500K.



# **Lines of Business Supported**

Personal auto:	Solution is designed to support, but no clients live or implementing
Homeowners:	Live clients offering this product in 10-49 US states
Personal umbrella:	Live clients offering this product in 10-49 US states
Dwelling fire:	Live clients offering this product in 10-49 US states
Boatowners:	Live clients offering this product in 10-49 US states
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Live clients offering this product in 10-49 US states
General liability:	Live clients offering this product in 10-49 US states
BOP:	Live clients offering this product in 10-49 US states
Commercial crime:	Live clients offering this product in 10-49 US states
Commercial auto:	Live clients offering this product in 2-9 US states
E&O/D&O:	Live clients offering this product in 10-49 US states
Inland marine:	Live clients offering this product in 10-49 US states
Professional liability (including medical malpractice):	Live clients offering this product in 10-49 US states
Commercial package:	Live clients offering this product in 10-49 US states
Specialty:	Live clients offering this product in 10-49 US states
Workers' comp:	Live clients offering this product in one US state
Surety:	Live clients offering this product in one US state
Other personal lines*:	Live clients offering this product in 10-49 US states
Other commercial lines†:	Live clients offering this product in all 50 US states

<sup>\*</sup> Other personal lines include builders risk, vacant property/land, jewelry, and mobile phones.

# **Client Base**

Globally, Solartis has 11 clients live on Solartis Insure, seven of which are insurer clients (i.e., not MGAs, self-insureds, etc.). These insurer clients are all live in the US and Canada. Most of these are smaller companies (under \$1B) using the solution to support commercial lines with some personal.

Publicly announced clients include Liberty Mutual, Starr Companies, National Independent Truckers Insurance Company, W.R. Berkley, and CHIC (Commercial HireCar Insurance Company).

<sup>†</sup> Other commercial lines include commercial umbrella and environmental.

# **Key Functions and Differentiators**

Solartis cites the key functions of Solartis Insure as:

- Comprehensive catalog of cloud-based microservices that support the entire sales, submission, quote, and policy life-cycle process
- All products initially configured and maintained in the Solartis Product Management Tool (PMT) by business users/IT analysts
- Complete library of ISO commercial lines content and ISO ERC countrywide and state-specific files, accessible to customers via PMT
- Solartis Explorer Platform, which allows Solartis or the customer to run what-if scenarios on book of business vs. individual policy level from platform or third-party systems
- Solartis Application Monitoring Tool (AMT) allows the company to be proactive vs. reactive with potential system issues and monitors all customers' production environments

The company asserts as its key differentiators its full suite of policy life-cycle microservices available in three delivery models: Solartis Insure SaaS (total solution option), Solartis Insure PaaS (all sales and policy life-cycle microservices without the UI/UX), or Solartis Insure RaaS (use of just Solartis Rating and Metadata microservices accessed via stateless APIs); ability to initially configure, manage, test, and deploy all insurance products in the PMT; electronically consumed and pretested commercial lines ISO content for all states with the ability to easily configure carrier deviation and exceptions; affordable, usage-based pricing for startups and existing programs; and a short, 90-day or less project timeline.

# **Solution Architecture and History**

Solartis Insure launched in 2005 and was re-architected in 2013. Solartis notes that, after the 2013 conversion to a microservices architecture, releases are updated every six to eight weeks. Solartis reports that all of the solution's customers are on the latest version and that half have been through at least one upgrade. The solution supports DB2/UDB, Oracle, Microsoft SQL Server, and MySQL/MariaDB databases as well as UNIX/Linux and Windows platforms. The solution is written in Java with some Python for an additional supported rules engine.

# **APIs and Integration**

The solution provides REST APIs; Solartis notes that it has a general availability of more than 80 APIs.

## **Configurability and User Interface**

Solartis Insure is browser-based for all user interface functions. Configuration for insurance product functions and document authoring is via tools for BAs and non-IT staff. Configuration for screens, workflows, and rules is via tools for IT analysts. Integration to third-party service calls is configurable via developer tools, XML manipulation, or a scripting language. The company notes that Solartis also has a headless mode, allowing insurers to develop custom screens and leverage back-end policy life-cycle web services and workflows.

# **Deployment Options**

Implementation is available through the company's resources. Solartis deploys the solution hosted on Oracle Cloud or at a private data center. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades.

The hosted solution is a multi-tenant app server and a single-tenant database. A single-tenant app server option is also available.

# **Average Implementation Length and Cost**

Solartis implements the solution through the company's resources. It reports that Solartis Insure can be ready for initial go-live in 90 days or less and fully rolled out in an additional 180 days or less. The company reports that the average implementation cost is \$100K-\$500K.

## Support

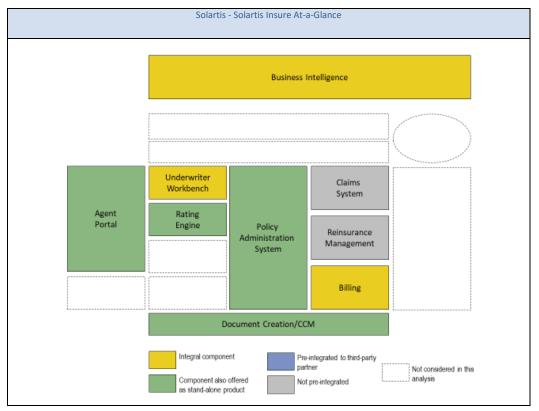
Of the 800 people employed at Solartis, there are between 50 and 100 on the product design and engineering team, between 50 and 100 on the implementation team (not counting partnerships), and between ten and 50 on the support team. The remainder is in Solartis's Administer division, which provides BPO (administrative or clerical) services to insurance administrators.

Senior business analyst/subject matter expert and management resources are all based in the United States. All other resources and support are based in the company's Chennai and Madurai, India locations. Solartis currently offers customer engagement activities including online training.

# **Systems Integrator and Other Partners**

Publicly announced technology partnerships include Verisk (ISO ERC).

# **Functionality**



# **Policy Administration Functions**

The solution includes policy issue, premium accounting, bordereaux import, forms management, and manuscripted policies out of the box. The solution includes out-of-sequence endorsement with configuration via tools for IT analysts or BAs.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

## **Rating Functions**

Solartis Insure Rating as a Service (RaaS) is part of the suite and is also sold as a stand-alone solution.

A quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are standard. Out-of-sequence endorsements are available with configuration via tools for IT analysts or BAs.

Versioning and update management, change control functions, and auditability of rate versioning are standard functions. An application and forms library with standard and customizable applications and forms is available out of the box. Pre-integration to third-party data providers is standard. Download to agency management systems is available with configuration via tools for IT analysts or BAs.

ISO rates/rules support, NCCI/Bureau of Workers' Comp rates/rules support, ISO-formatted statistical data, and ISO ERC integration are available with configuration via tools for IT analysts or BAs.

Multi-carrier comparison is standard. Setting insurer-specific defaults is available with configuration via tools for IT analysts or BAs. Saving/storing an in-process or completed policy change transaction to allow issuance at a later date is a standard function. Product design and development tools are available with configuration via tools for IT analysts or BAs.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are available with configuration via tools for IT analysts or BAs.

Displacement testing (i.e., the ability to run the existing book of business through proposed rate/product changes to determine impact) and testing, modeling, and product analysis are available with configuration via tools for IT analysts or BAs.

#### **Underwriter Workbench Functions**

Underwriting functions are part of the suite and are not marketed as a stand-alone solution.

Uploading/importing the submission data from a structured data feed is available with configuration via tools for IT analysts or BAs. Uploading/importing submission information from documents (OCR-like functionality) is available via integration to a third-party system or service.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, and cancellation transactions is standard.

Supporting underwriting multiple submissions as one work portfolio and allowing quotes for different lines to be combined into a single proposal are available with configuration via tools for IT analysts or BAs.

Capturing underwriting analysis; capturing underwriter loss analysis; underwriter checklists that can validate information and process completeness; submission rating; pricing analysis and scheduled rating information; and providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are standard functions.

Document creation (proposals, applications, correspondence) and document storage are standard functions.

A rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); a rules engine that interfaces to order specific data conditionally; inline reports/dashboards on tasks/work/work status; and inline reports/dashboards to support underwriting analysis are standard.

Displaying aggregate risk accumulation for the existing book at a granular location level (i.e., geomashup of existing book and proposed risk) are available with configuration via tools for IT analysts or BAs.

IM collaboration with other underwriters, screen sharing with other underwriters, and agent-facing capabilities are standard. Proposal co-authoring with other underwriters is available with configuration via tools for IT analysts or BAs.

Support for variable binding/approval authority by role is a standard function, as is support for email notification/communication with agents and underwriters within the system (retaining a record of all emails).

Preconfigured integration with business intelligence environments and preconfigured interfaces with third-party data services are standard. Preconfigured interfaces with agent portals are available with configuration via tools for IT analysts or BAs.

Preconfigured interfaces with external predictive scoring models are available via out-of-the-box integration to a third-party system or service. The solution does not currently include preconfigured interfaces with policy admin systems or natively calculated predictive scores.

#### **Document Functions**

Solartis Insure Document Generator as a Service is part of the suite and is also sold as a standalone solution.

The solution supports mass-produced documents, e.g., statements, (most common use case) and ad hoc documents, e.g., correspondence and manuscripted policies, (less common use case). The solution includes pre-packaged, pre-built forms, libraries, and templates from ISO and ACORD.

The company asserts that the solution produces all documents necessary to support the policy life cycle, e.g., rating worksheets, proposals, binders, policy packets (including the Dec page), schedule of forms, and all attaching forms, endorsements, cancellations, reinstatements, and renewal policies.

The primary authoring environment is MS Word, Adobe Creative Suite, or a non-Word/Adobe system. Content, schema mapping, and data sources are managed by business analysts; business rules are maintained by technical resources. The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is available with configuration via tools for IT analysts or BAs. Clients must use an external tool for document authoring and content management workflow.

A content repository, content management tools, and archival capabilities are available via out-of-the-box integration to Alfresco. The solution supports industry-standard schemas (e.g., ACORD XML) out of the box.

#### **Agent Portal Functions**

Solartis Insure's agent portal is integral to the suite and is also sold as a stand-alone agent and customer portal solution.

New business entry/submission, account clearance, quick quote, policy change entry/submission, online payment, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, proposal creation, side-by-side quote comparison, account/client view in addition to a policy view, underwriter view and/or tools, agent/underwriter collaboration, and a rating engine are standard.

Uploading/importing data from Excel (e.g., locations, cars, drivers), integration and pre-fill with data service, billing inquiry, claims inquiry, ACORD application creation, and agency management system upload are available with configuration via tools for IT analysts or BAs.

E-signature, document creation, file attachment support, workflow and task management capabilities, business intelligence and reporting, and a consumer portal are standard functions. The solution does not currently include scheduling, diary, or calendar functions.

#### **Reinsurance Functions**

Reinsurance is not pre-integrated as part of the suite.

## **Business Intelligence Functions**

Business intelligence functions are integral to the suite and are not marketed as a stand-alone solution.

Solartis reports that it provides three different ways of extracting data/generating near-real-time and batch reports.

In the first, Solartis will provide or configure a set of predefined reports using its selected open-source tool, Pentaho Community Edition. In the second, The Solartis Reporting platform, a predefined set of OLAP cube for quote and policies, allows business users to develop and generate their own custom reports with capabilities to pivot and export data in various formats. And in the third option, the company provides a near-real-time replicated reporting database instance for customers to develop their own reports using their own reporting tool.

The solution includes a presentation/reporting component, standard predefined reports and predefined insurance dashboards, and an ad hoc reporting tool. The solution also includes data mining and analytics tools as well as tools to support data governance, dictionaries, quality, and validation as a secondary part of the offering.

The solution provides a third-party tool as part of the native offering that includes an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes.

The solution supports real-time streaming data movement (e.g., use of Kafka).

# **Billing Functions**

Billing is integral to the suite and is not sold as a stand-alone solution. Payment and billing plans are configurable via tools for IT analysts or BAs. The table below shows the availability of other billing functions.

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Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Not available
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Not available
Flexible and configurable payment plans:	Available with configuration using simple tools targeted for IT analysts or BAs
Support for flexible payment types (e.g., payment card, check, EFT, payroll deduction):	Available out of the box with no configuration necessary
Automated rules for payment application and disbursements:	Available out of the box with no configuration necessary
Real-time account and payment calculation, scheduling, recalculation, and rescheduling:	Available out of the box with no configuration necessary
Commission calculation and payment:	Available with configuration using simple tools targeted for IT analysts or BAs
Collections activities and interfaces:	Currently not available, but could be available with a system enhancement
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing: Payroll deduction:	Currently not available, but sould be available with a
Payron deduction.	Currently not available, but could be available with a system enhancement
Billing dashboarding/reporting: Workers' compensation monthly self- reporting:	Available out of the box with no configuration necessary  Available out of the box with no configuration necessary
Pay-as-you-report for workers' comp:	Currently not available, but could be available with a system enhancement
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Currently not available, but could be available with integration to another system or service
Billing for non-premium receivables (such	Currently not available, but could be available with
as claims deductibles paid):	integration to another system or service
Payment of non-refund payables (such as policy dividends or mutual dividends):	Currently not available, but could be available with integration to another system or service
Multi-currency support in a single instance of the application:	Yes

#### **Claims Functions**

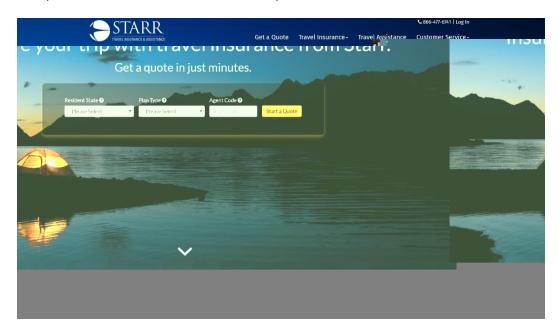
Full claims functionality is not pre-integrated as part of the suite.

Solartis asserts that its claims management functionality currently supports claims submission, claims filing, claims fulfillment, and claims cancellation for broken, lost, or stolen consumer products, e.g., mobile phones, watches, and jewelry.

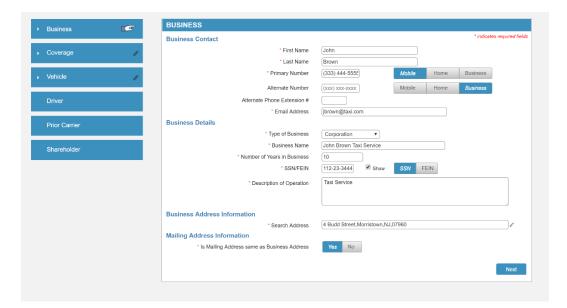
For more complex products, Solartis reports that it requires human claims adjusters, reserving, claim payments, and extensive coordination/communication between the insured, the carrier, and third parties Solartis integrates with its customers' claims systems.

## **Screenshots**

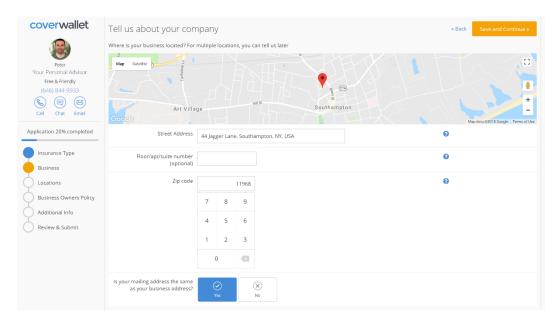
Example Solartis Insure Platform as a Service Implementation



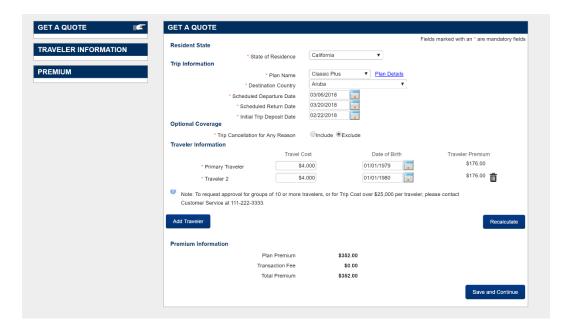
## Example Solartis Insure Software as a Service Implementation



## Example Solartis Insure Platform as a Service implementation

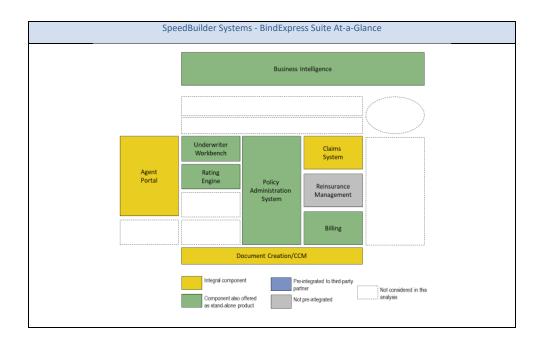


Example Solartis Insure Software as a Service Implementation



# SpeedBuilder Systems, Inc. - BindExpress Suite Executive Summary

- SpeedBuilder Systems, Inc. is a private and employee-owned company headquartered in Columbia, SC that employs 25 people. The company's annual revenue is under \$5M.
- BindExpress Suite is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, billing, and claims components.
- It currently has five live US/Canadian insurer clients using the suite, all of which are smaller companies (under \$1B) using the solution to support both personal and commercial lines.
- Publicly announced clients include Wolverine Mutual Insurance Company, Fremont
  Insurance Company, Centauri Specialty Insurance, American Access Casualty, and Retailers
  Mutual Insurance.
- The solution is browser-based for all user interface functions. It is written in Java.
- Configuration for insurance products and rules is via tools for BAs and non-IT staff.
   Configuration for screens, workflow, and document authoring is via developer tools, XML manipulation, or a scripting language. Configuration for integration to third-party service calls is via code.
- Implementation is available through SpeedBuilder's resources or an SI partner. The company
  deploys BindExpress Suite on-prem, hosted at a private data center, and hosted on MS Azure
  and Immedion. A SaaS delivery model is available that includes hosting, license, maintenance
  and support, ongoing access to the latest version, and the implementation of upgrades.
- The company reports that the average time to initial go-live is 90 days or less and that the average implementation cost is \$500K-\$1M.



# **Lines of Business Supported**

Personal auto:	Live clients offering this product in 2-9 US states
Homeowners:	Live clients offering this product in one US state
Personal umbrella:	Solution is designed to support, but no clients live or implementing
Dwelling fire:	Solution is designed to support, but no clients live or implementing
Boatowners:	Live clients offering this product in one US state
Personal package:	Not currently supported
Commercial property:	Live clients offering this product in 2-9 US states
General liability:	Live clients offering this product in 2-9 US states
BOP:	Live clients offering this product in 2-9 US states
Commercial crime:	Live clients offering this product in 2-9 US states
Commercial auto:	Live clients offering this product in 2-9 US states
E&O/D&O:	Not currently supported
Inland marine:	Live clients offering this product in 2-9 US states
Professional liability (including medical malpractice):	Not currently supported
Commercial package:	Live clients offering this product in 2-9 US states
Specialty:	Live clients offering this product in 2-9 US states
Workers' comp:	Live clients offering this product in 2-9 US states
Surety:	Not currently supported
Other personal lines*:	Not currently supported
Other commercial lines†:	Live clients offering this product in 2-9 US states
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<sup>†</sup> Other commercial lines include artisans and liquor liability.

## **Client Base**

Globally, SpeedBuilder Systems has seven clients live on BindExpress Suite, six of which are insurer clients (i.e., not MGAs, self-insureds). Five of these insurer clients are in the US and Canada; they are all smaller companies (under \$1B) using the solution to support both personal and commercial lines.

Publicly announced clients include Wolverine Mutual Insurance Company, Fremont Insurance Company, Centauri Specialty Insurance, American Access Casualty, and Retailers Mutual Insurance.

# **Key Functions and Differentiators**

SpeedBuilder Systems cites the key functions of BindExpress Suite as:

- Non-programmers are able to develop/maintain rates and rules
- Robust billing module, either integrated or stand-alone
- Tracks feature-based details, including payments and potential and actual recoveries
- Top-rated agent portal in an independent agent survey
- Ability to view all policies, documents, forms, and claims associated with a client in a single view

The company cites as its key differentiators its low time and cost to implement and maintain, due partly to its open-source nature; that the solution's configuration can replace programming customizations; that it is accessible to the small-to-medium tier carrier; that no agent training is required for its entry screens; and its flexible pricing model to match clients' business needs.

# **Solution Architecture and History**

BindExpress Suite launched in 2009 and was re-architected in 2018. The latest release was in December 2020. SpeedBuilder Systems, Inc. reports that 90% of the solution's customers are on the latest version, and 10% are on a version older than three years. All of the solution's clients have been through at least one upgrade. SpeedBuilder reports that it provides clients monthly small releases rather than major updates.

The solution supports DB2/UDB, Oracle, Microsoft SQL Server, and PostgreSQL databases as well as UNIX/Linux and Windows server platforms. The solution is written in Java.

# **APIs and Integration**

SpeedBuilder reports that the BindExpress Suite includes web services to support various mobile and external apps (e.g., digital FNOLs, roadside assistance, etc.) and has been integrated with third-party claims solutions, payment vendors, and comparative raters.

## **Configurability and User Interface**

BindExpress Suite is browser-based for all user interface functions.

Configuration for insurance products and rules is via tools for BAs and non-IT staff. Configuration for screens, workflow, and document authoring is via developer tools, XML manipulation, or a scripting language. Configuration for integration to third-party service calls is via code.

## **Deployment Options**

The company deploys BindExpress Suite on-prem, hosted at a private data center, and hosted on MS Azure and Immedion.

A SaaS delivery model is available that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades. The hosted solution is a single-tenant app server and database.

# **Average Implementation Length and Cost**

SpeedBuilder Systems implements the solution through SpeedBuilder's resources or an SI partner. It reports that BindExpress Suite can be ready for initial go-live in 90 days or less and fully rolled out in an additional nine months or less. The company reports that the average implementation cost is \$500K-\$1M.

# **Support**

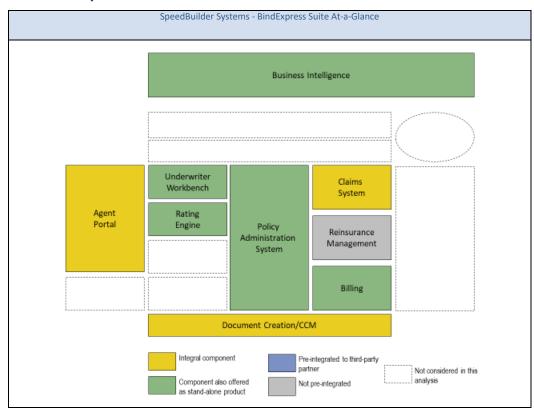
Of the 25 people employed at SpeedBuilder Systems, Inc., the product design and engineering team and the support team each have between ten and 25 people. The implementation team has fewer than ten (not counting partnerships).

SpeedBuilder notes that it supports clients via phone and internet; it provides on-site training and support as needed. Its support resources are located in Columbia, SC; Atlanta, GA; Asheville, NC; Washington, DC; and Tampa, FL. SpeedBuilder Systems offers customer engagement initiatives such as a user event.

# **Systems Integrator and Other Partners**

Publicly announced technology partnerships include Verisk/ISO Strategic Alliance Partner, MS Azure, AAIS (rates and rules), Marlabs, Inc. (off-shore), and Immedion (cloud service provider).

# **Functionality**



#### **Policy Administration Functions**

The solution includes policy issue, premium accounting, and out-of-sequence endorsement out of the box. Bordereaux import is available with configuration via tools for IT analysts or BAs. Forms management and manuscripted policies are available with configuration via developer tools, XML manipulation, or a scripting language.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

## **Rating Functions**

SCORE Rating and Rules Engine is part of the suite and is also sold as a stand-alone rating engine.

