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XCELENT Awards 2021

P&C POLICY ADMINISTRATION SYSTEMS IN EMEA

2021 XCELENT Awards, Powered by VendorMatch

Craig Beattie

January 22, 2021

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EXECUTIVE SUMMARY

Expanded PAS functionality and improved technology mean that insurers continue to have a wide spectrum of systems and vendors to consider when they are looking for a solution to fit their needs. Insurers should leverage their access to the authors through analyst access calls to learn more about the vendors. This report should help them define their core systems requirements and, where appropriate, create a short list of vendors for evaluation.

This report is part of a series on policy administration systems (PAS) in Latin America, North America, EMEA, and the Asia-Pacific. It provides an overview of the policy administration systems available in EMEA for property and casualty insurance. The report profiles 41 policy administration solutions, providing an overview of their functionality, customer base, lines of business, technology, implementation, pricing, and support.

Some vendors also appear in companion reports profiling these systems in Latin America, Asia-Pacific, and North America.

POLICY ADMINISTRATION SYSTEMS DEFINITION AND FUNCTIONALITY

In one sense, the definition of a policy administration system (PAS) is very simple—it is the system of record for all policies that an insurance company has written. At this most basic level, a PAS is a repository of policy-level data related to objects of insurance, coverages, limits, conditions, exclusions, duration of the policy, endorsements, and so forth. A permanent policy record is created at the time a policy is issued, and it includes the complete history of the policy through renewal, termination, cancellation, and/or reinstatement.

In actual practice, an insurer uses a PAS—either by itself or closely integrated with specific point solutions—to execute a number of core processes and relies on several types of supporting capabilities. All modern core policy systems provide basic functionality for the most standard processes of quoting, issuing, endorsing, and renewing a policy. However, there is significant variation in the way the solutions handle these functions.

System Features

A variety of features are available to handle the day-to-day transactional activities of quoting, issuance, endorsements, renewals, and cancellations.

Transactional Servicing Features

Scheduling/calendar/diary: A wide variety of tools are available to help the underwriter manage their workload. Underwriter desktops typically include an area where new business quotes, policies needing issuance or renewal, endorsements, and other assigned tasks are easily found. User interfaces can vary widely but often include features such as the ability to sort by clicking on columns, to filter columns, and to drag and drop and rearrange columns. All solutions include search, but some include sounds-like search, partial word search, Boolean search, or wildcards. Most systems allow underwriters to create manual diaries, tasks, and notes and to easily see their work in a calendar format. Many are integrated with email, allowing an underwriter to send an email from the desktop. Many include a policy or account summary that contains the most important information about a policy or account and is available at a glance from any location within the policy. Some solutions allow the underwriter to customize their own workspace, choosing which modules they want displayed, selecting a color scheme, or adding links to commonly used third party websites. Other capabilities such as configurable help text, hover-overs, and wizards can help an underwriter easily navigate through the task.

Quick quote and full quote: Agents and underwriters often want to get a quick indication of risk acceptability and price and to compare different options. Quick quote functionality allows a price to be generated with minimal data entry. The data entry screen contains only those questions needed to calculate a rate or to determine the basic terms and conditions of the policy. Sometimes the questions will include basic risk acceptability questions, but quick quote is not usually intended to handle the full underwriting of the policy. Many solutions support dynamic questions that expand and change based on the answers, allowing the system to prompt the broker or underwriter for more detailed information based on the insured's responses. Multiple versions of the quote can be generated to see the impact of different terms, conditions, and product choices. Some solutions handle side-by-side quoting by opening separate windows. Some allow different quote versions to be saved. More and more are offering side-by-side quoting in a single window.

Once a quote is generated, some solutions allow for multiple side-by-side views of different options. The user can change a deductible in version one, or a limit in version two. Some solutions use drop downs to show the different available options, with the price difference for each option shown next to the label within the drop down itself. Most solutions include the ability to create and display rating worksheets (a detailed listing of how the premium was calculated). Some have the ability to show simplified versions to the brokers and detailed versions to the underwriters.