Core rating functions like out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, multi-location rating on a single policy are standard. A quick quote option and support for after-inception policy rating for endorsements, cancellations, and reinstatements, and renewal processing are available with configuration via tools for IT analysts or BAs.

Compliance and change control capabilities, including versioning and update management, change control functions, and auditability of rate versioning, are available with configuration via developer tools, XML manipulation, or scripting language. An application and forms library with standard and customizable applications and forms is available with configuration using developer tools, XML manipulation, or a scripting language.

Download to agency management systems is a standard integration function. Pre-integration to third-party data providers is available via out-of-the-box integration to a third-party system or service. NCCI/Bureau of Workers' Comp rates/rules support is available via out-of-the-box integration to a third-party system or service. The solution does not currently support ISO ERC integration, ISO-formatted statistical data, or ISO rates/rules support.

Multi-carrier comparison is a standard function. Setting insurer-specific defaults is available with configuration via tools for IT analysts or BAs. Saving/storing an in-rocess or completed policy change transaction to allow issuance at a later date is a standard function. Product design and development tools are available with configuration via tools for IT analysts or BAs.

Rule definition and management functions, including maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities, are available out of the box with no configuration necessary.

Testing, modeling, and product analysis are standard. Displacement testing (i.e., the ability to run existing book of business through proposed rate/product changes to determine impact) is available with configuration via tools for IT analysts or BAs.

#### **Underwriter Workbench Functions**

BindExpress Underwriting is part of the suite and is also sold as a stand-alone underwriter workbench.

Uploading/importing the submission data from a structured data feed is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include uploading/importing the submission information from documents (OCR-like functionality), but this could be available with integration to another system or service.

Support for policy change transactions/underwriting, supporting renewal transactions/ underwriting, supporting the non-renewal transaction, and supporting cancellation transactions are standard functions.

Supporting for new business transactions/underwriting is available with configuration via tools for IT analysts or BAs. Support for underwriting multiple submissions as one work portfolio is available with configuration via developer tools, XML manipulation, or a scripting language.

Combining individual quotes for different lines into a single proposal; capturing underwriting analysis; capturing an underwriter's loss analysis; underwriter checklists that can validate information completeness and process completeness; submission rating; and providing current and historical views of insured accounts across the enterprise, lines of business, and policy systems are standard functions. Pricing analysis and scheduled rating information are available with configuration via tools for IT analysts or BAs.

Document creation (e.g., proposals, applications, correspondence) and document storage are standard functions. Workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries) and inline reports/dashboards to support underwriting analysis are also standard.

A rules engine that automatically applies underwriting, workflow, and general business rules is available with configuration via tools for IT analysts or BAs. A rules engine that interfaces to conditionally order specific data and inline reports/dashboards on tasks/work/work status are available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk).

IM collaboration with other underwriters, screen sharing with other underwriters, and agent-facing capabilities are standard functions. The solution does not currently include proposal co-authoring with other underwriters.

Support for variable binding/approval authority by role and support for email notification/ communication with agents and underwriters within the system (retaining a record of all emails) are standard functions. Preconfigured interfaces with policy admin systems, agent portals, and third-party data services are available with configuration via developer tools, XML manipulation, or a scripting language.

Natively calculated predictive scores are available via out-of-the-box integration to a third-party system or service. The solution doesn't currently include preconfigured integration with business intelligence environments or preconfigured interfaces with external predictive scoring models.

#### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents (e.g., statements) and ad hoc documents (e.g., correspondence, manuscripted policies). It does not currently include ISO/ACORD forms.

The primary authoring environment is a custom environment, MS Word, Adobe Creative Suite, or a non-Microsoft/Adobe solution. Content and business rules are designed to be managed by business analysts, with schema mapping and data sources maintained by technical resources.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is a standard function. Clients must use the solution's built-in toolset for document authoring and content management workflow.

A content repository and content management tools are available with configuration via tools for IT analysts or BAs. Archival capabilities for all generated documents are standard. The solution is designed to support industry-standard schemas like ACORD XML.

## **Agent Portal Functions**

BindExpress Portal is part of the suite and is not sold as a stand-alone agent portal.

New business entry/submission, quick quote, policy change entry/submission, online payment, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, proposal creation, ACORD application creation, side-by-side quote comparison, agency management system upload, account or client view in addition to a policy view, underwriter view and/or tools, agent/underwriter collaboration, and a rating engine are all standard functions.

Uploading/importing data from Excel (e.g., locations, cars, drivers) and integration and pre-fill with data services are available with configuration via developer tools, XML manipulation, or a scripting language. Account clearance and claims inquiry are available via out-of-the-box integration to a third-party system or service.

Document creation; file attachment support; scheduling, diary, and calendar functions; workflow and task management capabilities; business intelligence and reporting; and a consumer portal are standard functions. The solution doesn't include support for e-signature.

## **Reinsurance Functions**

Reinsurance is not pre-integrated as part of the suite.

## **Business Intelligence Functions**

BindExpress Analytics is part of the suite and is also sold as a stand-alone business intelligence component. The solution provides an insurance-specific data warehouse and domain models. The solution includes a presentation/reporting component, standard predefined reports, predefined insurance dashboards, an ad hoc reporting tool, and data mining and analytics tools. The solution supports the batch movement of data via ETL/CDC.

# **Billing Functions**

BindExpress Billing is integral to the suite and is also marketed as a stand-alone solution. Payment and billing plan configurability are available with configuration via tools for IT analysts or BAs. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available out of the box with no configuration necessary
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g., payment card, check, EFT, payroll	Available out of the box with no configuration necessary
deduction):	
Automated rules for payment application	Available with configuration using simple tools targeted
and disbursements:	for IT analysts or BAs
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available with configuration using simple tools targeted for IT analysts or BAs
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available with configuration using simple tools targeted
management:	for IT analysts or BAs
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available with configuration using developer tools, XML manipulation, or a scripting language
Online payment:	Available via out-of-the-box integration to a third-party system or service
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Currently not available, but could be available with a
	system enhancement
Billing dashboarding/reporting:	Available with configuration using simple tools targeted for IT analysts or BAs
Workers' compensation monthly self- reporting	Not available
Pay-as-you-report for workers' comp:	Available out of the box with no configuration necessary
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available via out-of-the-box integration to a third-party system or service
Billing for non-premium receivables (such as claims deductibles paid):	Available out of the box with no configuration necessary
Payment of non-refund payables (such as	Currently not available, but could be available with a
policy dividends or mutual dividends):	system enhancement
Multi-currency support in a single instance of the application:	No

#### **Claims Functions**

BindExpress Claims is integral to the suite and is not marketed as a stand-alone solution.

#### **Adjudication**

Disability management, automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard. Medical case management and injury detail maintenance (coding) are available with configuration via developer tools, XML manipulation, or a scripting language.

#### Catastrophe

Attaching multiple LOBs and multiple causes of loss to a single catastrophe comes standard. Catastrophe definition is available with configuration via tools for IT analysts or BAs. The solution does not currently include automatic identification of catastrophe claims or mapping tools.

#### **Disbursements**

Calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), and combining multiple pending payments for a single client into one disbursement are standard capabilities. Check processing is available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include OFAC checking or handle multiple offsets and deductions against benefits (e.g., wage garnishments, child support).

#### **Documents**

Image and media management, a correspondence or forms library, document rendering, a content repository and content management tools, and multi-channel delivery and output of documents (PDF, email, web, print) are standard functions. State-specific claims reporting templates are available with configuration via tools for IT analysts or BAs.

#### **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; handling of FROI/SROI EDI reporting; mobile and smart device input; scripting for claims intake with reflexive questioning; custom question sets to prompt additional mandatory questions depending on given answers given (branch scripting); claim characteristics scoring (to calculate alerts, trigger workflow, assign a claims handler, or otherwise segment the claim); claimant contact management data capture; and checking for duplicate claims are standard functions. The solution does not currently include integration with external vendors and services (e.g., car rental companies, car/equipment repair shops).

#### Fraud

Configurable business rules and tasks (specific to fraud and special investigations) and the provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims are standard functions.

## Litigation

Litigation process tracking, including negotiation details and litigation costs, as well as creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management are standard functions.

#### **Multi-Channel**

An agent portal with self-service is standard. A policyholder portal with self-service is available with configuration via tools for IT analysts or BAs. The solution does not currently include esignature, call center integration for FNOL via telephony, or call center integration for claims status check via telephony.

#### Reinsurance

The solution does not currently include reinsurance capabilities.

#### Reporting

Standard reporting of claims performance monitoring, including claims handling, and high-risk indicators such as fatality, large losses, and fraud; standard reporting of configurable metrics for claims reporting; and dashboards are available out of the box. Ad hoc reports are available with configuration via tools for IT analysts or BAs. The solution does not currently include reporting with jurisdictional-specific reports and forms or electronic reporting or automated state filings.

## Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; subrogation billing and the production of correct GL entries; and granular tracking of reserves and payments are standard. Automatic reserve calculations using business rules and risk characteristics as well as direct, case, average, factor, and expense reserve types are available with configuration via tools for IT analysts or BAs. The solution does not currently include jurisdictional wage and rate calculations integrated for workers' comp.

#### **Vendor Management**

Vendor management functions and processing required forms (including 1099s) are standard.

#### Workflow

Capabilities like automated workflow/task generation; overriding automated processes and manually triggering workflow processes; automatic work assignment based on configurable rules; generating notes, diaries, and reminders; inclusion of external documents (letters and pictures) in file notes; assigning multiple adjusters to a single claim; and processing claim workflow trigger (CWT) files at insurer-defined intervals are standard functions. The solution does not currently include OCR-triggered workflow, compliance with the Document Repository Interface (DRI) standards, or full integration with electronic court filings (ECF2).

## **Screenshots**

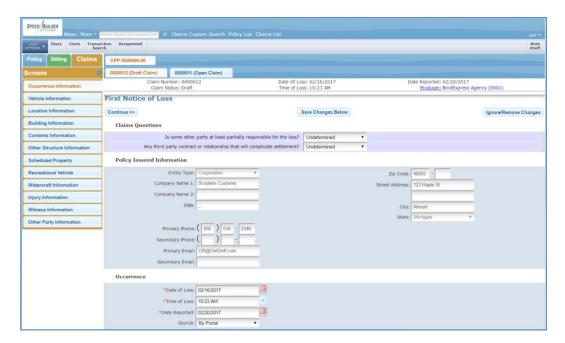
Policy Screen



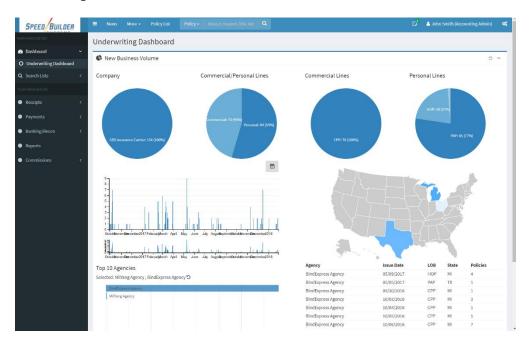
## Billing Screen



## Claims Screen

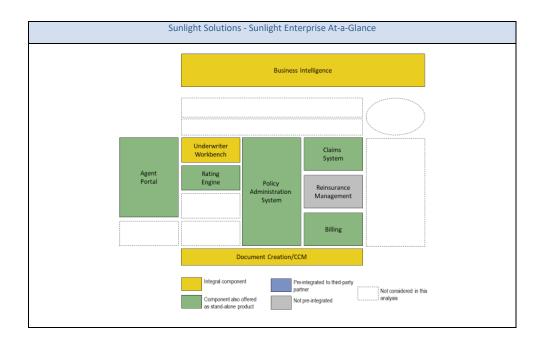


## **Underwriting Dashboard**



# **Sunlight Solutions, LLC. - Sunlight Enterprise Executive Summary**

- Sunlight Solutions, LLC, is a privately held company with headquarters in Minneapolis, MN.
   The company employs 50 people and reports annual revenue in the range of \$5M-\$10M.
- Sunlight Enterprise is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, business intelligence, billing, and claims components.
- It currently has seven live US/Canadian insurer clients using the suite, which are a mix of larger (over \$1B) and smaller (under \$1B) companies using the solution to support commercial lines and some personal lines.
- Publicly announced clients include CM Vantage and CM Select (both wholly owned by Church Mutual), American Family Mutual Insurance Co., Maif Assurance, and Applied Specialty.
- The solution is browser-based for all user interface functions. It is written primarily in .NET (C#/VB.NET) and a small amount of Java.
- Configuration for insurance products, screens, workflows, rules, integration to third-party service calls, and document authoring is via tools for BAs and non-IT staff.
- Implementation is available through a partner. Sunlight deploys the solution on-prem,
  hosted at a private data center, and hosted on MS Azure. The company offers a SaaS delivery
  model that includes hosting, license, maintenance and support, ongoing access to the latest
  version, and implementation of the upgrades.
- The company reports that the average time to initial go-live is 90 days or less and that the average implementation cost is \$100K-\$500K.



# **Lines of Business Supported**

Personal auto:	Solution is designed to support, but no clients live or implementing
Homeowners:	Clients currently in implementation for this line/product
Personal umbrella:	Solution is designed to support, but no clients live or implementing
Dwelling fire:	Solution is designed to support, but no clients live or implementing
Boatowners:	Solution is designed to support, but no clients live or implementing
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Live clients offering this product in all 50 US states
General liability:	Live clients offering this product in all 50 US states
BOP:	Live clients offering this product in 10-49 US states
Commercial crime:	Solution is designed to support, but no clients live or implementing
Commercial auto:	Live clients offering this product in 10-49 US states
E&O/D&O:	Live clients offering this product in all 50 US states
Inland marine:	Live clients offering this product in 10-49 US states
Professional liability (including medical malpractice):	Live clients offering this product in all 50 US states
Commercial package:	Live clients offering this product in 10-49 US states
Specialty:	Live clients offering this product in all 50 US states
Workers' comp:	Solution is designed to support, but no clients live or implementing
Surety:	Solution is designed to support, but no clients live or implementing
Other personal lines*:	Solution is designed to support, but no clients live or implementing
Other commercial lines†:	Live clients offering this product in all 50 US states

<sup>\*</sup> Other personal lines include liability.

## **Client Base**

Globally, Sunlight Solutions has nine clients live on Sunlight Enterprise, seven of which are insurer clients (i.e., not MGAs, self-insureds). These seven insurer clients are live in the US and Canada, a mix of smaller (under \$1B) and larger (over \$1B) companies using the solution to support commercial lines and some personal lines.

Publicly announced clients include CM Vantage and CM Select (both wholly owned by Church Mutual), American Family Mutual Insurance Co., Maif Assurance, and Applied Specialty.

## **Key Functions and Differentiators**

Sunlight Solutions cites the key functions of Sunlight Enterprise as:

- Policy, billing, and claims administration features across P/C lines of business
- Cloud-based or on-prem deployment options
- Rules, rating, and product engines designed for business analysts
- Proven speed to market
- Competitive price point

<sup>†</sup> Other commercial lines include excess property, excess liability, and cyber-liability.

The company asserts as its key differentiators that it has cloud-based offerings for all P/C lines of business; its automated social media plug for underwriting; a high level of configuration that is intuitive to business users; a complimenary suite of InsureTech services; and a natively built, fully integrated forms solution.

# **Solution Architecture and History**

Sunlight Enterprise launched in 2014. The company reports it has a continuous delivery model, meaning all customers are on the latest version and have been through at least one upgrade.

The solution supports DB2/UDB, Oracle, Microsoft SQL Server, MySQL/MariaDB, and PostgreSQL databases. It requires Windows platforms. The solution is written in .NET (C#/VB.NET) and a small amount of Java.

## **APIs and Integration**

The solution provides REST and SOAP APIs. Sunlight Solutions notes that it offers a library of REST API and SOAP services; over 30 functions are currently supported, and the company notes that the number is growing.

# **Configurability and User Interface**

Sunlight Enterprise is browser-based for all user interface functions.

Configuration for insurance products, screens, workflows, rules, integration to third-party service calls, and document authoring is via tools for BAs and non-IT staff.

# **Deployment Options**

Sunlight deploys the solution on-prem, hosted at a private data center, and hosted on MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades.

The hosted solution is a multi-tenant app server and a single-tenant database, with a single-tenant app server option available.

## **Average Implementation Length and Cost**

Sunlight Solutions implements the solution through a partner. It reports that Sunlight Enterprise can be ready for initial go-live in 90 days or less and fully rolled out in an additional 180 days or less. The company reports that the average implementation cost is \$100K-\$500K.

## Support

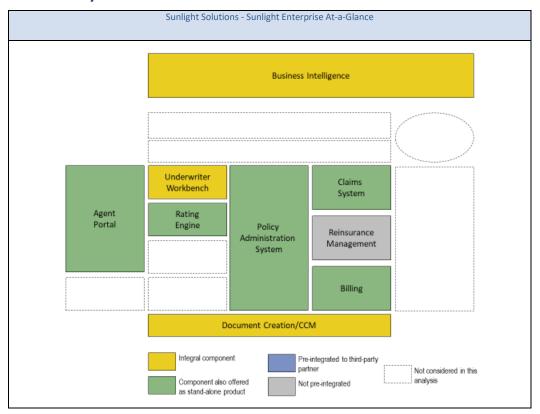
Of the 50 people employed at Sunlight Solutions, Inc., there are between ten and 50 on each of the product design and engineering, implementation (not counting partnerships), and support teams.

Support resources are located in the US, Europe, and India. Sunlight Solutions offers customer engagement activities such as online training, a customer advisory committee, a user event, and training seminars.

# **Systems Integrator and Other Partners**

Publicly announced technology partnerships include GhostDraft, Polaris, Xpertdoc, and HazardHub. Publicly announced SI partnerships include CGI.

# **Functionality**



## **Policy Administration Functions**

The solution includes policy issue, premium accounting, out-of-sequence endorsement, and manuscripted policies out of the box. Bordereaux import and forms management are available with configuration via tools for IT analysts or BAs.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

## **Rating Functions**

Sunlight Rating and Rules Engine is integral to the suite and is also sold as a stand-alone solution.

Quick quote; support for after-inception policy rating for endorsements, cancellations, reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, multi-location rating on single policies are standard functions.

Versioning and update management, change control functions, and auditability of rate versioning are standard functions. An application and forms library with standard and customizable applications is available out of the box.

Pre-integration to third-party data providers is standard. Download to agency management systems is available with configuration via tools for IT analysts or BAs.

ISO rates/rules support, NCCI/Bureau of Workers' Comp rates/rules support, and ISO-formatted statistical data are available with configuration via tools for IT analysts or BAs. The solution does not currently include ISO ERC integration.

Saving/storing an in-process or completed policy change transaction to allow issuance at a later date is available out of the box. Product design and development tools are standard. Multi-carrier comparison and setting insurer-specific defaults are available with configuration via tools for IT analysts or BAs.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are standard functions.

Testing, modeling, and product analysis are standard. The solution does not currently include displacement testing (i.e., the ability to run the existing book of business through proposed rate/product changes to determine the impact).

#### **Underwriter Workbench Functions**

Underwriting functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing the submission data from a structured data feed is available with configuration via tools for IT analysts or BAs. The solution does not currently include uploading/importing the submission information from documents (OCR-like functionality).

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, cancellation transactions, and underwriting multiple submissions as one work portfolio is standard.

The ability to combine individual quotes for different lines into a single proposal; submission rating; pricing analysis and scheduled rating information; and providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are standard functions.

Document storage is standard. Document creation (proposals, applications, correspondence) is available with configuration via tools for IT analysts or BAs.

Capturing underwriting analysis, capturing underwriter loss analysis, and underwriter checklists that can validate information and process completeness are available with configuration via tools for IT analysts or BAs.

A rules engine that interfaces to order specific data conditionally and inline reports/dashboards on tasks/work/work status are standard functions.

Workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); a rules engine that applies underwriting, workflow, and general business rules; inline reports/dashboards to support underwriting analysis; and displaying aggregate risk accumulation for the existing book at a granular location level (i.e., geomashup of existing book and proposed risk) are available with configuration via tools for IT analysts or BAs.

Proposal co-authoring with other underwriters, agent-facing capabilities, preconfigured interfaces with policy admin systems, preconfigured interfaces with agent portals, preconfigured integration with business intelligence environments, and preconfigured interfaces with third-party data services are standard.

IM collaboration and screen sharing with other underwriters are available via out-of-the-box integration to a third-party system or service.

Support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) is standard. Natively calculated predictive scores and support for variable binding/approval authority by role are available with configuration via tools for IT analysts or BAs. The solution does not currently include preconfigured interfaces with external predictive scoring models.

## **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

Sunlight Solutions reports that it offers document generation and forms management as a native capability. Sunlight can also integrate with other document management solutions based on client preference.

The solution supports mass-produced documents, e.g., statements (the most common use case) and ad hoc documents, e.g., correspondence and manuscripted policies (the less common use case).

The suite includes pre-packaged, pre-built forms, libraries, and templates from ACORD and ISO via third-party integration. The primary authoring environment is a custom environment, MS Word, Adobe Creative Suite, or a non-Microsoft/Adobe solution. Content is managed by the average business user. Business rules, schema mapping, and data sources are maintained by business analysts.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is available with configuration via tools for IT analysts or BAs. Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository and content management tools are available with configuration via tools for IT analysts or BAs. Archival capabilities for all generated documents are standard. The solution supports industry-standard schemas from ACORD XML, ebXML, and XBRL out of the box.

## **Agent Portal Functions**

Sunlight Portals are integral to the suite and are also marketed as a stand-alone solution.

New business entry/submission, account clearance, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, integration and pre-fill with data services, policy change entry/submission, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, proposal creation, side-by-side quote comparison, agency management system upload, account or client view (in addition to a policy view), underwriter view and/or tools, a rating engine, and agent/underwriter collaboration are standard functions.

ACORD application creation is available with configuration via tools for IT analysts for BAs. Online payment is available via out-of-the-box integration to a third-party system or service.

Document creation; file attachment support; scheduling, diary, and calendar functions; workflow and task management capabilities; business intelligence and reporting; and a consumer portal are standard. E-signature is available via out-of-the-box integration to a third-party system or service.

#### **Reinsurance Functions**

Full reinsurance is not currently pre-integrated as part of the suite, but the company reports that a limited first version of reinsurance is available. Sunlight Solutions notes that some facultative reinsurance capabilities exist but that these capabilities are only for insurers, not reinsurers.

## **Business Intelligence Functions**

Sunlight BI is integral to the suite and is not marketed as a stand-alone solution.

Sunlight Solution asserts that Sunlight BI offers complete analysis of data from within the solution and from the outside in a single, easy-to-use interface. Charts and graphs are configurable with a simple tool, with the ability to drill into detail. Users can share views with the organization or a group of users and can be added to each user's desktop via configuration.

The solution includes an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes; a presentation/reporting component; standard, predefined reports and predefined insurance dashboards; and an ad hoc reporting tool.

The solution supports real-time streaming data movement (e.g., use of Kafka).

# **Billing Functions**

Sunlight Billing is integral to the suite and is also marketed as a stand-alone solution. Payment and billing plan configurability is standard. The table shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration possessory
Agency bill:	Available out of the box with no configuration necessary  Available out of the box with no configuration necessary
Account or list bill:	
	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available out of the box with no configuration necessary
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available via out-of-the-box integration to a third-party
	system or service
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available via out-of-the-box integration to a third-party
	system or service
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Currently not available, but could be available with a
	system enhancement
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Currently not available, but could be available with a
reporting:	system enhancement
Pay-as-you-report for workers' comp:	Currently not available, but could be available with a
	system enhancement
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available via out-of-the-box integration to a third-party
	system or service
Billing for non-premium receivables (such	Available out of the box with no configuration necessary
as claims deductibles paid):	
Payment of non-refund payables (such as	Available out of the box with no configuration necessary
policy dividends or mutual dividends):	
Multi-currency support in a single instance	Yes
of the application:	

#### **Claims Functions**

Sunlight Claims is part of the suite and is also sold as a stand-alone claims component.

#### **Adjudication**

Automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard. Medical case management, injury detail maintenance (coding), and disability management are available with configuration via tools for IT analysts or BAs.

## Catastrophe

Catastrophe definition, automatic identification of catastrophe claims, attaching multiple LOBs and multiple causes of loss to a single catastrophe, and mapping tools are available with configuration via tools for IT analysts or BAs.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) are standard. OFAC checking is available via out-of-the-box integration to a third-party system or service.

#### **Documents**

Image and media management, a correspondence or forms library, state-specific claims reporting templates, a content repository, content management tools, and multi-channel delivery and output of documents (e.g., PDF, email, web, and print) are standard functions. Document rendering is available via out-of-the-box integration to a third-party system or service.

#### **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; handling of FROI/SROI EDI reporting; mobile and smart device input; scripting for claims intake with reflexive questioning; custom question sets to prompt additional, mandatory questions depending on given answers (branch scripting); claim characteristic scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim); and claimant contact management data capture are standard functions. Integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) is available with configuration via tools for IT analysts or BAs. Checking for duplicate claims is available with configuration via developer tools, XML manipulation, or a scripting language.

## Fraud

Configurable business rules and tasks (specific to fraud and special investigations) and the provision of multiple search and reporting criteria for fraud detection (via the ability to track common clients across multiple claims) are standard functions.

#### Litigation

Creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management is standard. Litigation process tracking, including negotiation details and litigation costs, is available with configuration via developer tools, XML manipulation, or a scripting language.

## **Multi-Channel**

An agent portal with self-service and a policyholder portal with self-service are standard functions. E-signature is available via out-of-the-box integration to a third-party system or service. The solution does not currently include call center integration for FNOL/claims status check via telephony.

## Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, and assignment to facultative arrangements are available with configuration via tools for IT analysts or BAs.

## Reporting

Standard reporting of claims performance monitoring, including claims handling, and high-risk indicators such as fatality, large losses, and fraud; standard reporting of configurable metrics for claims reporting; ad hoc reports; and dashboards are standard functions. Reporting that includes jurisdiction-specific reports and forms and electronic reporting or automated state filings are available via out-of-the-box integration to a third-party system or service.

## Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; subrogation billing and the production of correct GL entries; granular tracking of reserves and payments; automatic reserve calculations using business rules and risk characteristics; and direct, case, average, factor, and expense reserve types are standard. Jurisdictional wage and rate calculations integrated for workers' comp are available via out-of-the-box integration to a third-party system or service.

## **Vendor Management**

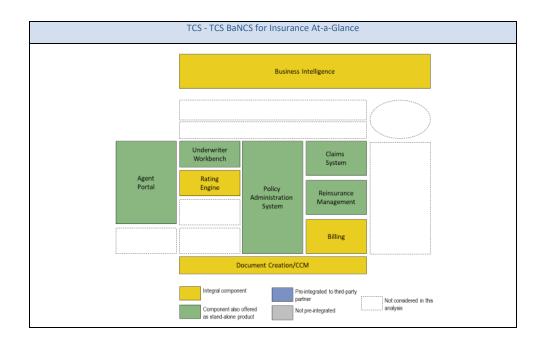
Vendor management functions are standard. The processing of required forms (including 1099s) is available with configuration via tools for IT analysts or BAs.

## Workflow

Automated workflow/task generation; overriding automated processes and manually triggering workflow processes; automatic work assignment based on configurable rules; generating notes, diaries, and reminders; inclusion of external documents (e.g., letters, pictures) in file notes; assigning multiple adjusters to a single claim; compliance with the Document Repository Interface (DRI) standards; and processing claim workflow trigger (CWT) files at insurer-defined intervals are standard functions. OCR-triggered workflow and full integration with electronic court filings (ECF2) are available with configuration via developer tools, XML manipulation, or a scripting language.

# Tata Consultancy Services - TCS BaNCS for Insurance (P/C) Executive Summary

- Tata Consultancy Services (TCS) is a public limited company traded on the National Stock Exchange (NSE: TCS) and the Bombay Stock Exchange (BSE: 532540) in India. TCS has headquarters in Mumbai, India and employs 488,649 people. The company's annual revenue is over \$10B.
- TCS BaNCS for Insurance (P/C) is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has three live US/Canadian insurer clients using the suite for P/C lines. These
  clients are mostly larger companies (over \$1B) using the solution to support personal lines
  with some commercial.
- Publicly announced clients include Nedbank Insurance, Bajaj Allianz General Insurance, and KBZ General Insurance.
- The solution is browser-based for all user interface functions. It is written primarily in Java with some PL/SQL.
- Configuration for insurance products, screens, workflow, rules, integration to third-party service calls, and document authoring is via tools for BAs and non-IT staff.
- Implementation is available through the company's own resources. TCS deploys the solution on-prem, hosted at a private data center, and hosted on AWS or another public cloud.
- The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades. TCS BaNCS Cloud is a SaaS offering of TCS BaNCS; it offers SaaS on the latest version, priced on an annual usage basis.
- The company reports that the average time to initial go-live is 180 days or less. TCS not disclose information related to costs.



# **Lines of Business Supported**

Personal auto:	Solution is designed to support, but no clients live or implementing
Homeowners:	Solution is designed to support, but no clients live or implementing
Personal umbrella:	Solution is designed to support, but no clients live or implementing
Dwelling fire:	Solution is designed to support, but no clients live or implementing
Boatowners:	Solution is designed to support, but no clients live or implementing
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Solution is designed to support, but no clients live or implementing
General liability:	Solution is designed to support, but no clients live or implementing
BOP:	Not currently supported
Commercial crime:	Not currently supported
Commercial auto:	Solution is designed to support, but no clients live or implementing
E&O/D&O:	Solution is designed to support, but no clients live or implementing
Inland marine:	Solution is designed to support, but no clients live or implementing
Professional liability (including medical malpractice):	Solution is designed to support, but no clients live or implementing
Commercial package:	Solution is designed to support, but no clients live or implementing
Specialty:	Solution is designed to support, but no clients live or implementing
Workers' comp:	Solution is designed to support, but no clients live or implementing
Surety:	Not currently supported
Other personal lines*:	Live clients offering this product in one US state
Other commercial lines†:	Solution is designed to support, but no clients live or implementing

<sup>\*</sup> Other personal lines include auto warranty and mortgage insurance. TCS notes that it has Canadian mortgage products live, including collateral mortgage, rental, vacation/secondary home, medical residence.

TCS notes that TCS BaNCS fully supports on-demand functionality; while the core system supports the underlying products (both traditional and non-traditional) for continuous underwriting and associated billing, TCS BaNCS collaborates with various InsureTech partners to get real-time data from telematics devices, points of sale, or other interaction channels.

## **Client Base**

Globally, TCS has 54 clients live on TCS BaNCS for Insurance, all of which are insurer clients (i.e., not MGAs, self-insureds), and 32 of which are P/C insurer clients. There are three P/C insurer clients in the US and Canada, most of which are larger companies (over \$1B) that use the solution to support personal lines with some commercial.

Publicly announced clients include Nedbank Insurance, Bajaj Allianz General Insurance, and KBZ General Insurance.

<sup>†</sup> Other commercial lines include physical damage and project insurance.

# **Key Functions and Differentiators**

TCS cites the key functions of TCS BaNCS as:

- Product definition and life-cycle management, along with geography-specific template products and processes integrated with business rules engine
- Workflow-driven business processes (e.g., new business, policy servicing, producer and commission management, claims administration, reinsurance) with a single customer view
- Out-of-the-box RESTful APIs with API security managed through Apache WSO2
- Packaged with digital capabilities (mobile, portal, and analytics) and multi-currency, multichannel, multi-language, and multi-entity capabilities
- Extensile configuration layer to accommodate the extension of customer-specific GUI, rules, processes, and services

The company asserts as key differentiators its geography-specific template products and processes along with market-ready adapters to integrate with third-party applications; flexible mix and match of various products and covers from different LOBs with the help of separately deployable business objects within the single architecture; out-of-the-box analytical models from homegrown analytical solution (OPTIX) along with core such as fast-track claim settlement, customer churn, etc.; integration with the blockchain platform Quartz, with proven use cases specific to insurance; and that it is a single solution for end-to-end insurance processes across general, health, and life insurance.

# **Solution Architecture and History**

TCS BaNCS for Insurance (P/C) launched in 2002 and was re-architected in 2018. The latest release was in December 2020. TCS reports that 30% of the solution's customers are on the latest version, 30% are on a version released in the last three years, and 40% are on a version older than three years. Approximately 70% of customers have been through at least one upgrade.

The solution supports DB2/UDB, Oracle, and PostgreSQL databases as well as Mainframe/Mini (zSeries, iSeries), UNIX/Linux, and Windows platforms. The solution is written primarily in Java with some JavaScript and PL/SQL. The company notes that, for the APAC market, a few clients are still using a .NET-based version of the platform; however, they are gradually moving to the Java-based platform. The .NET application supports Oracle and DB2 databases.

## **APIs and Integration**

The solution provides REST, SOAP, JSON-RPC, and XML-RPC APIs. TCS reports that it offers business partner, new business, policy servicing, claims, product, reports, workflow, documents, and APIs for advanced searches. All the services are generic. It notes that services inputs can be configured based on the product specification.

## **Configurability and User Interface**

TCS BaNCS is browser-based for all user interface functions.

Configuration for insurance products, screens, workflow, rules, integration to third-party service calls, and document authoring is via tools for BAs and non-IT staff.

# **Deployment Options**

TCS deploys the solution on-prem, hosted at a private data center, and hosted on AWS and other public clouds. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades. TCS BaNCS Cloud is a SaaS offering of TCS BaNCS; it offers SaaS on the latest version, priced on an annual usage basis. The hosted solution is a single-tenant app server and database.

# **Average Implementation Length and Cost**

TCS implements the solution through its own resources. It reports that TCS BaNCS can be ready for initial go-live in 180 days or less and fully rolled out in an additional 90 days or less. TCS does not disclose information related to costs.

# **Support**

TCS employs 488,649 people. Per company policy, TCS declined to provide information on the size of the product design and engineering, implementation, and support teams. The company asserts that it has a large resource pool that it can deploy based on demand and priority.

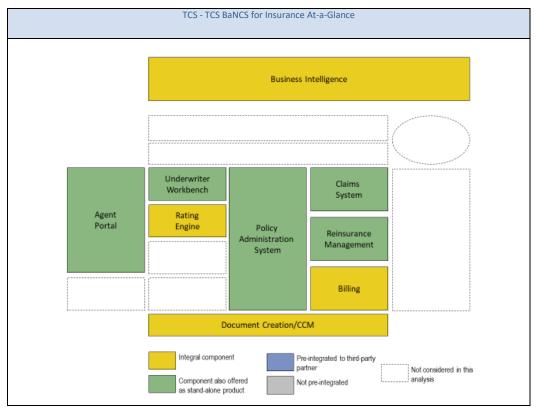
TCS reports that it has employees all over the globe in two sets. The first of employees, the product engineering team, is based out of India and is responsible for design and development of the core product. The second set is specific to installation, stationed in India and respective client locations across the globe. Offshore teams do development, design, and product support. On-site teams provide implementation services as well as any local or regional bespoke support.

TCS offers customer engagement activities such as an online community, online training, a customer advisory committee, a user event, and training seminars.

# Systems Integrator and Other Partners

Publicly announced technology partnerships include Oracle, AWS, SAP Financial, FileNet, and Claims Genius. TCS notes that it has a robust "Channel Partner" program to collaborate with various SI partners across the globe.

# **Functionality**



## **Policy Administration Functions**

Policy issue, premium accounting, out-of-sequence endorsement, and forms management are available out of the box. Bordereaux import is available with configuration using simple tools targeted for IT analysts or BAs. The solution does not currently include manuscripted policies.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

## **Rating Functions**

A rating engine is integral to the suite and is not marketed as a stand-alone solution.

Core rating functions like quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are standard.

Compliance and change control features like versioning and update management, change control functions, and auditability of rate versioning are standard. An application and forms library with standard and customizable applications and forms is also standard.

Download to agency management systems is available with configuration via developer tools, XML manipulation, or a scripting language. The solution also includes pre-integration to third-party data providers via out-of-the-box integration to a third-party system or service.

While not currently available, TCS notes that it has all integrations with ISO rates and rules in place. The company will renew partnership whenever a customer requires it. TCS reports that the same applies to the NCCI/Bureau of Workers' Compensation rates and rules.

Multi-carrier comparison and setting insurer-specific defaults are standard. Product design and development tools are standard. Saving/storing an in-process or completed policy change transaction to allow issuance at a later date is available out of the box.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, the import/export of rating tables to/from spreadsheets (e.g., Excel), rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are standard.

The solution does not currently include displacement testing (ability to run existing book of business through proposed rate/product changes to determine impact) or testing, modeling, and product analysis.

#### **Underwriter Workbench Functions**

Underwriting functions are part of the TCS BaNCS suite and can be sold as a stand-alone component. The underwriting workbench currently comes integrated with TCS BaNCS Core Policy Administration system.

Uploading/importing the submission data from a structured data feed and uploading/importing the submission information from documents (OCR-like functionality) are standard functions.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, and cancellation transactions are standard. Support for underwriting multiple submissions as one work portfolio is available with configuration via simple tools targeted for IT analysts or BAs.

Capturing underwriting analysis; submission rating; underwriter checklists that can validate information completeness and process completeness; and providing single current and historical views of insured account across the enterprise, lines of business, and policy systems are standard.

The ability to combine individual quotes for different lines into a single proposal, capturing an underwriter's loss analysis, and pricing analysis and scheduled rating information are available with configuration via tools for IT analysts or BAs. Document creation (proposals, applications, correspondence) and document storage are standard functions.

A rules engine that applies underwriting, workflow, and general business rules automatically; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); a rules engine that interfaces to order specific work conditionally; inline reports/dashboards on tasks/work/work status; inline reports/dashboards to support underwriting analysis; and displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) are standard functions.

Proposal coauthoring with other underwriters and agent-facing capabilities are standard functions. IM collaboration with other underwriters, screen sharing with other underwriters, preconfigured interfaces with policy admin systems, preconfigured interfaces with agent portals, preconfigured integration with business intelligence environments, preconfigured interfaces with third-party data services, and pre-configured interfaces with external predictive scoring models are available with configuration via developer tools, XML manipulation, or a scripting language.

Support for variable binding/approval authority by role and support for email notification/communication with agents and underwriters within the system (i.e., retaining a record of all emails) are standard functions. Natively calculated predictive scores are available with configuration via tools for IT analysts or BAs.

#### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents (e.g., statements) and ad hoc documents (e.g., correspondence, manuscripted policies). Pre-built forms, libraries, and templates for ACORD and ISO forms are configurable in the TCS BaNCS document management tool. Content, schema mapping, and data sources are managed by technical resources; business rules are maintained by business analysts.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is a standard function. Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository, content management tools, and archival capabilities for all documents generated are standard. The solution is designed to support industry-standard schemas like ACORD XML through configuration.

## **Agent Portal Functions**

TCS BaNCS Digital portal solution is part of the suite and is also sold as a stand-alone agent portal.

New business entry/submission, account clearance, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, integration and pre-fill with data services, policy change entry/submission, online payment, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, proposal creation, side-by-side quote comparison, account or client view in addition to a policy view, underwriter view and/or tools, agent/underwriter collaboration, and a rating engine are standard functions.

ACORD application creation and agency management system upload are available with configuration via developer tools, XML manipulation, or a scripting language. E-signature; document creation; file attachment support; workflow and task management capabilities; a consumer portal; and scheduling, diary, and calendar functions are standard functions.

Business intelligence and reporting are available through integration with TCS's analytics solution OPTiX and data lake solutions.

## **Reinsurance Functions**

TCS BaNCS for Reinsurance is part of the suite and is also sold as a stand-alone reinsurance component.

Ceded reinsurance management functions like the manual entry and tracking of cessions, reserves, and limits; automated notification if a reserve reaches a specific amount or treaties approach set limits; and automated identification/calculation of accounts with applicable reinsurance are standard.

Assumed reinsurance management functions like the manual entry and tracking of assumed reinsurance contracts, automated assumed reinsurance calculations based on reinsured data feeds/connections, and retrocession reinsurance management are standard.

Treaty management; facultative management; proportional support; non-proportional/excess of loss; multiple basis types (e.g., risks attaching, losses occurring, claims made); retroactive processing of late placements or midterm contract changes; and configuration of contract rules, formulas, and types are standard.

End-user interfaces for manual entry of contracts, for manual flagging of premiums and claims subject to reinsurance, and for review and approval of assumed policies as part of facultative contracts are available out of the box.

Real-time data intake from core systems (e.g., PAS, claims) via API or other mechanisms, real-time integration to an underwriting system (e.g., to display limits/reserves), and integration between other insurer/reinsurer systems are standard functions. Batch file import/export for integration to other systems is available with configuration via developer tools, XML manipulation, or a scripting language.

Statutory and regulatory reporting, a standard library of canned reports, automated Schedule F reporting, and automated bordereau reporting are standard functions. TCS notes that it includes a set of canned reports and provides transactional data in a reporting database; an insurer can use its tool of choice to generate ad hoc reports from this database.

TCS reports that business intelligence and analytics functionality, such as integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc., is available through integration with TCS's analytics solution OPTIX and data lake solutions. In addition, TCS notes that it provides a reporting database with a copy of the transactions; an insurer can deploy the analytics and BI solution on the reporting database.

Automated recoverable claims identification and viewing the full history and status of claims and claim recovery are available out of the box.

Tracking reinsurance payables and receivables, entity management (CRM), document management and storage of the actual contracts, multi-currency support, multi-language support, and an audit trail for all transactions are standard functions.

## **Business Intelligence Functions**

Business intelligence functions are integral to the suite and are not marketed as a stand-alone solution.

TCS reports that business intelligence and analytics functionality is available through integration with TCS's analytics solution OPTiX and data lake solutions. In addition, TCS notes that it provides a reporting database with a copy of the transactions; an insurer can deploy the analytics and BI solution on the reporting database.

The solution includes a presentation/reporting component; standard predefined reports and predefined insurance dashboards; and an ad hoc reporting tool.

It also includes some tools and features of an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes; a data lake to support schema on read and unstructured data; and data mining and analytics tools as a secondary part of the offering

The solution supports real-time streaming data movement (e.g., use of Kafka).

# **Billing Functions**

Billing is integral to the suite and is not marketed as a stand-alone solution. Payment and billing plan configurability is available out of the box. The table below shows the availability of other billing functions.

D1 1199	A 11 11 1 1 11 11 11 11 11 11 11 11 11 1
Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Available out of the box with no configuration necessary
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available with configuration using simple tools targeted
and disbursements:	for IT analysts or BAs
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Not available
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available with configuration using developer tools, XML
	manipulation, or a scripting language
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	No
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Available out of the box with no configuration necessary
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	, wantable out of the box than no comparation incocosally
	Available with configuration using simple tools targeted
reporting	,
reporting Pay-as-you-report for workers' comp:	Available with configuration using simple tools targeted
•	Available with configuration using simple tools targeted for IT analysts or BAs
Pay-as-you-report for workers' comp:	Available with configuration using simple tools targeted for IT analysts or BAs  Available out of the box with no configuration necessary
Pay-as-you-report for workers' comp: Invoice and correspondence:	Available with configuration using simple tools targeted for IT analysts or BAs  Available out of the box with no configuration necessary  Available out of the box with no configuration necessary
Pay-as-you-report for workers' comp: Invoice and correspondence: Check generation/production:	Available with configuration using simple tools targeted for IT analysts or BAs  Available out of the box with no configuration necessary  Available out of the box with no configuration necessary  Available out of the box with no configuration necessary
Pay-as-you-report for workers' comp: Invoice and correspondence: Check generation/production: Billing for non-premium receivables (such	Available with configuration using simple tools targeted for IT analysts or BAs  Available out of the box with no configuration necessary  Available out of the box with no configuration necessary  Available out of the box with no configuration necessary  Available out of the box with no configuration necessary
Pay-as-you-report for workers' comp: Invoice and correspondence: Check generation/production: Billing for non-premium receivables (such as claims deductibles paid):	Available with configuration using simple tools targeted for IT analysts or BAs  Available out of the box with no configuration necessary  Available out of the box with no configuration necessary  Available out of the box with no configuration necessary
Pay-as-you-report for workers' comp: Invoice and correspondence: Check generation/production: Billing for non-premium receivables (such as claims deductibles paid): Payment of non-refund payables (such as	Available with configuration using simple tools targeted for IT analysts or BAs  Available out of the box with no configuration necessary  Available out of the box with no configuration necessary  Available out of the box with no configuration necessary  Available out of the box with no configuration necessary

## **Claims Functions**

Claims functions are part of the suite and are also sold as a stand-alone claims component.

## **Adjudication**

Medical case management, injury detail maintenance (coding), disability management, automated coverage verification, aggregate tracking (erosion of policy limits), and deductible tracking are standard functions.

## Catastrophe

Catastrophe definition, automatic identification of catastrophe claims, and attaching multiple LOBs and causes of loss to a single catastrophe are standard functions. The solution does not currently include mapping tools.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, and handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support) are all standard functions. OFAC checking is available with configuration via developer tools, XML manipulation, or a scripting language.

#### **Documents**

Image and media management, document rendering, and multi-channel delivery and output of documents (e.g., PDF, email, web, and print) are standard functions. A correspondence or forms library is available with configuration via tools for IT analysts or BAs. State-specific claims reporting templates are available with configuration via developer tools, XML manipulation, or a scripting language. A content repository and content management tools are available via out-of-the-box integration to a third-party system or service.

## **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; mobile and smart device input; scripting for claims intake with reflexive questioning; custom question sets to prompt additional, mandatory questions depending on given answers (branch scripting); claim characteristics scoring (to calculate alerts, trigger workflow, assign a claims handler, or otherwise segment the claim); claimant contact management data capture; and checking for duplicate claims are standard functions. Handling of FROI/SROI EDI reporting and integration with external vendors and services (e.g., car rental companies, car/equipment repair shops) are available with configuration via developer tools, XML manipulation, or a scripting language.

## Fraud

Configurable business rules and tasks (specific to fraud and special investigations) are standard functions. The provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims is available with configuration via tools for IT analysts or BAs.

## Litigation

Litigation process tracking, including negotiation details and litigation costs, is a standard function. Creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management is available with configuration via tools for IT analysts or BAs.

#### Multi-Channel

E-signature, an agent portal with self-service, and a policyholder portal with self-service are standard functions. Call center integration for FNOL via telephony is available with configuration via tools for IT analysts or BAs. Call center integration for claims status check via telephony is available with configuration via developer tools, XML manipulation, or a scripting language.

#### Reinsurance

Capabilities like identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, and assignment to facultative arrangements are standard functions. The company also notes that TCS BaNCS can execute claim recovery against proportional treaties and non-proportional treaties as defined in the corresponding policy without manual intervention.

## Reporting

Standard reporting of claims performance monitoring (including claims handling and high-risk indicators, e.g., fatality, large losses, fraud) and ad hoc reports are standard. Dashboards are available with configuration via tools for IT analysts or BAs. Standard reporting of configurable metrics for claims reporting, reporting that includes jurisdiction-specific reports and forms, and electronic reporting or automated state filings are available with configuration via developer tools, XML manipulation, or a scripting language.

## Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; automatic subrogation identification; subrogation billing and the production of correct GL entries; granular tracking of reserves and payments; automatic reserve calculations using business rules and risk characteristics; direct, case, average, factor, and expense reserve types; and jurisdictional wage and rate calculations integrated for workers' comp are standard.