ACORD upload: ACORD applications are the most commonly utilized form of application in the industry. The data is commonly contained in the agents' or brokers' agency management systems. Rather than requiring the broker to reenter the data on the application, many systems allow brokers to upload an ACORD application and have the data prepopulate the appropriate fields, retaining a copy of the ACORD application elsewhere in the system.

Data upload: Specialty and commercial lines policies often include large schedules of drivers, locations, vehicles, or equipment. Many systems allow these schedules to be imported or uploaded from an Excel spreadsheet. Some systems require that the spreadsheet be formatted in a particular order. Some allow mapping of the spreadsheet as the spreadsheet is being uploaded.

Data services: Underwriters rely heavily on third party data or reports from external data services. Most systems have some level of preintegration with the most common data service vendors. Some require the underwriter to manually request the external data. Others use business rules to automatically send the data request and retrieve the data or report. Some can take the data retrieved and populate the specific field; others store the data as a record that the underwriter can review, and then the underwriter enters the data into the correct field in the policy record.

Automated underwriting: Many solutions have the ability to use business rules to automate the underwriting process. The solutions use business rules to determine if the transaction can proceed without human intervention; if intervention is required, a task is generated for the underwriter to review and act on. Some solutions can handle basic yes/no questions only. Others can perform

very sophisticated underwriting. The capabilities are heavily influenced by the level of sophistication of business rules and workflow capabilities.

Underwriter assignment: While some carriers still assign work manually, more and more carriers are looking for automated support in the underwriting process. Solutions handle underwriter assignments in a variety of ways, for example by assigning policies/quotes to a team or individual using a round-robin capability, or by assigning tasks to specific individuals based on specific criteria. Some solutions can assign a transaction very granularly, based on line of business, agent, geography, and workload. Most systems allow multiple underwriters to be assigned to work on a single account handling different policies. Carriers also look for the ability to use manual assignment or reassignment for both bulk transactions and single policies or accounts.

Automated renewals: Most solutions can handle no-touch automated renewals. If the policy meets the carrier's defined requirements, the information from the original policy carries over to the renewal, and the policy is issued. Some allow business rules that apply an inflation factor automatically or make other bulk changes on policies as they renew. Policies that do not meet the requirements are popped out of the renewal cycle and assigned to an underwriter for intervention.

Along with automated renewals, there are also automated nonrenewals. Some solutions allow a policy to be marked for nonrenewal. Others allow business rules to be used to determine whether an underwriter will allow the policy to renew. In the case of an automated nonrenewal, the system can generally send out the appropriate documents in the right timeframe according to the jurisdictional requirements of the policy.

Endorsements: All systems can handle endorsements. Almost all systems can handle out-of-sequence endorsements as well. When it comes to out-of-sequence endorsements, there are a variety of techniques in place. Some alert the underwriter to the fact that the policy change is out-of-sequence. Each affected endorsement is identified, and the underwriter can select which to back off from and which to roll back on. Others handle the back off and roll back on automatically, only highlighting conflicts for an underwriter's intervention. At least one solution can handle multiple policy changes with different dates on a single endorsement. Midterm broker of record changes can often be handled as a bulk transaction, but some systems require the changes to be implemented policy by policy. Some allow flexibility as to when commission changes occur, and some allow the commission to begin accruing to the new broker immediately. Others begin commission accrual at the time of renewal.

Product Management Capabilities

Product Management

In addition to transactional capabilities, a policy administration system is the primary repository for the product rules, rates, and documents for all products.