## **Vendor Management**

Vendor management functions are standard. The solution does not currently include capabilities to process required forms (including 1099s), but the company notes they could be available with a system enhancement.

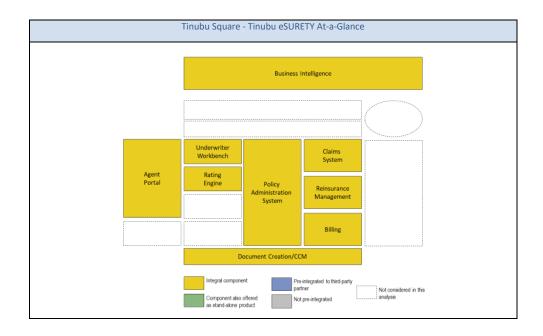
#### Workflow

Automated workflow/task generation; overriding automated processes and manually triggering workflow processes; automatic work assignment based on configurable rules; generating notes, diaries, and reminders; inclusion of external documents (e.g., letters, pictures) in file notes; and assigning multiple adjusters to a single claim are standard functions. OCR-triggered workflow, compliance with the Document Repository Interface (DRI) standards, processing claim workflow trigger (CWT) files at insurer-defined intervals, and full integration with electronic court filings (ECF2) are available with configuration via developer tools, XML manipulation, or a scripting language. The company also notes that the solution can define SLAs and track them against workflows and business processes.

# Tinubu Square - Tinubu eSURETY

# **Executive Summary**

- Tinubu Square is a private SaaS platform vendor for credit and surety insurers worldwide. It
  has headquarters in Paris, France, with US headquarters in Orlando, FL; it employs 178
  people. Serving over 20 countries, Tinubu Square notes that its SaaS cloud platform
  accelerates business growth through its Tinubu CIS short term, medium term, and political
  risk for credit insurance and Tinubu eSURETY and Tinubu SurePath Digital for surety. Its
  annual recurring revenue is €15M-€20M.
- In March 2020, Tinubu Square Group acquired eSURETY, and in December 2020 it acquired SuretyWave, including SurePath Digital, a surety bond processing system. The company notes that these strategic acquisitions are part of a multi-year plan to offer an end-to-end solution to agents, brokers, and carrier partners alike.
- The Tinubu eSURETY suite includes core policy, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has 27 live US/Canadian insurer clients using the suite, most of which are larger companies (over \$1B) using the solution to support surety and fidelity lines.
- Publicly announced clients include US Fire Insurance, Great American, FCCI Group, Hudson Insurance Group, and Cincinnati Insurance Companies.
- The solution is browser-based for all user interface functions. It is written primarily in C#, plus a small amount of JavaScript.
- Configuration for insurance products, screens, workflows, rules, integration to third-party service calls, and document authoring functions is via tools for BAs and non-IT staff.
- Implementation is available through Tinubu's resources. It deploys the solution on MS Azure.
   A SaaS delivery model is available that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades.
- The company reports that the average time to initial go-live varies and that the average implementation cost is \$500K-\$1M.



# **Lines of Business Supported**

Personal auto:	Not currently supported
Homeowners:	Not currently supported
Personal umbrella:	Not currently supported
Dwelling fire:	Not currently supported
Boatowners:	Not currently supported
Personal package:	Not currently supported
Commercial property:	Not currently supported
General liability:	Not currently supported
BOP:	Not currently supported
Commercial crime:	Not currently supported
Commercial auto:	Not currently supported
E&O/D&O:	Not currently supported
Inland marine:	Not currently supported
Professional liability (including medical malpractice):	Not currently supported
Commercial package:	Not currently supported
Specialty:	Not currently supported
Workers' comp:	Not currently supported
Surety:	Live clients offering this product in all 50 US states
Other personal lines:	Not currently supported
Other commercial lines†:	Live clients offering this product in all 50 US states

<sup>†</sup>Other commercial lines include fidelity.

## **Client Base**

Globally, Tinubu eSURETY has 30 live clients, 27 of which are insurer clients (i.e., not MGAs, self-insureds). These insurer clients are all live in the US and Canada. Most are larger companies (over \$1B) using the solution to support surety and fidelity lines.

Publicly announced clients include US Fire Insurance, Great American, FCCI Group, Hudson Insurance Group, and Cincinnati Insurance Companies.

# **Key Functions and Differentiators**

Tinubu Square cites the key functions of Tinubu eSURETY as:

- Direct-to-consumer portal featuring online pay and instant delivery of surety bond documents
- Rules-based workflow and processing
- Financial analysis tools and reporting for insurers, MGAs, and agents
- SNAP integration to/from enterprise data systems via web APIs
- Natively integrated multi-language and multi-currency support

The company cites as its key differentiators its surety bond capabilities, including underwriting, issuance, and management, for every life cycle stage for global, super-regional, and regional carriers; its extensive client base with a 20-year record of success; that it is designed for surety personnel, not IT, to manage; its modern cloud architecture with an aggressive update schedule; and that it completed SOC II, Type 2 certification with PCI compliance in January 2019.

# **Solution Architecture and History**

Tinubu eSURETY launched in 1999 and was re-architected in 2014 with a more modern cloud architecture. This was followed with another major release and upgrade in March 2019. The company reports that 90% of the solution's customers are on the latest version, and 10% are on a version less than three years old. The company reports that 100% of customers have been through at least one upgrade.

The solution supports Microsoft SQL Server and Azure SQL databases as well as Azure (Windows) platforms. The solution is written primarily in C#, plus a small amount of JavaScript.

# **APIs and Integration**

The solution provides REST and SOAP APIs. They are available to all clients.

# **Configurability and User Interface**

Tinubu eSURETY is browser-based for all user interface functions.

Configuration of insurance products, screens, workflows, rules, integration to third-party service calls, and document authoring functions is via tools for BAs and non-IT staff.

## **Deployment Options**

Tinubu Square deploys the solution on MS Azure. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of the upgrades. The hosted solution is a single-tenant app server and database.

# **Average Implementation Length and Cost**

The company implements the solution through its own resources. It reports that Tinubu eSURETY does not have an average go-live time frame as every carrier it has worked with has been different. The average implementation cost is \$500K-\$1M.

## Support

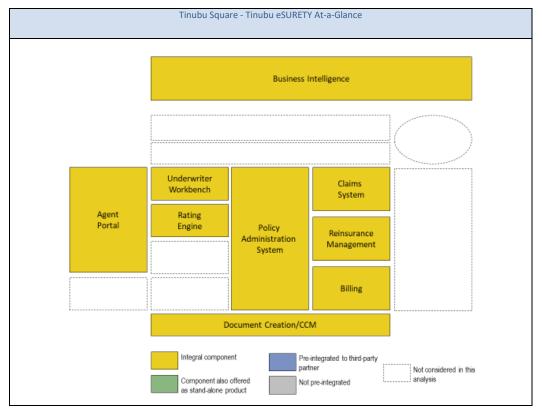
Of the 178 people employed at Tinubu Square, there are around 20 employees on each of the product design and engineering, implementation, and support teams. Tinubu Square support staff is based in the US.

The company offers customer engagement activities such as an online community, online training, a customer advisory committee, a user event, and training seminars.

# Systems Integrator and Other Partners

Publicly announced partnerships include Crowe, LLP.

# **Functionality**



## **Policy Administration Functions**

Policy issue, premium accounting, out-of-sequence endorsement, and manuscripted policies are available out of the box. Bordereaux import and forms management are available with configuration via tools for IT analysts or BAs. The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

## **Rating Functions**

A rating engine is integral to the suite and is not marketed as a stand-alone solution.

A quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are standard.

Versioning and update management, change control functions, and auditability of rate versioning are standard. An applications and forms library with standard and customizable applications and forms is standard. Pre-integration to third-party data providers is standard. Download to agency management systems is available with configuration via developer tools, XML manipulation, or a scripting language.

ISO rates/rules support and ISO-formatted statistical data are standard functions. The solution does not currently include NCCI/Bureau of Workers' Comp rates/rules support or ISO ERC integration.

Setting insurer-specific defaults is a standard function. The solution does not currently include multi-carrier comparison. Product design and development tools and saving/storing an inprocess or completed policy change transaction to allow issuance at a later date are standard.

Maintaining rating algorithm definition and management separately from rate tables; rate table design and update management tools; the import/export of rating tables to/from spreadsheets (e.g., Excel); rating and rule definition and management (e.g., automatic driver assignment); and date management capabilities are standard.

Testing, modeling, and product analysis, as well as displacement testing (i.e., the ability to run existing book of business through proposed rate/product changes to determine impact), are standard functions.

## **Underwriter Workbench Functions**

Underwriting functions are integral to the suite and are not marketed as a stand-alone solution.

Uploading/importing the submission information from documents (ACORD forms for surety/fidelity) is a standard function. Uploading/importing the submission data from a structured data feed is available with configuration via tools for IT analysts or BAs.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, cancellation transactions, and underwriting multiple submissions as one work portfolio are standard functions.

Capturing underwriting analysis; capturing underwriter loss analysis; underwriter checklists that can validate information and process completeness; submission rating; pricing analysis and scheduled rating information; and providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are standard functions. The solution does not currently include combining individual quotes for different lines into a single proposal.

Document creation (proposals, applications, correspondence) and document storage are standard functions. Rules engines that automatically apply underwriting, workflow, and general business rules; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); a rules engine that interfaces to order specific data conditionally; inline reports/dashboards on tasks/work/work status; inline reports/dashboards to support underwriting analysis; and displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) are standard functions.

IM collaboration, proposal co-authoring, and screen sharing with other underwriters as well as agent-facing capabilities are standard. Support for variable binding/approval authority by role and support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) are standard.

Preconfigured interfaces with policy admin systems, agent portals, external predictive scoring models, and third-party data services as well as preconfigured integration with business intelligence environments and natively calculated predictive scores are standard functions.

## **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports ad hoc document creation (e.g., correspondence, manuscripted policies). The suite includes pre-packaged, pre-built forms, libraries, and templates from ACORD.

The primary authoring environment is a custom environment, MS Word, Adobe Creative Suite, or a non-Microsoft/Adobe solution. Content, business rules, schema mapping, and data sources are all maintained by business analysts.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is a standard function. Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository, content management tools are standard functions, and archival capabilities for all generated documents are standard. The solution support industry-standard schemas including ACORD XML and XBRL out of the box.

## **Agent Portal Functions**

Agent portal functions are integral to the suite and not marketed as a stand-alone solution.

New business entry/submission, account clearance, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, integration and pre-fill with data services, policy change entry/submission, online payment, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, billing inquiry, claims inquiry, proposal creation, ACORD application creation, account or client view in addition to a policy view, underwriter view and/or tools, agent/underwriter collaboration, and a rating engine are standard functions.

Agency management system upload capabilities are available with configuration via tools for IT analysts or BAs. The solution does not currently include side-by-side quote comparison.

E-signature; document creation; file attachment support; workflow and task management capabilities; business intelligence and reporting; a consumer portal; and scheduling, diary, and calendar functions are standard.

## **Reinsurance Functions**

Reinsurance is integral to the suite and is not marketed as a stand-alone solution.

The solution does not currently include ceded reinsurance management functions like automated notifications if a reserve reaches a specific amount or treaties approach set limits; automated identification/calculation of accounts with applicable reinsurance; or manual entry and tracking of cessions, reserves, and limits.

Assumed reinsurance management functions like manual entry and tracking of assumed reinsurance contracts are available out of the box. The solution does not currently include automated assumed reinsurance calculations based on reinsured data feeds/connections or retrocession reinsurance management.

The solution does not currently include treaty management; facultative management; proportional support; non-proportional/excess of loss; multiple basis types (e.g., risks attaching, losses occurring, claims made); retroactively processing late placements or midterm contract changes; or configuration of contract rules, formulas, and types.

End-user interfaces for manual entry of contracts, manual flagging of premiums and claims subject to reinsurance, and review and approval of assumed policies as part of facultative contracts are standard functions.

Batch file import/export for integration to other systems, real-time data intake from core systems (e.g., PAS, claims) via API or another mechanism, real-time integration to an underwriting system (e.g., to display limits/reserves), and integration between other insurer/reinsurer systems are available with configuration via tools for IT analysts or BAs.

Statutory and regulatory reporting; a standard library of canned reports; automated Schedule F reporting; ad hoc reporting; and integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc. are standard functions. Automated bordereau reporting is available with configuration via developer tools, XML manipulation, or a scripting language.

Viewing the full history and status of a claim and claim recovery is available with configuration using via tools, XML manipulation, or a scripting language. The solution does not currently include automated recoverable claims identification.

Document management and storage of the actual contracts, multi-currency support, multi-language support, and an audit trail for all transactions are standard. Entity management (CRM) and tracking reinsurance payables and receivables are available with configuration via developer tools, XML manipulation, or a scripting language.

## **Business Intelligence Functions**

Business intelligence functions are integral to the suite and are not marketed as a stand-alone solution.

The Tinubu eSURETY BI stack (Microsoft BI platform) is specific to surety and provides a suite of tools, reports, and dashboards to manage customer books of business from a strategic perspective with the ability to drill down to individual transactions. It supports PowerBI.

The solution includes tools to support data governance, dictionaries, quality, and validation; standard predefined reports and predefined insurance dashboards; an ad hoc reporting tool; and data mining and analytics tools.

The solution supports data movement via batch ETL.

# **Billing Functions**

Billing is integral to the suite and is not marketed as a stand-alone solution. Payment and billing plan configurability is standard. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Currently not available, but could be available with a
	system enhancement
Split or multi-payer bill:	Currently not available, but could be available with a
	system enhancement
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Not available
and disbursements:	
Real-time account and payment calculation,	Not available
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Not available
Equity billing support:	Not available
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Not available
Billing dashboarding/reporting:	Currently not available, but could be available with
	integration to another system or service
Workers' compensation monthly self-	Not applicable
reporting	
Pay-as-you-report for workers' comp:	Not available
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Not available
Billing for non-premium receivables (such	Not available
as claims deductibles paid):	
Payment of non-refund payables (such as	Not available
policy dividends or mutual dividends):	
Multi-currency support in a single instance	Yes
of the application:	
TP	

#### **Claims Functions**

Claims is integral to the suite and is not marketed as a stand-alone solution.

## **Adjudication**

The solution does not currently include adjudication functionalit.

## Catastrophe

Mapping tools are available out of the box. The solution does not currently include catastrophe definition, automatic identification of catastrophe claims, or attaching multiple LOBs and multiple causes of loss to a single catastrophe.

#### **Disbursements**

The solution does not currently include disbursement functionality.

#### **Documents**

Image and media management, a correspondence or forms library, document rendering, a content repository and content management tools, and multi-channel delivery and output of documents (e.g., PDF, email, web, and print) are standard functions. The solution does not currently include state-specific claims reporting templates.

#### **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; mobile and smart device input; custom question sets to prompt additional, mandatory questions depending on given answers (branch scripting); claim characteristics scoring (to calculate alerts, trigger workflow, assign a claims handler, or otherwise segment the claim); claimant contact management data capture; and checking for duplicate claims are standard functions. The solution does not currently include handling of FROI/SROI EDI reporting, scripting for claims intake with reflexive questioning, or integration with external vendors and services (e.g., car rental companies, car/equipment repair shops).

## **Fraud**

Configurable business rules and tasks (specific to fraud and special investigations) and provision of multiple search and reporting criteria for fraud detection via the ability to track common clients across multiple claims are standard functions.

#### Litigation

The solution does not currently include litigation management functionality.

## **Multi-Channel**

E-signature, an agent portal with self-service, a policyholder portal with self-service, call center integration for FNOL via telephony, and call center integration for claims status check via telephony are standard functions.

#### Reinsurance

Identifying claims subject to reinsurance through multiple dimensions (e.g., type of claim, limit, location), assignment to reinsurance treaties, and assignment to facultative arrangements are standard.

## Reporting

Standard reporting of claims performance monitoring, including claims handling, and high-risk indicators, e.g., fatality, large losses, fraud; standard reporting of configurable metrics for claims reporting; and ad hoc reports are standard functions. Dashboards and reporting that includes jurisdiction-specific reports and forms are available with configuration via tools for IT analysts or BAs. The solution does not currently include electronic reporting or automated state filings.

## Reserves, Recoveries, Subrogation

The solution does not currently include reserve/recovery/subrogation functionality.

#### **Vendor Management**

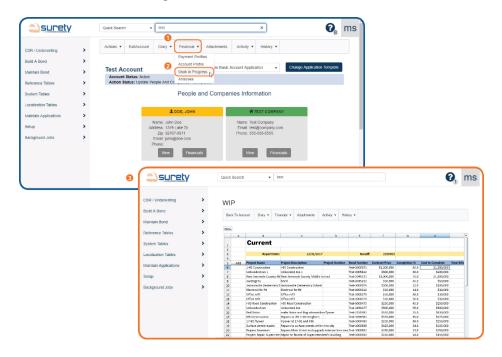
The solution does not currently include vendor management functionality.

## Workflow

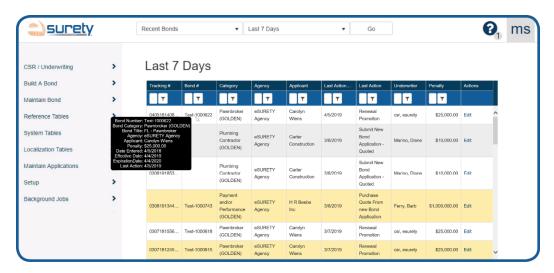
Automated workflow/task generation; overriding automated processes and manually triggering workflow processes; automatic work assignment based on configurable rules, including external documents (e.g., letters, pictures) in file notes; and generating notes, diaries, and reminders are standard functions. The solution does not currently include OCR-triggered workflow, assigning multiple adjusters to a single claim, compliance with the Document Repository Interface (DRI) standards, processing claim workflow trigger (CWT) files at insurer-defined intervals, or full integration with electronic court filings (ECF2).

# **Screenshots**

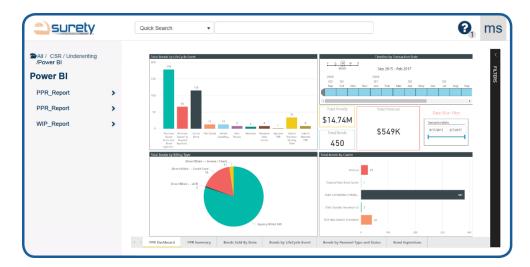
Account With Work-In-Progress Cutout



Agent Recent Bond List With Search Terms and Mouse Over Bond Details Summary View



## PowerBI Report Dashboard



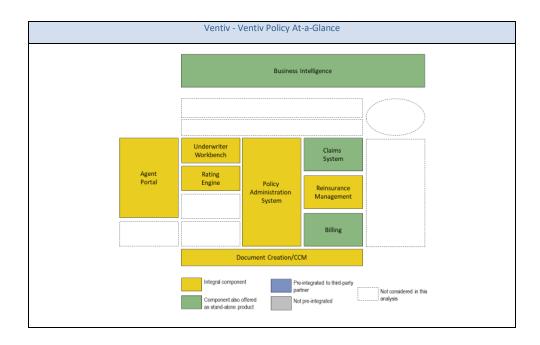
## Direct-to-Consumer, Customized, Consumer-Facing Interface



# **Ventiv Technology Inc. - Ventiv Policy**

# **Executive Summary**

- Ventiv Technology Inc. asserts that its people, software, and solutions empower
  organizations to achieve optimal results through its risk, insurance, and claims programs.
   Ventiv reports that it partners with over 625 clients and 390,000 users in more than 40
  countries. The private company is headquartered in Atlanta, GA and employs 450 people.
- Ventiv Policy is part of a larger admin suite that includes Ventiv Policy, Ventiv Claims, and Ventiv Billing. Ventiv Policy is a solution that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, and business intelligence components.
- It currently has 25 North American insurer clients live on the suite, all of which are smaller and midsize companies (under \$1B) using the solution to support commercial lines.
- Publicly announced clients include Vermont League of Municipalities and Towns, Municipal Association of South Carolina, Indiana University Health Risk Retention Group, Maine Municipal Association, and Massachusetts Interlocal Insurance Association.
- The solution is browser-based for all user interface functions. It is written primarily in .NET (C#/VB.NET), with some TQL/Microsoft SQL and HTML5.
- Configuration for document authoring is done via developer tools, XML manipulation, or a scripting language. Insurance products, screens, workflows, rules, and integration to thirdparty service calls are configured via code.
- Implementation is available through the company's own resources or a partner. The
  company deploys Ventiv Policy on-prem or hosted at a private data center. The company
  offers a SaaS delivery model that includes hosting, license, maintenance and support,
  ongoing access to the latest version, and implementation of upgrades.
- The company reports that the average time to initial go-live for the policy product is 270 days or less and that its average implementation cost is \$200K-\$500K.



# **Lines of Business Supported**

Personal auto:	Not currently supported
Homeowners:	Not currently supported
Personal umbrella:	Not currently supported
Dwelling fire:	Not currently supported
Boatowners:	Not currently supported
Personal package:	Not currently supported
Commercial property:	Live clients offering this product in 10-49 US states
General liability:	Live clients offering this product in 10-49 US states
BOP:	Live clients offering this product in 10-49 US states
Commercial crime:	Live clients offering this product in 10-49 US states
Commercial auto:	Live clients offering this product in 10-49 US states
E&O/D&O:	Live clients offering this product in 2-9 US states
Inland marine:	Live clients offering this product in 10-49 US states
Professional liability (including medical malpractice):	Live clients offering this product in 10-49 US states
Commercial package:	Live clients offering this product in 10-49 US states
Specialty:	Live clients offering this product in 10-49 US states
Workers' comp:	Live clients offering this product in 10-49 US states
Surety:	Live clients offering this product in 2-9 US states
Other personal lines:	Not currently supported
Other commercial lines†:	Live clients offering this product in 2-9 US states

<sup>†</sup>Other commercial lines include medical professional liability.

## **Client Base**

Globally, Ventiv Policy has 26 live clients, 25 of which are insurer clients (i.e., not MGAs, self-insureds). These insurer clients are all live in the US and Canada. All are smaller or midsize companies (under \$1B) using the solution to support commercial lines.

Publicly announced clients include Vermont League of Municipalities and Towns, Municipal Association of South Carolina, Indiana University Health Risk Retention Group, Maine Municipal Association, and Massachusetts Interlocal Insurance Association.

# **Key Functions and Differentiators**

Ventiv cites the key functions of Ventiv Policy as:

- User interface design and user experience
- Data analytics KPI and a bulk processing data engine
- CRM role-based email capability
- Rate table import/export management
- Configurable binder issuance

The company asserts as key differentiators its focus on insured analytics, e.g., predictive deductible; single solution insured/agent portal; data analytics KPI and benchmarks; user interface design and user experience; and member self-service certificate issuance.

# **Solution Architecture and History**

Ventiv Policy launched in 2001 and was re-architected in 2016. The latest release was in October 2020.

The solution requires Microsoft SQL Server databases and Windows platforms. The solution is written primarily in .NET (C#/VB.NET) with some TSQL/Microsoft SQL and HTML5.

# **APIs and Integration**

The solution does not provide any APIs out of the box.

# **Configurability and User Interface**

Ventiv Policy is browser-based for all user interface functions.

Document authoring is configured via developer tools, XML manipulation, or a scripting language. Configuration for insurance products, screens, workflows, rules, and integration to third-party service calls is via code.

# **Deployment Options**

Ventiv Policy is available on-prem and hosted at a private data center. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades. The hosted solution is a single-tenant app server and database.

## **Average Implementation Length and Cost**

Implementation is available through the company's own resources or a partner. Ventiv reports that Ventiv Policy can be ready for initial go-live in an average of 270 days or less and fully rolled out in an additional 12 months or less. The average implementation cost for Ventiv Policy is \$200K-\$500K.

## Support

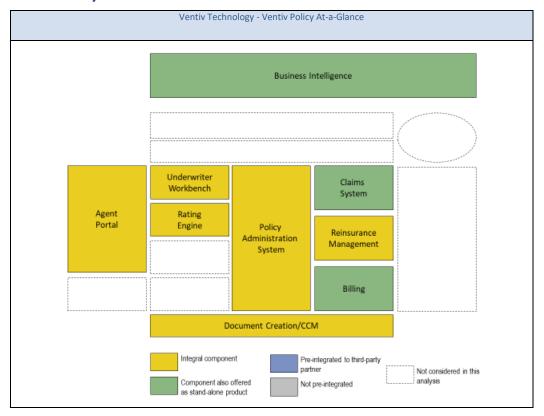
Of the 450 people employed at Ventiv, there are between 100 and 250 on the product design and engineering team, between 50 and 100 on the implementation (not including partners) team, and between ten and 50 on the support team for Ventiv Policy.

Support for the solution is based out of the US. The company offers customer engagement activities for Ventiv Policy such as an online community, online training, a user event, and training seminars.

# **Systems Integrator and Other Partners**

Publicly announced technology partnerships include OnBase, Franco Signore, Microsoft, SAP, and Health-Tech.

# **Functionality**



## **Policy Administration Functions**

The solution includes policy issue, out-of-sequence endorsement, and manuscripted policies out of the box. Forms management is available with configuration using simple tools targeted for IT analysts or BAs. Premium accounting and bordereaux import are available with configuration using developer tools, XML manipulation, or a scripting language.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

## **Rating Functions**

Rating functionality is integral to the suite and is not sold as a stand-alone rating engine.

Core rating functions like quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are standard.

Auditability of rate versioning is standard. Versioning and update management as well as change control functions are available with configuration using developer tools, XML manipulation, or a scripting language.

An application and forms library with standard and customizable applications and forms is available with configuration via tools for IT analysts or BAs.

Integration functions like download to agency management systems and pre-integration to thirdparty data providers are available with configuration using developer tools, XML manipulation, or a scripting language.

Currently, the solution does not include any ISO or NCCI partnership capabilities like ISO rates/rules support, NCCI/Bureau of Workers' Comp rates/rules support, ISO-formatted statistical data, or ISO ERC integration. Multi-carrier comparison is a standard function. Setting insurer-specific defaults is available with configuration using developer tools, XML manipulation, or a scripting language.

Saving/storing an in-process or completed policy change transaction to allow issuance at a later date is a standard function. Product design and development tools are available with configuration using developer tools, XML manipulation, or a scripting language.

Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, import/export of rating tables to/from spreadsheets (e.g., Excel), and date management capabilities are standard functions. Rating and rule definition and management (e.g., automatic driver assignment) is available with configuration using developer tools, XML manipulation, or a scripting language.

Displacement testing (i.e., the ability to run existing book of business through proposed rate/product changes to determine impact) and testing, modeling, and product analysis are available out of the box with no configuration necessary.

## **Underwriter Workbench Functions**

Underwriting functions are integral to the suite and are not sold as a stand-alone solution.

Uploading/importing submission data from a structured data feed is standard. Uploading/importing the submission information from documents (OCR-like functionality) is available via out-of-the-box integration to a third-party system or service.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, and cancellation transactions is standard. Support for underwriting multiple submissions as one work portfolio is also available out of the box.

Allowing individual quotes for different lines to be combined into a single proposal; capturing underwriting analysis; capturing underwriter loss analysis; submission rating; pricing analysis and scheduled rating information; and providing a single current and historical view of the insured's account across the enterprise, lines of business, and policy systems are standard functions. Underwriter checklists that can validate information completeness and process completeness are not currently available.

Document creation (e.g., proposals, applications, correspondence) and document storage are available out of the box.

A rules engine that automatically applies underwriting, workflow, and general business rules along with a rules engine that interfaces to conditionally order specific data are available with configuration using developer tools, XML manipulation, or a scripting language. Workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries) and inline reports/dashboards on tasks/work/work status are standard functions. A rules engine that interfaces to order specific data conditionally is available with configuration using developer tools, XML manipulation, or a scripting language. Inline reports/dashboards to support underwriting analysis and displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) are available with configuration using simple tools targeted for IT analysts or BAs.

The solution does not currently include IM collaboration with other underwriters. Proposal coauthoring with other underwriters, screen sharing with other underwriters, agent-facing capabilities, preconfigured interfaces with policy admin systems, and preconfigured interfaces with agent portals are available out of the box.

Preconfigured integration with business intelligence environments is available with configuration using simple tools targeted for IT analysts or BAs. Preconfigured interfaces with third-party data services are available with configuration using developer tools, XML manipulation, or a scripting language. Currently, the solution does not include natively calculated predictive scores or preconfigured interfaces with external predictive scoring models.

Support for variable binding/approval authority by role and support for email notification/ communication with agents and underwriters within the system (retaining a record of all emails) are available out of the box with no configuration necessary.

## **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents, e.g., statements, and ad hoc documents, e.g., correspondence and manuscripted policies.

The suite does not include pre-packaged, pre-built forms, libraries, or templates from ISO or ACORD. The primary authoring environment is a custom environment. Content is designed to be maintained by business analysts; business rules, schema mapping, and data sources are designed to be managed by technical resources.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is available with configuration using simple tools targeted for IT analysts or BAs. Clients must use the toolset built into the solution for document authoring and content management workflow.

A content repository and content management tools are available via out-of-the-box integration to a third-party system or service. Archival capabilities for all generated documents are not currently available. The solution supports industry-standard schemas like ACORD XML out of the box.

## **Agent Portal Functions**

Ventiv notes that Ventiv Policy Gateway can be used as an agent portal, insured portal, or both. The portal is sold as an add-on module to Ventiv Policy and cannot be used stand-alone without Ventiv Policy.

New business entry/submission, account clearance, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, integration and pre-fill with data services, policy change entry/submission, renewal quote entry/submission, policy inquiry, policy transaction history inquiry, claims inquiry, proposal creation, ACORD application creation, side-by-side quote comparison, account or client view in addition to a policy view, underwriter view and/or tools, agent/underwriter collaboration, and a rating engine are all standard functions.

Agency management system upload is available with configuration using developer tools, XML manipulation, or a scripting language. Currently, the solution does not include online payment or billing inquiry.

Document creation; file attachment support; scheduling, diary, and calendar functions; workflow and task management capabilities; and a consumer portal are standard functions. Ventiv notes that business intelligence and reporting is under development and should be available in less than six months. Currently, the solution does not include e-signature.

#### **Reinsurance Functions**

Reinsurance functionality is integral to the suite and is not marketed as a stand-alone solution.

The solution does not currently include any ceded reinsurance management functions.

Assumed reinsurance management functions like the manual entry and tracking of assumed reinsurance contracts are standard. The solution does not currently include retrocession reinsurance management or automated assumed reinsurance calculations based on reinsured data feeds/connections.

Currently, the solution does not include any contract management functions, but the company notes that they could be available with a system enhancement.

End-user interfaces are not included in the solution. Real-time integration is available out of the box with no configuration necessary. The solution does not currently include other integration functions.

Ad hoc reporting is a standard function. The solution does not currently include other reporting functionality or claim management capabilities.

Entity management (CRM) as well as document management and storage of the actual contracts are standard functions. Currently, tracking reinsurance payables and receivables, multi-currency support, multi-language support, and audit trail for all transactions are not available.

## **Business Intelligence Functions**

Ventiv Policy offers operational analytics within the application; for more advanced analytics, Ventivs Analytics product can be purchased. Ventiv Policy's out-of-the-box analytics capabilities offer easy-to-use UI field selection to compose ad hoc reports, dashboards, and reports. Ventiv Policy's out-of-the-box analytics functionality leverages Logi's reporting tool.

Ventiv asserts that Business Analytics combines KPI goals, scoring algorithms, dashboards, reporting, and analysis into one analytic platform. It includes: dashboards and data visualizations; charts and graphs that display risk, policy, billing, and claims performance data; static and interactive reports; self-service analytics and ad hoc querying; mobile reporting; benchmarking of comparative internal client performance metrics; and user configurable product capabilities for KPIs and business rules.

The solution includes a presentation/reporting component, standard predefined reports and predefined insurance dashboards, and an ad hoc reporting tool. Data mining and analytics tools are included as a secondary part of the solution.

# **Billing Functions**

Ventiv Billing is part of the suite and is also sold as a stand-alone billing component. Payment and billing plan configurability is standard. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Under development and will be available in less than six
	months
Account or list bill:	Under development and will be available in less than six
	months
Third-party (i.e., mortgagee) bill:	Currently not available, but could be available with a
	system enhancement
Split or multi-payer bill:	Currently not available, but could be available with a
	system enhancement
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
payment card, check, EFT, payroll	
deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Available out of the box with no configuration necessary
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	Manage Salata
Payroll deduction:	Not available
Billing dashboarding/reporting: Workers' compensation monthly self-	Available out of the box with no configuration necessary
	Available out of the box with no configuration necessary
reporting Pay-as-you-report for workers' comp:	Available out of the boy with no configuration possessary
Invoice and correspondence:	Available out of the box with no configuration necessary  Available out of the box with no configuration necessary
Check generation/production:	Available out of the box with no configuration necessary  Available out of the box with no configuration necessary
	<u> </u>
Billing for non-premium receivables (such	Available out of the box with no configuration necessary
as claims deductibles paid):	A with the sect of the leavest the second in west
Payment of non-refund payables (such as	Available out of the box with no configuration necessary
policy dividends or mutual dividends):	N.
Multi-currency support in a single instance	No
of the application:	

#### **Claims Functions**

Ventiv Claims Premier is part of the suite and is also sold as a stand-alone claims component.

## **Adjudication**

Medical case management, injury detail maintenance (coding), automated coverage verification, and aggregate tracking (erosion of policy limits) are available out of the box. The solution does not currently include disability management or deductible tracking.

#### Catastrophe

Catastrophe definition and mapping tools are standard functions. Automatic identification of catastrophe claims and attaching multiple LOBs and multiple causes of loss to a single catastrophe are available with configuration using developer tools, XML manipulation, or a scripting language.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, combining multiple pending payments for a single client into one disbursement, and OFAC checking are standard. Currently, the solution does not include calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), or handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support, etc.).

#### **Documents**

Image and media management, a correspondence or forms library, document rendering, a content repository and content management tools, and multi-channel delivery and output of documents (e.g., PDF, email, web, and print) are standard. State-specific claims reporting templates are available via out-of-the-box integration to a third-party system or service.

## **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; mobile and smart device input; claimant contact management data capture; and claim checking duplication are standard. Scripting for claims intake with reflexive questioning, customized question sets to prompt mandatory additional questions depending on the answers given (branch scripting), and claim characteristics scoring (to calculate alerts, trigger workflow, assign claims hander, or otherwise segment the claim) are available with configuration using developer tools, XML manipulation, or a scripting language.

Handling of FROI/SROI EDI reporting is available via out-of-the-box integration to a third-party system or service. Currently, the solution does not include integration with external vendors and services (e.g., car rental companies, car/equipment repair shops).

#### **Fraud**

Configurable business rules and tasks specific to fraud and special investigations as well as the provision of multiple search and reporting criteria for fraud detection via ability to track common clients across multiple claims are available with configuration using developer tools, XML manipulation, or a scripting language.

#### Litigation

Litigation process tracking, including negotiation details and litigation costs, as well as creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management are available out of the box.

#### **Multi-Channel**

An agent portal with self-service is available out of the box with no configuration necessary. A policyholder portal with self-service is available with configuration using simple tools targeted for IT analysts or BAs. Currently, the system does not include e-signature, call center integration for FNOL via telephony, or call center integration for claims status check via telephony.

#### Reinsurance

The solution does not currently include reinsurance functionality.

#### Reporting

The standard reporting of claims performance monitoring, including claims handling and high-risk indicators such as fatality, large losses, and fraud; standard reporting of configurable metrics for claims reporting; ad hoc reports; dashboards; reporting that includes jurisdictional-specific reports and forms; and electronic reporting or automated state filings are standard functions.

#### Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases; the granular tracking of reserves and payments; and direct, case, average, factor, and expense reserve types are available out of the box. Automatic subrogation identification is available with configuration using developer tools, XML manipulation, or a scripting language. Currently, the solution does not include subrogation billing and the production of correct GL entries or jurisdictional wage and rate calculations integrated for workers' comp.

## **Vendor Management**

Vendor management functions and processing required forms (including 1099s) are standard.

## Workflow

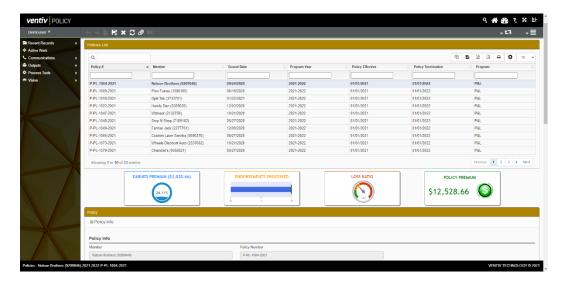
Inclusion of external documents (letters and pictures) in file notes and assigning multiple adjusters to a single claim are available out of the box. Automated workflow/task generation and generating notes, diaries, and reminders are available with configuration using developer tools, XML manipulation, or a scripting language. OCR-triggered workflow, overriding automated processes and manually triggering workflow processes, and automatic work assignment based on configurable rules is available via out-of-the-box integration to a third-party system or service. Currently, the solution does not include compliance with the Document Repository Interface (DRI) standards, processing claim workflow trigger (CWT) files at insurer-defined intervals, or full integration with electronic court filings (ECF2).

## **Screenshots**

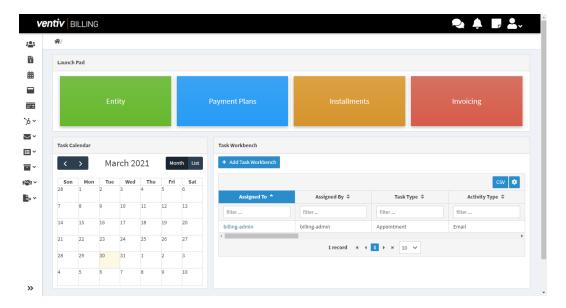
Ventiv Policy Home Screen



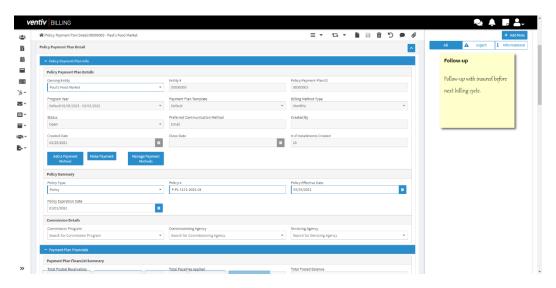
## Ventiv Policy Policy Screen



## Ventiv Billing Home Screen



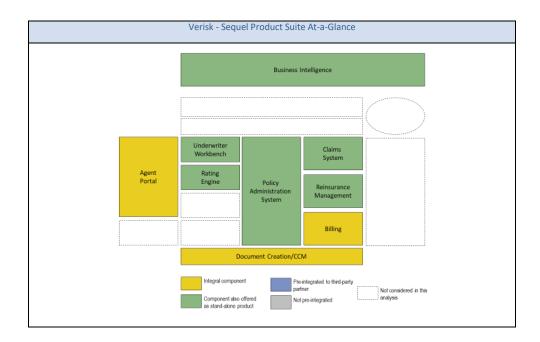
## Ventiv Billing Payment Plan Screen



# **Verisk - Sequel Product Suite**

# **Executive Summary**

- Sequel, a Verisk business, offers a suite of products including modular solutions for the
  complete insurance life cycle. Verisk (NASDAQ: VRSK) is a data analytics provider serving
  customers in insurance, energy and specialized markets, and financial services. Verisk
  collects and analyzes billions of records, drawing on unique data assets and deep domain
  expertise to provide innovative products integrated into customer workflows. Verisk is
  headquartered in Jersey City, NJ and operates in 30 countries. It employs 8,000 people.
- Sequel Product Suite is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- The company declined to disclose client count information.
- The solution has a Windows client for admin and a browser interface for users. It is written primarily in .NET (C#/VB.NET), with some JavaScript.
- Configuration for insurance products, screens, workflows, and document authoring is via tools for BAs and non-IT staff. Configuration for rules and integration to third-party service calls is via Sequel Message Bus and a suite of APIs.
- Implementation is available through Sequel services or a partner. The company deploys Sequel Product Suite on-prem, hosted at a private data center, or hosted on AWS. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and implementation of upgrades.
- The company reports that the average time to initial go-live is 90 days or less. Verisk declined to disclose the average cost of implementation.



# **Lines of Business Supported**

Personal auto:	Not currently supported
Homeowners:	Not currently supported
Personal umbrella:	Not currently supported
Dwelling fire:	Not currently supported
Boatowners:	Not currently supported
Personal package:	Not currently supported
Commercial property:	Live clients offering this product in one US state
General liability:	Live clients offering this product in one US state
BOP:	Solution is designed to support, but no clients live or implementing
Commercial crime:	Solution is designed to support, but no clients live or implementing
Commercial auto:	Solution is designed to support, but no clients live or implementing
E&O/D&O:	Live clients offering this product in one US state
Inland marine:	Solution is designed to support, but no clients live or implementing
Professional liability (including medical malpractice):	Live clients offering this product in one US state
Commercial package:	Solution is designed to support, but no clients live or implementing
Specialty:	Live clients offering this product in one US state
Workers' comp:	Not currently supported
Surety:	Live clients offering this product in one US state
Other personal lines:	Not currently supported
Other commercial lines:	Solution is designed to support, but no clients live or implementing

## **Client Base**

Verisk declined to disclose client count information. Most insurer clients are smaller (under \$1B) and use the solution to support personal and commercial lines. The company declined to disclose client names.

# **Key Functions and Differentiators**

Verisk cites the key functions of Sequel Product Suite as:

- Streamlined policy management of direct insurance with an intuitive, automated, and configurable web interface
- Powerful workflow and task management engine with Kanban visualization dashboard
- Flexible and configurable rating, rules, and limits calculation engine
- Native document production module
- Robust accounting and financial calculation engine

The company asserts as key differentiators its web-based configuration tools for low-code/no-code product administration; an open API gateway, providing self-service of internal and external data integrations; continuous investment in product roadmap for further enhancements and capabilities; configurable fraud scoring, data analytics, and reporting; and graphically rich interfaces with real-time micro to macro.

## **Solution Architecture and History**

Verisk acquired the Sequel Product Suite in 2017. The .NET version of the Sequel Product Suite launched in 2008 and was re-architected in 2018 and 2019. The latest release was in 2020.

The solution requires Microsoft SQL Server databases and Windows platforms. The solution is written primarily in .NET (C#/VB.NET) with some JavaScript.

## **APIs and Integration**

The solution provides REST APIs.

# **Configurability and User Interface**

Sequel Product Suite has a Windows client for admin and a browser interface for users. Clients can access core code but only in extreme circumstances.

Configuration for insurance products, screens, workflows, and document authoring is via tools for BAs and non-IT staff. Configuration for rules and integration to third-party service calls is via Sequel Message Bus and a suite of APIs.

## **Deployment Options**

Sequel Product Suite is available on-prem, hosted at a private data center, and hosted on AWS. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades. The hosted solution is a single-tenant app server and database.

## **Average Implementation Length and Cost**

Implementation is available through Sequel Services or a partner. Verisk reports that Sequel Product Suite can be ready for initial go-live in 90 days or less and fully rolled out in an additional 90 days or less. Verisk asserts that the solution is modularized, and therefore individual components can be implemented in a short amount of time. Verisk declined to disclose average implementation costs.

## Support

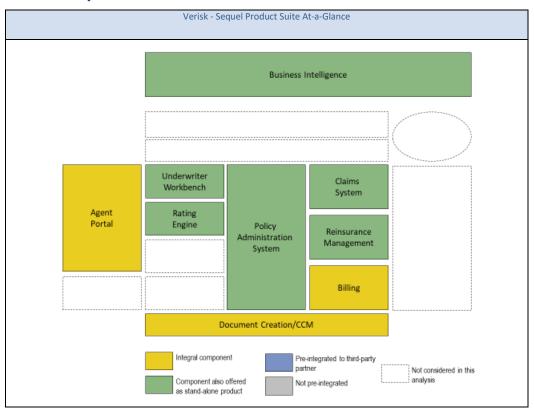
Of the more than 8,000 people employed at Verisk, there are between 100 and 250 on each of the product design and engineering, implementation (not including partners), and support teams for Sequel Product Suite.

Current support for the product is provided out of Jersey City, NJ; London, UK; and Malaga, Spain. The company offers customer engagement activities for Sequel Product Suite such as an online community, online training, a customer advisory committee, and a user event.

## **Systems Integrator and Other Partners**

The company declined to disclose partnerships for the suite.

# **Functionality**



## **Policy Administration Functions**

The solution includes policy issue, premium accounting, and bordereaux import out of the box. Forms management and manuscripted policies are available with configuration using simple tools targeted for IT analysts or BAs. The solution does not currently include out-of-sequence endorsement.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

## **Rating Functions**

Sequel Rulebook is part of the suite and is also sold as a stand-alone rating engine.

Core rating functions like support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing are standard. Quick quote option; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location on single policies are available with configuration via tools for IT analysts or BAs. The solution does not currently include out-of-sequence endorsements.

Compliance and change control functions like versioning and update management, change control functions, and auditability of rate versioning are standard.

An application and forms library with standard and customizable applications and forms is available with configuration via tools for IT analysts or BAs.

Integration functions like download to agency management systems and pre-integration to third-party data providers are available via out-of-the-box integration to a third-party system or service.

ISO rates/rules support and ISO-formatted statistical data are available with configuration using simple tools targeted for IT analysts or BAs. Verisk notes that ISO ERC integration is under development and should be available in less than six months. Currently, the solution does not include NCCI/Bureau of Workers' Comp rates/rules support. Multi-carrier comparison and setting insurer-specific defaults are available with configuration via tools for IT analysts BAs.

Saving/storing an in-process or completed policy change transaction to allow issuance at a later date is a standard function. Product design and development tools are available with configuration via tools for IT analysts BAs.

Import/export of rating tables to/from spreadsheets (e.g., Excel) is a standard function. Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, rating and rule definition and management (e.g., automatic driver assignment), and date management capabilities are available with configuration via tools for IT analysts or BAs.

Displacement testing (i.e., the ability to run existing book of business through proposed rate/product changes to determine impact) and testing, modeling, and product analysis are available with configuration via tools for IT analysts or BAs.

#### **Underwriter Workbench Functions**

Sequel Workbench is integral to the suite and is also marketed as a stand-alone solution.

Verisk notes that uploading/importing submission data from a structured data feed is under development and should be available in less than six months. Uploading/importing the submission information from documents (OCR-like functionality) is available via out-of-the-box integration to a third-party system or service.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, and cancellation transactions is standard. The solution does not currently include support for underwriting multiple submissions as one work portfolio.

Capturing underwriting analysis, capturing underwriter loss analysis, and underwriter checklists that can validate information completeness and process completeness are standard functions. Allowing individual quotes for different lines to be combined into a single proposal; submission rating; pricing analysis and scheduled rating information; and providing single current and historical views of insured accounts across the enterprise, lines of business, and policy systems are available with configuration using simple tools targeted for IT analysts or BAs.

Document storage is available out of the box. Document creation (e.g., proposals, applications, correspondence) is available with configuration via tools for IT analysts or BAs.

A rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); and a rules engine that interfaces to order specific data conditionally are available with configuration using simple tools targeted for IT analysts or BAs. Inline reports/dashboards on tasks/work/work status; inline reports/dashboards to support underwriting analysis; and displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) are standard.

The solution does not currently include IM collaboration with other underwriters, proposal coauthoring with other underwriters, screen sharing with other underwriters, or agent-facing capabilities.

Preconfigured interfaces with policy admin systems, agent portals, and third-party data services are standard. Preconfigured interfaces with external predictive scoring models, preconfigured integration with business intelligence environments, and natively calculated predictive scores are available with configuration using simple tools targeted for IT analysts or BAs.

Support for variable binding/approval authority by role is available with configuration using simple tools targeted for IT analysts or BAs. Verisk notes that support for email notification/ communication with agents and underwriters within the system (retaining a record of all emails) is under development and should be available in less than six months.

#### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents, e.g., statements, (less common use case) and ad hoc documents, e.g., correspondence and manuscripted policies, (most common use case).

The suite does not include pre-packaged, pre-built forms, libraries, or templates from ISO or ACORD. The primary authoring environment is a custom environment or MS Word. Content is designed to be maintained by business analysts; business rules, schema mapping, and data sources are designed to be managed by technical resources.

The solution supports print and e-delivery output channels. Managing preferences for print vs. electronic delivery is a standard function. Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository and content management tools are available out of the box. Archival capabilities for all generated documents are available via out-of-the-box integration to a third-party system or service. The solution does not support industry-standard schemas (e.g., ACORD XML, ebXML, XBRL) out of the box.

#### **Agent Portal Functions**

Sequel Rulebook is part of the suite and is not sold as a stand-alone agent portal.

Policy inquiry, policy transaction history, and underwriter view and/or tools are standard functions.

New business entry/submission, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, integration and pre-fill with data services, policy change entry/submission, renewal quote entry/submission, billing inquiry, claims inquiry, proposal creation, side-by-side quote comparison, agency management system upload, agent/underwriter collaboration, and a rating engine are available with configuration using simple tools targeted for IT analysts or BAs.

Currently the solution does not include account clearance, online payment, ACORD application creation, or account or client view in addition to a policy view.

File attachment support; scheduling, diary, and calendar functions; and workflow and task management capabilities are standard functions. Document creation and business intelligence and reporting are available with configuration using simple tools targeted for IT analysts or BAs. Currently, the solution does not include e-signature or a consumer portal.

#### **Reinsurance Functions**

Sequel Re is integral to the suite and is also marketed as a stand-alone reinsurance solution.

Ceded reinsurance management functions like the manual entry and tracking of cessions, reserves, and limits; automated notification if a reserve reaches a specific amount or treaties approach set limits; and automated identification/calculation of accounts with applicable reinsurance are standard.

Assumed reinsurance management functions like the manual entry and tracking of assumed reinsurance contracts and retrocession reinsurance management are standard. Currently, the solution does not include automated assumed reinsurance calculations based on reinsured data feeds/connections.

Contract management functions like treaty management; facultative management; proportional support; non-proportional/excess of loss; multiple basis types (e.g., risks attaching, losses occurring, and claims made); retroactively processing late placements or midterm contract changes; and configuration of contract rules, formulas, and types are all available out of the box.

End-user interfaces for the manual entry of contracts, manual flagging of premiums and claims subject to reinsurance, and the review and approval of assumed policies as part of facultative contracts are available out of the box.

Real-time data intake from core systems (e.g., PAS, claims) via API or another mechanism, real-time integration to an underwriting system (e.g., to display limits/reserves), and integration with other insurer/reinsurer systems are standard functions. Batch file import/export for integration to other systems is available with configuration via tools for IT analysts or BAs.

A standard library of canned reports and automated bordereau reporting are standard functions. Statutory and regulatory reporting are configurable via simple tools for IT analysts or BAs.

Currently, the solution does not include automated Schedule F reporting; ad hoc reporting; or integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc.

Automated recoverable claims identification and viewing the full history and status of claims and claim recovery are standard functions.

Tracking reinsurance payables and receivables, multi-currency support, and audit trail for all transactions are available out of the box. Currently the solution does not include entity management (CRM), document management and storage of the actual contracts, or multi-language support.

#### **Business Intelligence Functions**

Sequel Rulebook Data Analytics is part of the suite and is also sold as a stand-alone business intelligence component.

The BI framework consists of four components: ETL code builders, the framework data model, the ETL control architecture, and the presentation library. Data is extracted from source systems and loaded into the framework data model nightly. The ETL control architecture monitors this process to ensure no errors are identified and that the data in the warehouse reconciles with the source system. This data then populates the presentation library, including out-of-the-box analytical cubes. The framework data model consists of measure groups that contain quantitative data that can be analyzed by one or more dimensions containing qualitative data. Rulebook Analytics ensures that underwriting performance monitoring requirements are met.

The solution includes an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes. Rulebook Data Analytics also includes a presentation/reporting component, standard predefined reports and predefined insurance dashboards, an ad hoc reporting tool, and data mining and analytics tools.

The solution also includes tools to support data governance, dictionaries, quality, and validation as a secondary part of the offering. The solution supports data movement via batch ETL.

#### **Billing Functions**

Billing functionality is part of the suite and is not sold as a stand-alone billing component. The solution does not currently include payment and billing plan configurability. The table on the following page shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Split or multi-payer bill:	Available out of the box with no configuration necessary
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g.,	Available with configuration using simple tools targeted
payment card, check, EFT, payroll	for IT analysts or BAs
deduction):	
Automated rules for payment application	Currently not available, but could be available with a
and disbursements:	system enhancement
Real-time account and payment calculation,	Currently not available, but could be available with a
scheduling, recalculation, and rescheduling:	system enhancement
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Currently not available, but could be available with
	integration to another system or service
Equity billing support:	Currently not available, but could be available with a
	system enhancement
Automated workflow and task	Currently not available, but could be available with a
management:	system enhancement
Electronic bill presentment:	Currently not available, but could be available with a
	system enhancement
Agent portal:	Currently not available, but could be available with a
	system enhancement
Consumer portal:	Currently not available, but could be available with a
	system enhancement
Online payment:	Currently not available, but could be available with a
	system enhancement
Out-of-the-box integration with	No
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Not available
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Currently not available, but could be available with a
reporting	system enhancement
Pay-as-you-report for workers' comp:	Not available
Invoice and correspondence:	Available with configuration using simple tools targeted
	for IT analysts or BAs
Check generation/production:	Currently not available, but could be available with
	integration to another system or service
Billing for non-premium receivables (such	Available out of the box with no configuration necessary
as claims deductibles paid):	,
Payment of non-refund payables (such as	Currently not available, but could be available with a
	system enhancement
policy dividends or mutual dividends):	
policy dividends or mutual dividends):  Multi-currency support in a single instance	Yes

#### **Claims Functions**

Sequel Claims is part of the suite and is also sold as a stand-alone claims component.

#### **Adjudication**

Aggregate tracking (erosion of policy limits) is available out of the box. The solution does not currently include medical case management, injury detail maintenance (coding), disability management, automated coverage verification, or deductible tracking.

#### Catastrophe

Catastrophe definition and attaching multiple LOBs and multiple causes of loss to a single catastrophe are available out of the box. The solution does not currently include automatic identification of catastrophe claims or mapping tools.

#### **Disbursements**

The solution does not currently include support for disbursement capabilities.

#### **Documents**

Image and media management, document rendering, a content repository and content management tools, and multi-channel delivery and output of documents (e.g., PDF, email, web, and print) are standard. A correspondence or forms library and state-specific claims reporting templates are available with configuration via tools for IT analysts or BAs.

#### **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry along with claim checking duplication are standard functions. Handling of FROI/SROI EDI reporting; custom question sets to prompt additional, mandatory questions depending on given answers (branch scripting); claim characteristics scoring to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim; and claimant contact management data capture are available with configuration via tools for IT analysts or BAs. The solution does not currently include mobile and smart device input, scripting for claims intake with reflexive questioning, or integration with external vendors and services (e.g., car rental companies, car/equipment repair shops).

## **Fraud**

Configurable business rules and tasks specific to fraud and special investigations as well as the provision of multiple search and reporting criteria for fraud detection via ability to track common clients across multiple claims are available with configuration via tools for IT analysts or BAs.

#### Litigation

Litigation process tracking, including negotiation details and litigation costs, and creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management are available with configuration via tools for IT analysts or BAs.

#### **Multi-Channel**

The company notes that multi-channel support is available via security configuration and that there are enhancements on the product roadmap.

#### Reinsurance

The solution does not currently include reinsurance functionality.

#### Reporting

The standard reporting of claims performance monitoring, including claims handling and high-risk indicators, e.g., fatality, large losses, fraud, and standard reporting of configurable metrics for claims reporting are available with configuration via tools for IT analysts or BAs. Ad hoc reports, dashboards, and reporting that includes jurisdiction-specific reports and forms are available with configuration via developer tools, XML manipulation, or a scripting language. The solution does not currently include electronic reporting or automated state filings.

## Reserves, Recoveries, Subrogation

Creating separate tasks, workflow, diaries, and business rules for subrogated cases as well as the granular tracking of reserves and payments are available out of the box. Automatic reserve calculations using business rules and risk characteristics along with direct, case, average, factor, and expense reserve types are available with configuration via tools for IT analysts or BAs. The solution does not currently include automatic subrogation identification, subrogation billing and the production of correct GL entries, or jurisdictional wage and rate calculations integrated for workers' comp.

## **Vendor Management**

Vendor management functions are standard. Processing required forms (including 1099s) is available with configuration via tools for IT analysts or BAs.

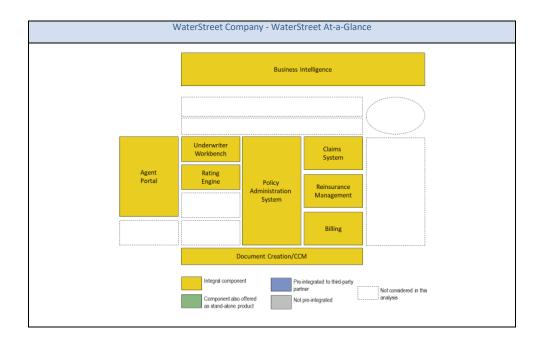
#### Workflow

Automated workflow/task generation; overriding automated processes and triggering workflow processes manually; automatic work assignment based on configurable rules; generating notes, diaries, and reminders; inclusion of external documents (e.g., letters, pictures) in file notes; assigning multiple adjusters to a single claim; compliance with the Document Repository Interface (DRI) standards; processing claim workflow trigger (CWT) files at insurer-defined intervals; and full integration with electronic court filings (ECF2) are standard functions. The solution does not currently include OCR-triggered workflow.

# WaterStreet Company - WaterStreet

# **Executive Summary**

- WaterStreet Company is headquartered in Kalispell, MT and employs 95 people.
   WaterStreet reports that its P/C policy administration suite is a fully managed, high-availability cloud solution that is scalable and secure while offering an end-to-end policy life cycle for P/C insurers and MGAs. The company's annual revenue is in the range of \$10M-\$20M.
- WaterStreet is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, reinsurance, business intelligence, billing, and claims components.
- It currently has eight North American insurer clients live on the suite, all of which are smaller and midsize companies (under \$1B) using the solution to support personal lines.
- The solution has a browser interface for users. It is written in JavaScript, .NET (C#, VB.NET), and a proprietary database language.
- Configuration for insurance products, screens, workflows, rules, integration to third-party service calls via configuration, and document authoring is not available; changes are performed by the vendor's delivery teams.
- Implementation is available through the company's own resources. The company deploys
  cloud instances via MS Azure. The company offers a SaaS delivery model that includes
  hosting, subscription, maintenance and support, ongoing access to the latest version, and
  implementation of upgrades.
- The company reports that the average time to initial go-live is 90 days or less and that the average cost of implementation is \$100K-\$500K.



# **Lines of Business Supported**

Personal auto:	Live clients offering this product in 2-9 US states
Homeowners:	Live clients offering this product in 10-49 US states
Personal umbrella:	Live clients offering this product in 2-9 US states
Dwelling fire:	Live clients offering this product in 10-49 US states
Boatowners:	Live clients offering this product in 2-9 US states
Personal package:	Solution is designed to support, but no clients live or implementing
Commercial property:	Solution is designed to support, but no clients live or implementing
General liability:	Solution is designed to support, but no clients live or implementing
BOP:	Solution is designed to support, but no clients live or implementing
Commercial crime:	Solution is designed to support, but no clients live or implementing
Commercial auto:	Solution is designed to support, but no clients live or implementing
E&O/D&O:	Solution is designed to support, but no clients live or implementing
Inland marine:	Solution is designed to support, but no clients live or implementing
Professional liability (including medical malpractice):	Solution is designed to support, but no clients live or implementing
Commercial package:	Solution is designed to support, but no clients live or implementing
Specialty:	Solution is designed to support, but no clients live or implementing
Workers' comp:	Solution is designed to support, but no clients live or implementing
Surety:	Solution is designed to support, but no clients live or implementing
Other personal lines*:	Live clients offering this product in 10-49 US states
Other commercial lines:	Solution is designed to support, but no clients live or implementing

<sup>\*</sup>Other personal lines include private flood, service line, and mechanical breakdown.

## **Client Base**

Globally, WaterStreet has eight live clients, all of which are insurer clients (i.e., not MGAs, self-insureds) live in the US and Canada. All are smaller or midsize companies (under \$1B) using the solution to support personal lines.

The company did not disclose any client names for the solution.

# **Key Functions and Differentiators**

WaterStreet cites the key functions of its platform as:

- Complete, cloud-based policy and claims administration solution
- Integrated document management and workflow
- Client-managed agency profile and relationship management
- Integrated billing and pay plans
- Integrations with dozens of third-party vendors

The company asserts as its key differentiators its aggressive product implementation timelines and budgets; an easy-to-use UI design and workflow for agents and users; a proven track record of accurate transaction processing, data integrity, data accessibility and reporting, and responsiveness to carriers (e.g., for regulatory requests, data migrations); owner managers since inception who are now funding their fourth version of the policy administration software; and that the company offers complementary services (underwriting assistance, premium and commission processing, phone and chat customer service, full policy distribution) on an à la carte basis.

## **Solution Architecture and History**

The first iteration of the solution, a thin-client/browser solution, was launched in 2002. Version 2.0, an ASP was launched in 2005, and the .NET version launched in 2009. The latest release was in 2019.

The solution requires Microsoft SQL Server databases; it supports UNIX/Linux and Windows platforms. The solution is written in JavaScript, .NET (C#, VB.NET), and a proprietary database language.

# **APIs and Integration**

The solution provides open REST APIs.

# **Configurability and User Interface**

WaterStreet has a browser interface for users.

Configuration for insurance products, screens, workflows, rules, integration to third-party service calls, and document authoring is not available; changes are done by the vendor.

## **Deployment Options**

WaterStreet is hosted on MS Azure. The company offers a SaaS delivery model that includes hosting, subscription, maintenance and support, ongoing access to the latest version, and the implementation of upgrades. The hosted solution is a single-tenant app server and database.

## **Average Implementation Length and Cost**

Implementation is available through the company's own resources. WaterStreet reports that the suite can be ready for initial go-live in 90 days or less and fully rolled out in an additional 180 days or less and that the average implementation cost is \$100K-\$500K.

## Support

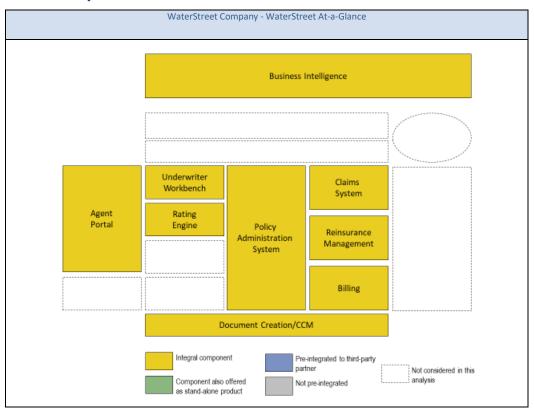
Of the more than 95 people employed at WaterStreet, there are between five and ten on the product design and engineering team, between five and ten on each client delivery (implementation) team, and three to five on the support team.

Current support for the product is provided on site and remotely. The company offers customer engagement activities such as an online community, online training, a customer advisory committee, a user event, and training seminars.

## **Systems Integrator and Other Partners**

The company declined to disclose partnerships for the suite.

# **Functionality**



## **Policy Administration Functions**

The solution includes policy issue and premium accounting out of the box. Bordereaux import, forms management, and manuscripted policies are available with configuration using developer tools, XML manipulation, or a scripting language.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

## **Rating Functions**

Rating functionality is integral to the suite and is not sold as a stand-alone rating engine.

Core rating functions like quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; rating multiple coverage/quote alternatives; and multi-line, multi-state, and multi-location rating on a single policy are available with configuration using developer tools, XML manipulation, or a scripting language.

Auditability of rate versioning is available with configuration using simple tools targeted for IT analysts or BAs. Versioning and update management as well as change control functions are available with configuration using developer tools, XML manipulation, or a scripting language.

An application and forms library with standard and customizable applications and forms is available with configuration using developer tools, XML manipulation, or a scripting language.

Integration functions like download to agency management systems and pre-integration to third-party data providers are available with configuration using developer tools, XML manipulation, or a scripting language.

WaterStreet notes that bureau statistical data is available with configuration using simple tools targeted for IT analysts or BAs; the company reports that it is agnostic with regards to standards organizations, rating bureaus, and their rates and rules. Multi-carrier comparison is available with configuration using developer tools, XML manipulation, or a scripting language. Setting insurer-specific defaults is available with configuration via tools for IT analysts BAs.

Saving/storing an in-process or completed policy change transaction to allow issuance at a later date is a standard function. Product design and development tools are available with configuration using developer tools, XML manipulation, or a scripting language.

Maintaining rating algorithm definition and management separately from rate tables is a standard function. Rating and rule definition and management (e.g., automatic driver assignment) and date management capabilities are available with configuration using developer tools, XML manipulation, or a scripting language. Currently, the solution does not include rate table design and update management tools or import/export of rating tables to/from spreadsheets (e.g., Excel).

The solution does not currently include displacement testing (i.e., the ability to run existing book of business through proposed rate/product changes to determine impact) or testing, modeling, and product analysis. WaterStreet notes that it typically provides data extracts to clients who run their models and analysis using other tools.

#### **Underwriter Workbench Functions**

An underwriting workbench is integral to the suite and is not marketed as a stand-alone solution.

Uploading/importing submission data from a structured data feed is available with configuration using developer tools, XML manipulation, or a scripting language. Uploading/importing the submission information from documents (OCR-like functionality) is not currently available.

Support for policy change transactions/underwriting, non-renewal transactions, and cancellation transactions is available with configuration using simple tools targeted for IT analysts or BAs. Support for new business transactions/underwriting, renewal transactions/underwriting, and underwriting multiple submissions as one work portfolio is available with configuration using developer tools, XML manipulation, or a scripting language.

Allowing individual quotes for different lines to be combined into a single proposal is also available with configuration using developer tools, XML manipulation, or a scripting language.

Capturing underwriting analysis, capturing underwriter loss analysis, underwriter checklists that can validate information completeness and process completeness, and submission rating are available with configuration using developer tools, XML manipulation, or a scripting language.

Pricing analysis and scheduled rating information is not currently supported; the company notes that it typically creates data extracts or exports to be used by the client to perform such analyses elsewhere.

The solution does not currently provide a single current and historical view of insured accounts across the enterprise, lines of business, and policy systems.

Document storage is available out of the box. Document creation (e.g., proposals, applications, correspondence) is available with configuration via developer tools, XML manipulation, or a scripting language.

A rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); and a rules engine that interfaces to order specific data conditionally are available with configuration using developer tools, XML manipulation, or a scripting language.

Inline reports/dashboards on tasks/work/work status and inline reports/dashboards to support underwriting analysis are standard. The solution does not currently display aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) or allow proposal co-authoring with other underwriters; the company notes that this is due to its primary focus on personal lines.

IM collaboration with other underwriters, screensharing with other underwriters, agent-facing capabilities, preconfigured interfaces with policy admin systems, preconfigured interfaces with agent portals, support for variable binding/approval authority by role, and support for email notification/communication with agents and underwriters within the system (retaining a record of all emails) are standard functions.

Preconfigured integration with business intelligence environments, preconfigured interfaces with third-party data services, and preconfigured interfaces with external predictive scoring models, are available with configuration using developer tools, XML manipulation, or a scripting language. The solution does not currently support natively calculated predictive scores.

## **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents, e.g., statements, (the more common use case) and ad hoc documents, e.g., correspondence and manuscripted policies, (the less common use case).

WaterStreet notes that it is agnostic with regards to bureau forms and templates; it receives the filed forms clients require to be loaded for the singular use of each client. The primary authoring environment is a custom environment.

Content, business rules, schema mapping, and data sources are designed to be maintained by business analysts.

The solution supports print, e-delivery, and mobile output channels. Managing preferences for print vs. electronic delivery is a standard function. Clients primarily use the solution's built-in toolset for document authoring and content management workflow, but they have the option to use external workflow/BPM tools.

A content repository, content management tools, and archival capabilities for all documents generated are available out of the box. The solution does not support industry-standard schemas (e.g., ACORD XML, ebXML, XBRL) out of the box.

## **Agent Portal Functions**

An agent portal is part of the suite and is not sold as a stand-alone agent portal.

New business entry/submission, policy inquiry, policy transaction history, billing inquiry, claims inquiry, underwriter view and/or tools, and agent/underwriter collaboration are standard functions. Agency management system upload is available with configuration using simple tools targeted for IT analysts or BAs.

Account clearance, uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, integration and pre-fill with data services, policy change entry/submission, online payment, renewal quote entry/submission, proposal creation, ACORD application creation, side-by-side quote comparison, account or client view in addition to a policy view, and a rating engine are available with configuration using developer tools, XML manipulation, or a scripting language.

Document creation; file attachment support; scheduling, diary, and calendar functions; workflow and task management capabilities; business intelligence and reporting; and a consumer portal are standard functions. E-signature support is available with configuration using developer tools, XML manipulation or a scripting language.

#### **Reinsurance Functions**

Reinsurance functions are integral to the suite and not marketed as a stand-alone solution.

Ceded reinsurance management functions like automated notification if a reserve reaches a specific amount or treaties approach set limits and automated identification/calculation of accounts with applicable reinsurance are available with configuration using developer tools, XML manipulation, or a scripting language. Currently, the solution does not include manual entry and tracking of cessions, reserves, and limits.

Currently, the solution does not include assumed reinsurance management functions like the manual entry and tracking of assumed reinsurance contracts, retrocession reinsurance management, or automated assumed reinsurance calculations based on reinsured data feeds/connections.

Contract management functions like treaty management, facultative management, proportional support, and non-proportional/excess of loss are available with configuration using developer tools, XML manipulation, or a scripting language.

The solution does not currently include multiple basis types (e.g., risks attaching, losses occurring, and claims made); retroactively processing late placements or midterm contract changes; or configuration of contract rules, formulas, and types.

End-user interfaces for the manual entry of contracts, for manual flagging of premiums and claims subject to reinsurance, and for the review and approval of assumed policies as part of facultative contracts are available with configuration using developer tools, XML manipulation, or a scripting language.

Batch file import/export for integration to other systems, real-time data intake from core systems (e.g., PAS, claims) via API or another mechanism, real-time integration to an underwriting system (e.g., to display limits/reserves), real-time integration to an underwriting system (e.g., to display limits/reserves), and integration with other insurer/reinsurer systems are all available with developer tools, XML manipulation, or a scripting language.

Statutory and regulatory reporting, a standard library of canned reports, and automated bordereau reporting are available with configuration using developer tools, XML manipulation, or a scripting language. Ad hoc reporting and integrated analytics for profitability analysis, exposure, "what-if" analysis, risk profile, etc. are available with configuration using simple tools targeted for IT analysts or BAs. Currently, the solution does not include automated Schedule F reporting.

Automated recoverable claims identification and viewing the full history and status of claims and claim recovery are available with developer tools, XML manipulation, or a scripting language.

Audit trail for all transactions is standard. Currently, the solution does not include tracking reinsurance payables and receivables, entity management (CRM), multi-currency support, document management and storage of the actual contracts, or multi-language support.

## **Business Intelligence Functions**

Business intelligence functions are part of the suite and are not sold as a stand-alone component.

WaterStreet notes that it offers real-time reporting via more than 60 standard reports and heavy data analytics via a reporting server where clients can create their own queries or connect to third-party tooling.

The solution includes a presentation/reporting component and standard predefined reports and predefined insurance dashboards.

The solution also includes tools to support data governance, dictionaries, quality, and validation; an insurance data model and databases that insurers are intended to use to replace existing EDW, ODS, and/or OLAP cubes; a data lake to support schema on read and unstructured data; and an ad hoc reporting tool as a secondary part of the offering.

WaterStreet notes that it provides a third-party tool for data mining and analytics as part of the native offering.

The solution supports real-time streaming data movement (e.g., use of Kafka).

# **Billing Functions**

Billing functionality is part of the suite and is not sold as a stand-alone billing component. Payment and billing plan configurability are available out of the box. The table below shows the availability of other billing functions.

Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available with configuration using simple tools targeted for IT analysts or BAs
Account or list bill:	Available with configuration using simple tools targeted
Account of list bill.	for IT analysts or BAs
Third party (i.e. mortgages) hills	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available with configuration using developer tools, XML
Split or multi-payer bill:	
Flexible and configurable payment plans:	manipulation, or a scripting language
Support for flexible payment types (e.g.,	Available out of the box with no configuration necessary
	Available out of the box with no configuration necessary
payment card, check, EFT, payroll deduction):	
Automated rules for payment application	Available out of the box with no configuration necessary
and disbursements:	Available out of the box with no configuration necessary
Real-time account and payment calculation,	Available out of the box with no configuration necessary
scheduling, recalculation, and rescheduling:	Wanable out of the box with no configuration necessary
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Available with configuration using developer tools, XML
Equity bining supports	manipulation, or a scripting language
Automated workflow and task	Available out of the box with no configuration necessary
management:	Transaction and soft manner compared to the control of the control
Electronic bill presentment:	Available out of the box with no configuration necessary
Agent portal:	Available out of the box with no configuration necessary
Consumer portal:	Available out of the box with no configuration necessary
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Available with configuration using developer tools, XML
	manipulation, or a scripting language
Billing dashboarding/reporting:	Available out of the box with no configuration necessary
Workers' compensation monthly self-	Not available
reporting	
Pay-as-you-report for workers' comp:	Not available
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available out of the box with no configuration necessary
Billing for non-premium receivables (such	Available with configuration using developer tools, XML
as claims deductibles paid):	manipulation, or a scripting language
Payment of non-refund payables (such as	Available with configuration using developer tools, XML
policy dividends or mutual dividends):	manipulation, or a scripting language
Multi-currency support in a single instance	No
of the application:	

#### **Claims Functions**

Claims functionality is part of the suite and is not sold as a stand-alone claims component.

#### **Adjudication**

Automated coverage verification is a standard function. Aggregate tracking (erosion of policy limits) and deductible tracking are available with configuration using developer tools, XML manipulation, or a scripting language. The solution does not currently include medical case management, injury detail maintenance (coding), or disability management.

#### Catastrophe

Catastrophe definition, atuomatic identification of catastrophe claims, and attaching multiple LOBs and multiple causes of loss to a single catastrophe are available out of the box. Mapping tools are available via out-of-the-box integration to a third-party system or service.

#### **Disbursements**

Check processing, calculating and scheduling recurring payments, calculating partial or one-off payments, accommodating multiple pay parties (e.g., garnishments), combining multiple pending payments for a single client into one disbursement, and OFAC checking are available out of the box. Handling multiple offsets and deductions against benefits (e.g., wage garnishments, child support, etc.) are available with configuration using developer tools, XML manipulation, or a scripting language.

#### **Documents**

Image and media management, a content repository and content management tools, and multi-channel delivery and output of documents (e.g., PDF, email, web, and print) are standard. A correspondence or forms library ais available with configuration using simple tools targeted for IT analysts or BAs. State-specific claims reporting templates and document rendering are available with configuration using developer tools, XML manipulation, or a scripting language.

#### **FNOL**

Recording and storage of new loss notices (including FROI/SROI) from a web portal, email, fax, or manual entry; mobile and smart device input; and claimant contact management data capture are available out of the box. Handling of FROI/SROI EDI reporting, scripting for claims intake with reflexive questioning, customized question sets to prompt mandatory additional questions depending on the answers given (branch scripting), and claim characteristics scoring (to calculate alerts, trigger workflow, assign claims handler, or otherwise segment the claim) are available with configuration using simple tools targeted for IT analysts or BAs. Integration with external vendors and services, such as car rental companies or repair shops, is available with configuration using developer tools, XML manipulation, or a scripting language. The solution does not currently support claim checking duplication, although the company notes that it makes it possible to reflect a duplicate claim in the system.

#### Fraud

Configurable business rules and tasks specific to fraud and special investigations is available with configuration using simple tools targeted for IT analysts or BAs. Provision of multiple search and reporting criteria for fraud detection via ability to track common clients across multiple claims is available with configuration using developer tools, XML manipulation, or a scripting language.

## Litigation

Litigation process tracking, including negotiation details and litigation costs, as well as creating separate tasks, workflow, diaries, and business rules for litigated cases to allow legal case management are standard functions.

#### **Multi-Channel**

A policyholder portal with self-service is available out of the box. E-signature capability, an agent portal with self-service, call center integration for FNOL via telephony, and call center integration for claims status check via telephony are available with configuration using developer tools, XML manipulation, or a scripting language.

#### Reinsurance

Identifying claims subject to reinusrance through multiple dimensions (e.g., type of claim, limit, location, etc.) and assignment to reinsurance treaties are available with configuration using developer tools, XML manipulation, or a scripting language. The solution does not include assignment to facultative arrangements.

#### Reporting

Standard reporting of configurable metrics for claims reporting, ad hoc reports, reporting that includes jurisdictional-specific reports and forms, and electronic reporting or automated state filings are available out of the box. The standard reporting of claims performance monitoring, including claims handling and high-risk indicators, e.g., fatality, large losses, and fraud, is available with configuration using simple tools targeted for IT analysts or BAs. Dashboards are available with configuration using developer tools, XML manipulation, or a scripting language.

## Reserves, Recoveries, Subrogation

The granular tracking of reserves and payments as well as direct, case, average, factor, and expense reserve types are available out of the box with no configuration necessary. Creating separate tasks, workflow, diaries, and business rules for subrogated cases as well as automatic reserve calculations using business rules and risk characteristics are available with configuration using simple tools targeted for IT analysts or BAs. Automatic subrogation identification and subrogation billing and the production of correct GL entries are available with configuration using developer tools, XML manipulation, or a scripting language. Currently, the solution does not include jurisdictional wage and rate calculations integrated for workers' comp.

## **Vendor Management**

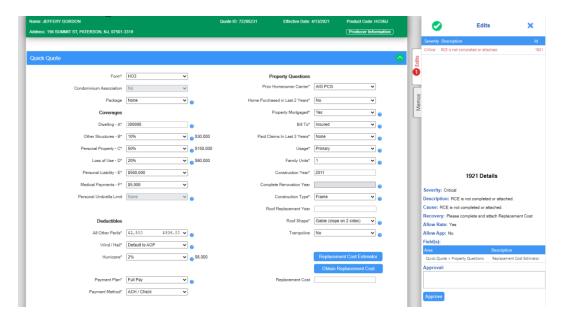
Vendor management functions and processing required forms (including 1099s) are standard.

#### Workflow

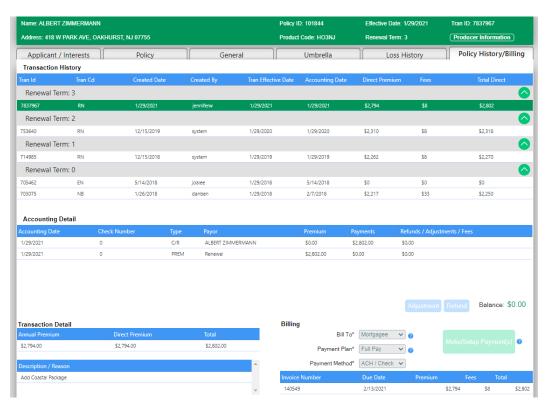
Automated workflow/task generation; generating notes, diaries, and reminders; and inclusion of external documents (letters and pictures) in file notes are standard functions. OCR-triggered workflow, overriding automated processes and triggering workflow processes manually, automatic work assignment based on configurable rules, assigning multiple adjusters to a single claim, processing claim workflow trigger (CWT) files at insurer-defined intervals, and full integration with electronic court filings (ECF2) are available with configuration using developer tools, XML manipulation, or a scripting language. Currently, the solution does not support compliance with the Document Repository Interface (DRI) standards.

## **Screenshots**

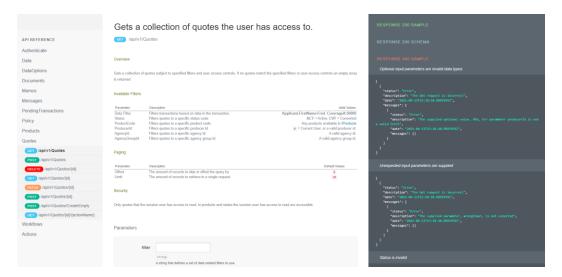
**Quote Screen** 



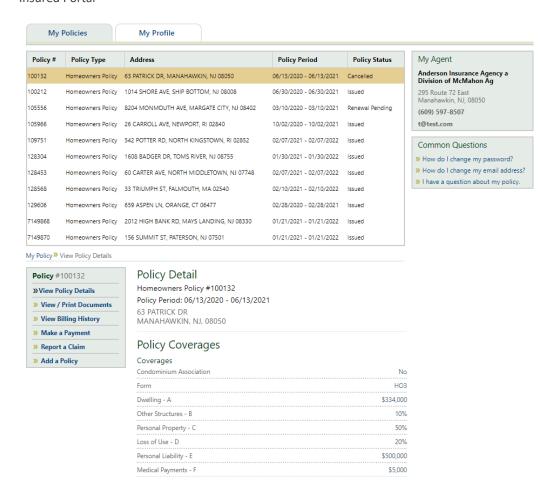
#### **Accounting Screen**



## API Help Page

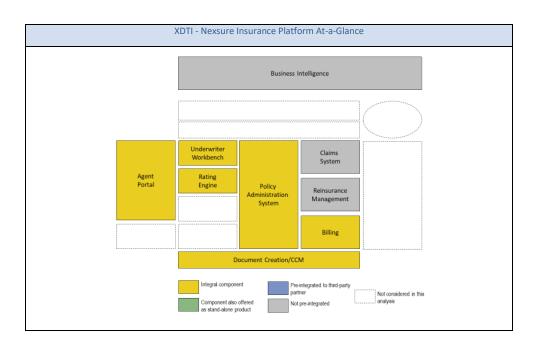


#### **Insured Portal**



# **XDimensional Technologies - Nexsure Insurance Platform Executive Summary**

- XDimensional Technologies, Inc. (XDTI), founded in 2000, is a privately held company that develops and markets insurance management, processing, and distribution solutions that connect agents, brokers, wholesalers, MGAs/MGUs, program administrators, carriers, and policyholders. Delivered through the Nexsure Insurance Management Platform, XDTI reports that solutions are scalable, secure, and cloud-based. XDTI is headquartered in Brea, CA and employs 51 people. Its annual revenue is in the range of \$10M-\$20M.
- Nexsure Insurance Platform (Nexsure) is a suite of solutions that includes core policy features, rating, underwriter workbench, document creation, agent portal, billing, and components.
- It currently has four North American insurer clients live on the suite, all of which are smaller
  and midsize companies (under \$1B) using the solution to support commercial lines with
  some personal.
- The solution is browser-based for all user interface functions. It is written in a mix of JavaScript, .NET (C#/VB.NET), and SQL language.
- Configuration for insurance products, screens, workflows, rules, integration to third-party service calls, and document authoring is not available; changes are done by the vendor.
- Implementation is available through an implementation partner. The company deploys the
  suite hosted at a private data center. The company offers a SaaS delivery model that
  includes hosting, license, maintenance and support, ongoing access to the latest version, and
  implementation of upgrades.
- The company reports that the average time to initial go-live is 90 days or less. The average cost of implementation is \$100K-\$500K.



# **Lines of Business Supported**

Personal auto:	Live clients offering this product in one US state
Homeowners:	Live clients offering this product in all 50 US states
Personal umbrella:	Live clients offering this product in all 50 US states
Dwelling fire:	Live clients offering this product in all 50 US states
Boatowners:	Solution is designed to support, but no clients live or implementing
Personal package:	Live clients offering this product in 10-49 US states
Commercial property:	Live clients offering this product in all 50 US states
General liability:	Live clients offering this product in all 50 US states
BOP:	Live clients offering this product in all 50 US states
Commercial crime:	Live clients offering this product in all 50 US states
Commercial auto:	Live clients offering this product in all 50 US states
E&O/D&O:	Live clients offering this product in all 50 US states
Inland marine:	Live clients offering this product in all 50 US states
Professional liability (including medical malpractice):	Live clients offering this product in all 50 US states
Commercial package:	Live clients offering this product in all 50 US states
Specialty:	Live clients offering this product in all 50 US states
Workers' comp:	Live clients offering this product in all 50 US states
Surety:	Not currently supported
Other personal lines:	Solution is designed to support, but no clients live or implementing
Other commercial lines†:	Live clients offering this product in all 50 US states

<sup>†</sup>Other commercial lines include builders risk (live in 10-49 US states), terrorism, and aircraft/helicopter liability.

## **Client Base**

Globally, Nexsure has 16 live clients, four of which are insurer clients (i.e., not MGAs, self-insureds). These insurer clients are all live in the US and Canada. All are smaller or midsize companies (under \$1B) using the solution to support commercial lines with some personal.

Publicly announced clients include RMS Insurance Brokerage, Acrisure, EPIC (Edgewater Partners Insurance Center) Specialty Progam and Investements, Transport Risk Management, and Hotchkiss Insurance Programs.

# **Key Functions and Differentiators**

XDTI cites the key functions of Nexsure as:

- Full policy life-cycle managemet and servicing
- Insured, agent, broker, and carrier collaboration capability
- Policy submission and issuance workflow
- Integrated CRM and ARM
- Integrated accounting and general ledger

The company asserts as key differentiators its speed of implementation, platform flexibility and configurability, that it offers a single platform for multiple distribution channels, its customer experience built on automation and a strong relationship with the vendor, and its ease of use.

# **Solution Architecture and History**

Nexsure launched in 2002. The latest release was in January 2021.

The solution requires Microsoft SQL Server databases and Windows platforms. The solution is written in a mix of JavaScript, .NET (C#/VB.NET), and SQL language.

## **APIs and Integration**

The solution provides REST and SOAP APIs. XDTI notes that its APIs have 99.9% availability with scheduled monthly downtime related to service pack deployment.

# **Configurability and User Interface**

Nexsure is browser-based for all user interface functions.

Configuration for insurance products, screens, workflows, rules, integration to third-party service calls, and document authoring is not available; changes are done by the vendor.

## **Deployment Options**

Nexsure is hosted at a private data center. The company offers a SaaS delivery model that includes hosting, license, maintenance and support, ongoing access to the latest version, and the implementation of upgrades. The hosted solution is a multi-tenant app server and single-tenant database with a single-tenant app server option available.

## **Average Implementation Length and Cost**

Implementation is available through an implementation partner. XDTI reports that Nexsure can be ready for initial go-live in 90 days or less and fully rolled out in an additional 30 days or less. The average implementation cost is \$100K-\$500K.

## Support

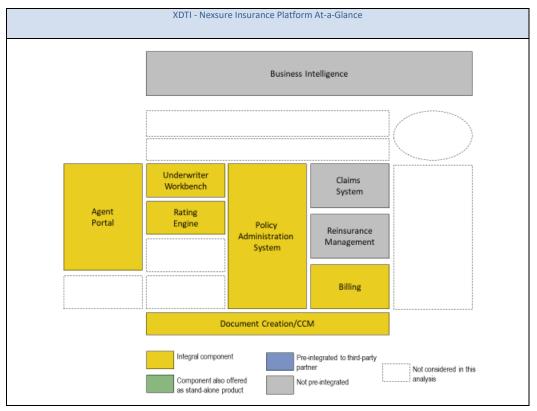
Of the 51 people employed at XDTI, there are between ten and 50 on each of the product design and engineering, implementation (not including partners), and support teams for Nexsure.

Support for the product is provided by a core team in Brea, CA with other locations in Texas, Georgia, Connecticut, and Illinois. The company offers customer engagement activities for Nexsure such as an online community, online training, a customer advisory committee, a user event, and training seminars.

## Systems Integrator and Other Partners

Publicly announced technology partnerships for the solution include Microsoft, Verisk Analytics/ISO, Cert Office, DocuSign, and Twilio.

# **Functionality**



## **Policy Administration Functions**

The solution includes premium accounting, out-of-sequence endorsement, and forms management out of the box. Policy issue, bordereaux import, and manuscripted policies are available with configuration using simple tools targeted for IT analysts or BAs.

The following are independent objects in the solution's data model: policy, product, policyholder, individual, distributor, and insured.

# **Rating Functions**

Rating functions are part of the suite and are not sold as a stand-alone rating engine.

Core rating functions like quick quote option; support for after-inception policy rating for endorsements, cancellations and reinstatements, and renewal processing; out-of-sequence endorsements; and multi-line, multi-state, and multi-location rating on a single policy are standard. Rating multiple coverage/quote alternatives is not currently available.

Compliance and change control functions like auditability of versioning are standard. Versioning and update management as well as change control functions are available with configuration using simple tools targeted for IT analysts or BAs.

An application and forms library with standard and customizable applications and forms is standard.

Integration functions like download to agency management systems are available with configuration using simple tools targeted for IT analysts or BAs. Pre-integration to third-party data providers is a standard function.

XDTI notes that ISO rates/rules support, NCCI/Bureau of Workers' Comp rates/rules support, and ISO ERC integration are under development and should be available in less than six months. Currently, the solution does not include ISO-formatted statistical data. Multi-carrier comparison and setting insurer-specific defaults are available with configuration via tools for IT analysts BAs.

Saving/storing an in-process or completed policy change transaction to allow issuance at a later date is a standard function. Product design and development tools are also available out of the box.

Import/export of rating tables to/from spreadsheets (e.g., Excel) and date management capabilties are standard functions. Maintaining rating algorithm definition and management separately from rate tables, rate table design and update management tools, and rating and rule definition and management (e.g., automatic driver assignment) are available with configuration via tools for IT analysts or BAs.

Displacement testing (i.e., the ability to run existing book of business through proposed rate/product changes to determine impact) and testing, modeling, and product analysis are available with configuration via tools for IT analysts or BAs.

#### **Underwriter Workbench Functions**

An underwriter workbench is integral to the suite and is not marketed as a stand-alone solution.

Uploading/importing submission data from a structured data feed as well as uploading/importing the submission information from documents (OCR-like functionality) are available with configuration using developer tools, XML manipulation, or a scripting language.

Support for new business transactions/underwriting, policy change transactions/underwriting, renewal transactions/underwriting, non-renewal transactions, and cancellation transactions is standard. Support for underwriting multiple submissions as one work portfolio and allowing individual quotes for different lines to be combined into a single proposal are available with configuration using simple tools targeted for IT analysts or BAs.

Capturing underwriting analysis; capturing underwriter loss analysis; underwriter checklists that can validate information completeness and process completeness; submission rating; pricing analysis and scheduled rating information; providing a single current and historical view of the insured's account across the enterprise, lines of business, and policy systems are standard functions.

Document creation (e.g., proposals, applications, correspondence) and document storage are available out of the box.

A rules engine that automatically applies underwriting, workflow, and general business rules; workflow/task capabilities (e.g., inbox, predefined workflows by transaction or line of business, automatic task assignment, diaries); and a rules engine that interfaces to order specific data conditionally are available with configuration using simple tools targeted for IT analysts or BAs.

Inline reports/dashboards on tasks/work/work status and inline reports/dashboards to support underwriting analysis are standard functions. Displaying aggregate risk accumulations for the existing book at a granular location level (i.e., geo-mashup of existing book and proposed risk) is available with configuration using simple tools targeted for IT analysts or BAs.

XDTI notes that IM collaboration with other underwriters in the traditional sense (i.e., co-authoring a quote or escalating a submission for underwriting review) is available out of the box. XDTI also reports that the platform facilitates real-time collaboration across multiple tiers of a given distribution channel, with an agent-facing portal as well as an insured/client-facing portal, out of the box. The company asserts that it offers a high level of configurability for its portals as well as product-level controls (such as binding requirements unique to a specific program) out of the box.

XDTI notes that in lieu of preconfigured interfaces with policy admin systems or with agent portals, it has an integrated portal. Preconfigured interfaces with third-party data services are standard. Preconfigured integration with business intelligence environments is available with configuration using developer tools, XML manipulation, or a scripting language.

Preconfigured interfaces with external predictive scoring models and natively calculated predictive scores are not currently available.

Support for variable binding/approval authority by role is available with configuration using simple tools targeted for IT analysts or BAs. Support for email notification/ communication with agents and underwriters within the system (retaining a record of all emails) is standard.

#### **Document Functions**

Document functions are integral to the suite and are not marketed as a stand-alone solution.

The solution supports mass-produced documents, e.g., statements, (the most common use case) and ad hoc documents, e.g., correspondence and manuscripted policies, (the less common use case).

The suite includes pre-packaged, pre-built forms, libraries, or templates from ISO and ACORD. The primary authoring environment is MS Word. Content and business rules are designed to be maintained by business analysts; schema mapping and data sources are designed to be managed by technical resources.

The solution supports print and e-delivery output channels. Managing preferences for print vs. electronic delivery is a standard function. Clients must use the solution's built-in toolset for document authoring and content management workflow.

A content repository, content management tools, and archival capabilities for all documents generated are available out of the box. The solution supports industry-standard schemas from ACORD XML out of the box.

#### **Agent Portal Functions**

Nexsure Productivity Plus is part of the suite and is also sold as a stand-alone agent portal.

New business entry/submission, account clearance, policy change entry/submission, online payment, renewal quote entry/submission, policy inquiry, policy transaction history, billing inquiry, claims inquiry, proposal creation, ACORD application creation, side-by-side comparison, account or client view in addition to a policy view, underwriter view and/or tools, and agent/underwriter collaboration are standard functions.

Uploading/importing data from Excel (e.g., locations, cars, drivers), quick quote, integration and pre-fill with data services, agency management system upload, and a rating engine are all available with configuration using simple tools targeted for IT analysts or BAs.

E-signature; document creation; file attachment support; scheduling, diary, and calendar functions; workflow and task management capabilities; business intelligence and reporting; and a consumer portal are standard functions.

#### **Reinsurance Functions**

Reinsurance functions are not pre-integrated as part of the suite.

## **Business Intelligence Functions**

Business intelligence functions are not pre-integrated as part of the suite.

#### **Billing Functions**

Billing functionality is part of the suite and is not sold as a stand-alone billing component. Payment and billing plan configurability is available out of the box. The table on the following page shows the availability of other billing functions.

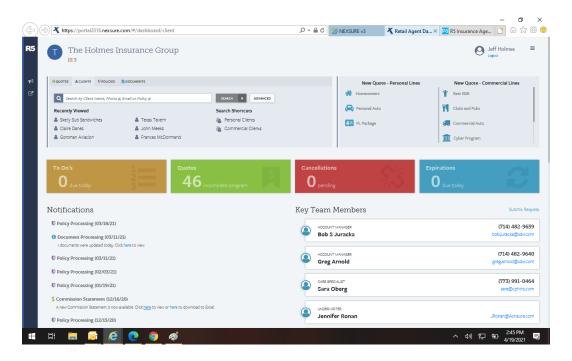
51	
Direct bill:	Available out of the box with no configuration necessary
Agency bill:	Available out of the box with no configuration necessary
Account or list bill:	Available out of the box with no configuration necessary
Third-party (i.e., mortgagee) bill:	Available out of the box with no configuration necessary
Split or multi-payer bill:	Currently not available, but could be available with a system enhancement
Flexible and configurable payment plans:	Available out of the box with no configuration necessary
Support for flexible payment types (e.g., payment card, check, EFT, payroll deduction):	Available out of the box with no configuration necessary
Automated rules for payment application	Available with configuration using simple tools targeted
and disbursements:	for IT analysts or BAs
Real-time account and payment calculation, scheduling, recalculation, and rescheduling:	Available out of the box with no configuration necessary
Commission calculation and payment:	Available out of the box with no configuration necessary
Collections activities and interfaces:	Available out of the box with no configuration necessary
Equity billing support:	Currently not available, but could be available with a system enhancement
Automated workflow and task	Available out of the box with no configuration necessary
management:	
Electronic bill presentment:	Currently not available, but could be available with a
	system enhancement
Agent portal:	Currently not available, but could be available with a system enhancement
Consumer portal:	Currently not available, but could be available with a system enhancement
Online payment:	Available out of the box with no configuration necessary
Out-of-the-box integration with	Yes
banks/credit card companies for token-	
based processing:	
Payroll deduction:	Currently not available, but could be available with a system enhancement
Billing dashboarding/reporting:	Available with configuration using simple tools targeted for IT analysts or BAs
Workers' compensation monthly self-	Available with configuration using simple tools targeted
reporting	for IT analysts or BAs
Pay-as-you-report for workers' comp:	Available with configuration using simple tools targeted for IT analysts or BAs
Invoice and correspondence:	Available out of the box with no configuration necessary
Check generation/production:	Available out of the box with no configuration necessary
Billing for non-premium receivables (such as claims deductibles paid):	Available out of the box with no configuration necessary
Payment of non-refund payables (such as policy dividends or mutual dividends):	Available out of the box with no configuration necessary
Multi-currency support in a single instance of the application:	No

#### **Claims Functions**

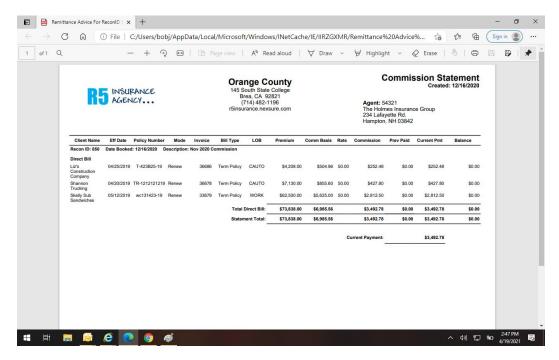
Claims functionality is not pre-integrated as part of the suite.

## **Screenshots**

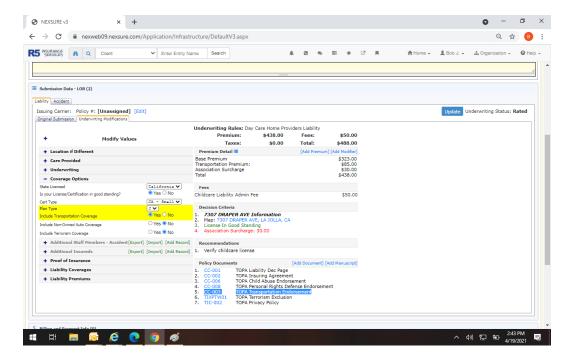
Agent Access Portal Home Screen



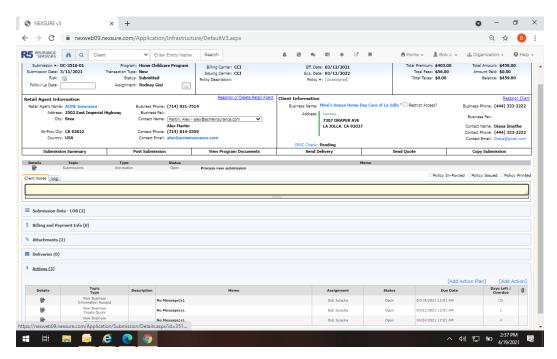
Portal View of Agent Commission Statement



#### Submission Record/Underwriting Modifications View



### Submission Record/Underwriting Checklist ("Actions") View



# **CONCLUSIONS**

P/C insurers have a rich vendor market to select from when considering providers of policy administration solutions. Modern P/C solutions are maturing, giving insurers better options than ever before. Novarica recommends a rapid selection process, including a market scan, an RFI phase, and directed demonstrations over 12-16 weeks. A cross-functional team of business and IT participants will ensure that all stakeholders are invested in the decision.

While core transformation projects are challenging, they are typically successful. Outright failures are thankfully much rarer than they used to be. Time frames vary significantly, but Novarica research shows that the typical time to deliver the first release is about two years, while full implementation can take up to five years. The benefits are clear: improved time to market, increased business and IT agility, improved flexibility, reduced technical risk, and more. These benefits then improve employee, agent, and customer satisfaction. However, these projects require significant financial investment and organizational attention—and unfortunately, they typically run over budget and schedule.

There are several steps insurers can take before a transformation project begins to ensure that their project runs as smoothly as possible. These steps fall into three areas: business readiness, IT/technical readiness, and program readiness. These preparatory activities are listed below.

## **Business Readiness**

- ✓ Product Rationalization
- ✓ Business Process Vision
- ✓ Business Scope
- Program Implementation Plan/Order
- ✓ Business Guiding Principles
- ✓ Configuration/Customization Decision Framework

#### IT/Technical Readiness

- ✓ Architectural Blueprint
- ✓ Technical Guiding Principles
- ✓ Technical Design Process
- Architecture and Design Governance
- ✓ Technical Scope
- ✓ Interface Inventory

# **Program Readiness**

- ✓ Overall Project Plan
- Project Governance, Organization, and Communications
- Methodology and Process Around Requirements,
   Development, and Testing
- Templates Around Requirements, Development, and Testing
- ✓ Tools to Manage Work in Requirements, Design, Development, and Testing
- ✓ Vendor Management Approach

Lack of planning up front can result in disagreement, analysis paralysis, and general project "swirl," all of which ultimately lead to delays and cost overruns. It is impossible to foresee every difficulty that organizations may encounter during a core system implementation, but having a clear idea of the project's business vision and scope, technical approach, and project/ development processes and tools can significantly reduce the risk. Insurers that prepare for these activities will position themselves for transformation project success.

# **NEXT STEPS AND RELATED RESEARCH**

- Contact Novarica at <u>client-support@novarica.com</u> to discuss this topic.
- Read related reports:
  - <u>Snapshot: Policy Admin Suite Pricing Models and Levels</u>
  - Insurer IT Budgets and Projects 2021
  - Novarica 100 Digital, Data, and Core Capabilities for Property/Casualty Insurers
  - Policy Administration Systems Project Metrics
  - Core Systems Project Readiness
  - 13 Things Not to Do When Replacing Policy Administration Systems
  - Speed to Market for Property/Casualty Insurers

## **ABOUT NOVARICA**

Novarica helps more than 150 insurers make better decisions about technology projects and strategy through research, retained advisory services, consulting, and special programs.

We serve clients in life/annuity/retirement, property/casualty, workers' compensation, and reinsurance. Our clients range from Fortune 100 insurers to small regionals and specialty companies. Although most of our clients prefer we keep their names confidential, a partial client roster includes AF Group, Amica, Grange, Hanover, Mercury, National Life, OneAmerica, Penn Mutual, Principal, ProSight, RLI, SunLife, and WCF.

Our senior team has direct experience as senior IT executives at firms including AIG, Arbella, AXA, Guardian, Liberty Mutual, Marsh, MetLife, Progressive, Prudential, Travelers, and others.

We publish frequent, independent, in-depth research on trends, best practices, and vendors. Our research projects are directed by our senior team and leverage our relationships with the more than 400 insurer CIO members of our Research Council. We conduct more than 2,000 conversations with insurer executives every year.

Our retained advisory services provide enterprise access to our research, unlimited phone and email consultations with our team, facilitated 1-on-1 conversations with other CIOs in our network, and an annual trends and best practices workshop.

Our consulting services include assessments, strategic blueprints and roadmaps, benchmarking, business process visioning, and vendor evaluation across digital, data/analytics, core systems, operating model, and innovation.

Our special programs include our Silicon Valley Innovation Tour, InsureTech Summits, Executive Leadership Development with Brown University, an online learning course in Foundations of Insurance Technology Strategy, and more.

More information at <a href="https://novarica.com">https://novarica.com</a>

# **APPENDIX - COMPARATIVE TABLES**

The tables below compare the company characteristics of the solution providers in this report, as well as the solution characteristics, supported lines of business, and supported functions of their vended solutions.

Solution providers are categorized by segment in the Novarica Market Navigator Graphic.

# **Company Characteristics**

Table 1: Dominant Providers' Company Characteristics

Vendor	Location	Headcount	Revenue	Public	Live US Insurers	Large Insurer Clients	Personal Lines	Commercial Lines	Workers' Comp	Specialty
Duck Creek	Boston, MA	1,400	>\$100M	•	60		•	•		
Guidewire (InsuranceNow)	San Mateo, CA	2,690	>\$500M	•	35		•			
Guidewire (PolicyCenter)	San Mateo, CA	2,690	>\$500M	•	92		•	•		
Insurity (Insurance Decisions)	Hartford, CT	Undisclosed	Undisclosed		70			•		
Majesco	Morristown, NJ	2,195	Undisclosed		45					
				[Blank] =	None □= Some	= Most			·	

Table 2: Contenders' Company Characteristics

Vendor	Location	Headcount	Revenue	Public	Live US Insurers	Large Insurer Clients	Personal Lines	Commercial Lines	Workers' Comp	Specialty
BriteCore	Springfield, MO	190	>\$10M		53					
OneShield (Enterprise)	Marlborough, MA	264	Undisclosed		31					
Sapiens (P/C)	Holon, Israel	4,000	>\$250M	•	10					
				[Blank] = N	one □= Some ■	= Most				

Table 3: Established Players' Company Characteristics

Vendor	Location	Headcount	Revenue	Public	Live US Insurers	Large Insurer Clients	Personal Lines	Commercial Lines	Workers' Comp	Specialty
Beyontec	Irving, TX	340	>\$10M		14					
Bond-Pro	Tampa, FL	80	Undisclosed		25			-		
DRC	Honolulu, HI	130	Undisclosed		11					
DXC	Tysons, VA	138,000	>\$21B	•	13					
eBaoTech	Singapore	1,700	>\$50M		3					
Ebix	Atlanta, GA	9,000	>\$500M	•	17			•		
EIS	San Francisco, CA	1,000	Undisclosed		9					
Finys	Troy, MI	85	>\$10M		31					
Focus Tech	Sunrise, FL	300	Undisclosed		8		•			
Horizon	Sheboygan, WI	23	<\$5M		15		•	-		
Instec	Naperville, IL	155	>\$20M		19					
ISI	Toronto, Canada	60	>\$10M		12			•		
Insuresoft (Volaris)	Tuscaloosa, AL	135	>\$20M	•	38		•			
Insurity (Bridge)	Hartford, CT	Undisclosed	Undisclosed		20					
Insurity (Enterprise)	Hartford, CT	Undisclosed	Undisclosed		6					
Insurity (WC)	Hartford, CT	Undisclosed	Undisclosed		15					
JW Software	St. Louis, MO	39	>\$5M		4					
OneShield (Market)	Marlborough, MA	264	Undisclosed		4			•		
PCMI	Park Ridge, IL	150	>\$10M		48					
PCMS	Dallas, TX	15	>\$5M		12					
Policy Admin. Solutions	Westchester, NY	53	>\$5M		19			-		
Sapiens (WC)	Holon, Israel	4,000	>\$250M	•	16					
Silvervine	Warner Robins, GA	86	<\$20M		12		-	-		
SimpleSolve	Pennington, NJ	65	<\$5M		7		•	-		
SpeedBuilder	Columbia, SC	25	<\$5M		5			-		
TCS	Mumbai, India	488,649	>\$10B	•	3					
Tinubu Square	Orlando, FL	178	>€15M		27					
Ventiv	Atlanta, GA	450	Undisclosed		25					
WaterStreet	Kalispell, MT	95	>\$10M		8					
			[BI	ank] = None	□= Some ■= M	ost				

Table 4: New Entrants' Company Characteristics

Vendor	Location	Headcount	Revenue	Public	Live US Insurers	Large Insurer Clients	Personal Lines	Commercial Lines	Workers' Comp	Specialty
AdvantageGo	London, UK	420	>\$500M	•	2					
INSTANDA	London, UK	113	Undisclosed		5			•		
Insurium	Denver, CO	50	Undisclosed		16					
Jarus Technologies	Pittsburgh, PA	170	Undisclosed		4					
Origami Risk	Chicago, IL	336	Undisclosed		8					
Salesforce	San Francisco, CA	50,000	>\$10B	•	Undisclosed			•		
Socotra	San Francisco, CA	52	Undisclosed		4					
Solartis	Manhattan Beach, CA	800	>\$10M		7			•		•
Sunlight	Minneapolis, MN	50	>\$5M		7					
Verisk	Jersey City, NJ	8,000	Undisclosed	•	Undisclosed			•		
XDimensional Technologies	Brea, CA	51	>\$10M		4			•		-
	·		·	[Blank] = No	ne □= Some ■=	Most	·	·	·	

# **Solution Characteristics**

Table 5: Dominant Providers' Solution Characteristics

Vendor	Product Name	Launched	Rearchitected	Current Version	Engineering Headcount	Public Cloud	On-Prem	Private Hosting
Duck Creek	Duck Creek Policy	2001	2009	2021	<1,000	•	•	
Guidewire	InsuranceNow	1994	2004	2020	<1,000	•		
Guidewire	PolicyCenter	2006	2020	2020	<1,000	•		
Insurity	Insurance Decisions Suite	1985	2014	2021	Undisclosed	•	•	•
Majesco	Majesco P&C Core Suite	1997	2017	2021	<1,000	•	•	•

Table 6: Contenders' Solution Characteristics

Vendor	Product Name	Launched	Rearchitected	Current Version	Engineering Headcount	Public Cloud	On-Prem	Private Hosting
BriteCore	BriteCore	2010	2019	2021	<100	•		
OneShield	OneShield Enterprise	1999	2012	2021	<100	•	•	•
Sapiens	CoreSuite for P&C	2002	2013	2020	<100	•	•	

Table 7: Established Players' Solution Characteristics

Vendor	Product Name	Launched	Rearchitected	Current Version	Engineering Headcount	Public Cloud	On-Prem	Private Hosting
Beyontec	Beyontec Suite	2010	N/A	2019	<50	•	•	
Bond-Pro	Enterprise Next Gen	1991	2015	2021	<50	•	•	•
DRC	DRC Insurance Platform	2012	N/A	2021	<50	•		
DXC	DXC Assure for P/C	2019	N/A	2021	<1,000	•	•	•
eBaoTech	InsureMO & Digital Core	2002	2015	2020	<1,000	•		
Ebix	Ebix Advantage Web	1989	2009	2018	<250	•	•	•
EIS	EIS Suite (P/C)	2008	2009	2021	<1,000	•	•	•
Finys	Finys	2001	2017	2021	<50	•	•	•
Focus Technologies	PolicyPort	1999	2019	2020	<50	•		
Horizon	AllPoints	2004	2011	2019	~10	•	•	•
Instec	Instec Policy	1992	2011	2020	<100	•	•	
ISI	ISI Enterprise	1999	2009	2019	<50	•	•	
Insuresoft (Volaris)	The Diamond System	1993	2008	2021	<100	•	•	•
Insurity	Bridge Specialty	2012	2018	2021	Undisclosed	•		•
Insurity	Insurance Enterprise	2008	2012	2021	Undisclosed	•		
Insurity	Workers CompXpress	1994	2012	2021	Undisclosed	•	•	•
JW Software	PolicyHandler	2006	2020	2021	<50		•	•
OneShield	Market Solutions	2007	2017	2021	<100	•		•
PCMI	Policy Claims & Reporting Solution	2011	N/A	2021	<150	•		•
PCMS	Atlas	1999	2019	2019	<15			•
Policy Admin. Solutions	pasCarrier.Net	1998	2009	2020	33		•	•
Sapiens	CoreSuite for WC	1995	2016	2021	<200	•	•	•
Silvervine	Evergreen Policy Tracking System	1996	2019	2019	<50			•
SimpleSolve	SimpleINSPIRE	2004	2019	2021	~40	•	•	
SpeedBuilder	BindExpress Suite	2009	2018	2020	<25	•	•	•
TCS	TCS BaNCS for Insurance	2002	2018	2020	Undisclosed	•	•	•
Tinubu Square	Tinubu eSURETY	1999	2014	2019	~20	•		
Ventiv	Ventiv Policy	2001	2016	2020	<250		•	•
WaterStreet	WaterStreet	2002	2009	2019	<10	•		

Table 8: New Entrants' Solution Characteristics

Vendor	Product Name	Launched	Rearchitected	Current Version	Engineering Headcount	Public Cloud	On-Prem	Private Hosting
AdvantageGo	Navigator	2014	N/A	2018	<250	•	•	•
INSTANDA	INSTANDA	2015	N/A	2020	<100	•		
Insurium	Insurium	2010		2021	<50	•		
Jarus Technologies	Jarus Policy Admin System	2018	2019	2021	<50	•	•	
Origami Risk	Origami Risk	2009	N/A	2021	<50	•		
Salesforce	Salesforce Digital Insurance Platform	2018	N/A	2021	Undisclosed			•
Socotra	Socotra Platform	2014	N/A	2021	<35	•		
Solartis	Solartis Insure	2005	2013	2021	<100	•		•
Sunlight	Sunlight Enterprise	2014	N/A	2021	<50	•	•	•
Verisk	Sequel Product Suite	2017	2019	2020	<250	•	•	•
XDimensional Technologies	Nexsure Insurance Platform	2002	N/A	2021	<50			•

# **Line of Business Summary**

Table 9: Dominant Providers' Line of Business Summary

Vendor	Personal Auto	Home	Other Personal	Comm. Property	General Liability	Comm. Package	Surety	ВОР	Comm. Auto	Inland Marine	Other Comm.	Workers' Comp.
Duck Creek												
Guidewire (InsuanceNow)	•	•	•	•	•	•	•	•	•	•	•	•
Guidewire (PolicyCenter)	•	•		•		•		•	•	•	•	
Insurity (Insurance Decisions)	•	•	•	•	•	•		•	•	•	•	
Majesco												
	■ = Live Clients □ = Supported [Blank] = Not Supported											

Table 10: Contenders' Line of Business Summary

Vendor	Personal Auto	Home	Other Personal	Comm. Property	General Liability	Comm. Package	Surety	ВОР	Comm. Auto	Inland Marine	Other Comm.	Workers' Comp.
BriteCore												
OneShield (Enterprise)	•	•	•	•	•	•	•	•	•	•	•	•
Sapiens (P/C)												
				■ = Live C	lients □= Su <sub>l</sub>	pported [Blai	nk] = Not Sup	ported				

Table 11: Established Players' Line of Business Summary

Vendor	Personal Auto	Home	Other Personal	Comm. Property	General Liability	Comm. Package	Surety	ВОР	Comm. Auto	Inland Marine	Other Comm.	Workers' Comp.
Beyontec					•							
Bond-Pro												
DRC												
DXC												
eBaoTech												
Ebix			-									•
EIS												
Finys			•									
Focus Technologies		•										
Horizon												
Instec												
ISI												
Insuresoft												
Insurity (Bridge)		-	-	-	-	-	-	-	*	-	-	-
Insurity (Insurance Enterprise)		-	•	•				-				
Insurity (WCXpress)												•
JW Software												
OneShield (Market)								•	•			•
PCMI												
PCMS												
Policy Admin. Solutions	-	•	-	-	-	-	-	•	-	-	-	-
Sapiens (WC)												
Silvervine												
SimpleSolve		_				_	-	_	•			
SpeedBuilder												
TCS												
Tinubu Square	_	<u> </u>			<u> </u>	_			_	_		_
Ventiv						_		_				-
WaterStreet												
Trate. Street			= Live Client				tod * - Live	_		_		

Table 12: New Entrants' Line of Business Summary

Vendor	Personal Auto	Home	Other Personal	Comm. Property	General Liability	Comm. Package	Surety	ВОР	Comm. Auto	Inland Marine	Other Comm.	Workers' Comp.
AdvantageGo					•	-		-		•		
INSTANDA												
Insurium												
Jarus Technologies											•	
Origami Risk												
Salesforce						•		•				
Socotra												
Solartis		•				•		•				
Sunlight												
Verisk												
XDimensional Technologies		•			•			-		•	•	
	■ = Live Clients □= Supported [Blank] = Not Supported											

# **Functional Summary**

Table 13: Dominant Providers' Functional Summary

Vendor	Rating	ISO Content	Claims	Billing	Doc Creation	UW Workbench	Agent Portal	Customer Portal	Business Intelligence	Reinsurance	
Duck Creek				•			•	•			
Guidewire (InsuranceNow)			•	•	•		•	•	•	•	
Guidewire (PolicyCenter)	•			•		•	•	•	•	•	
Insurity (Insurance Decisions)	•	•	•	•	•	•	•	•	•		
Majesco		•							•		
	■ = Integral □ = Available via Third-Party Integration [Blank] = Not Supported										

Table 14: Contenders' Functional Summary

Vendor	Rating	ISO Content	Claims	Billing	Doc Creation	UW Workbench	Agent Portal	Customer Portal	Business Intelligence	Reinsurance
BriteCore	-		-				-			
OneShield (Enterprise)				•		•	•	•	•	•
Sapiens (P/C)	-		•	•	•	•	•	•	•	•
	■ = Integral □ = Available via Third-Party Integration [Blank] = Not Supported									

Table 15: Established Players' Functional Summary

Vendor	Rating	ISO Content	Claims	Billing	Doc Creation	UW Workbench	Agent Portal	Customer Portal	Business Intelligence	Reinsurance
Beyontec	•				-				-	-
Bond-Pro							-		•	•
DRC			-							
DXC										
eBaoTech			-		•			•		
Ebix				-						
EIS										
Finys	-	•		-	-	•			-	-
Focus Technologies	-	•	-	•	•	•	-	•	-	•
Horizon										
Instec	-								-	
ISI			-		•		-		•	•
Insuresoft	-		-		-			•		•
Insurity (Bridge)									-	
Insurity (Insurance Enterprise)	-		-	-	-	-	-	•	•	•
Insurity (WC)								•		•
JW Software								•		•
OneShield (Market)	-		-	•	•	•	•	•	•	•
PCMI										
PCMS										
Policy Admin. Solutions	-	•		•	•	•		•	•	•
Sapiens (WC)										
Silvervine	-		-				-			
SimpleSolve										
SpeedBuilder										
TCS	•		•				•			•
Tinubu Square									-	
Ventiv										
WaterStreet						■ ation [Blank] = N	•			

Table 16: New Entrants' Functional Summary

Vendor	Rating	ISO Content	Claims	Billing	Doc Creation	UW Workbench	Agent Portal	Customer Portal	Business Intelligence	Reinsurance	
AdvantageGo			-								
INSTANDA	•					•					
Insurium	-		-	-	-	-	-	•	•		
Jarus Technologies	-					•	•	•			
Origami Risk	-		-								
Salesforce	-		-								
Socotra											
Solartis	-	•			•	•					
Sunlight	-		-	-	-	-	-	•	•		
Verisk	-		-	•	-	-	•		•	•	
XDimensional Technologies	-	•		•	•	•	•	•			
	■ = Integral □ = Available via Third-Party Integration [Blank] = Not Supported										

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