Product design tools: The product architecture is a key component of a policy administration system. Often when implementing a new system, this is an area that requires significant work on the part of a carrier, such as redesigning their

products to match the architecture inherent in the policy administration system. Look for a base set of insurance products that can be leveraged for building new lines or new products. Some solutions allow easy cloning of product/rating rules and structures. Many solutions have a product architecture that is depicted as a tree, which allows inheritance across jurisdictions for common features. Some include color coding that helps a carrier easily identify where a product does not conform to the nationwide version. Some keep their product architecture in an Excel or Excel-like format, which can be easy for the business to maintain. Some solutions include wizards that make it very easy for a business user to make basic parameter-driven product updates. Some include a self-documenting product dictionary. The dictionary is the source of complete, reusable insurance product definitions, including rates, underwriting rules, calculations, specifications, integration definitions, and data for managing forms so each piece can be defined as reusable components that can be rapidly adapted to form new products or enhancements. Some product dictionaries are very business userfriendly with natural language definitions.

Rating: Most, but not all, solutions include rating engines as a key feature. As vendors create more sophisticated configuration tools, rate changes can be done by business analysts rather than developers. The rate tables, rules, and algorithms are externalized from the programming code. There are wide variations in the level of sophistication of the rating engines. As carriers have moved to more complex rating algorithms, rating engines have expanded their ability to support them, including multivariate rating and by-peril rating. The more precise an algorithm, the more precisely a risk can be priced. As insurers extend their use of predictive models, they need algorithms that can accommodate these models. Look for the ability to easily create subroutines; built-in functions to handle minimum premiums, rate capping, or prorating; and the ease of ordering the expression. Interpolation of rates is sometimes needed, like when a specific rate is not provided in a rate table. Some tools include interpolation capabilities out of the box. Rounding is another area to look at closely to ensure the ability to round with the right level of granularity at any place in the expression. Most allow multiline, multilocation rating on a single quote or policy. Many also allow multistate rating. Look for the ability to use external party information sources (e.g., credit score, loss data, property data, predictive scores etc.) in the rate algorithms during real time calculation. Other features to look for include the date management capabilities—the ability to manage multiple dates based on the versions of the rate, table, or algorithm changes. Some solutions require the versioning dates be embedded in the code or script. Others provide fields to enter the dates. Some allow different versions or effective dates for renewals versus new business.

Rating maintenance tools: For the easiest management and maintenance, rate tables should be kept separate from the algorithms, and business rule definition and management (e.g., automatic driver assignment) should be maintained separately from the rating algorithms. It's also helpful to keep deviations in a separate layer. Most solutions allow the import or export of rating tables to or from spreadsheets. Look for how the tool handles multidimensional tables. Look for the tools necessary to create the algorithm—some have graphical Visio-like tools. Lastly, reusable rating components are helpful, especially if there is a

prebuilt library of product and rating rule components. Even better is to have a repository of rules that is searchable, and version controlled.

Testing, modeling, and analytical tools: Some solutions include very robust tools for handling the rate analysis function. Testing, modeling, and product analysis tools that allow an insurer to do an impact analysis to calculate the overall impact of a rate change, or a displacement analysis to identify the number of policyholders that will be affected, are included. Some include tools that make it easy to compare current rates against proposed rates. Not all vendors have these types of tools built in. Some vendors have business intelligence tools included and can set up reports that can provide some level of analysis as well. Some solutions do not include any functionality for handling rate analysis or testing. This is an area that is rising in priority for insurers. For more information, see the report *New Tools for Product Management: Four Tips for Getting It Right*.

Bureau support: Most developed markets globally have local definitions of products, rates, and standards that inform the majority of the products in the market. In some cases, this is imposed or managed by a particular distribution channel; in some it is agreed to by a standards body, and in others is simply local convention. Most often it is the distribution channels that increase product diversity and speed of change, as partners impose standards. Examples include adopting price comparison site data standards, or adopting a data standard on a blockchain to participate in specific international marine opportunities, as seen in *InsurWave*¹.

Price optimization, machine learning, and artificial intelligence: Systems may include price optimization tools (in jurisdictions where this is legal). Some include artificial intelligence capabilities. In some cases, the integration is simply allowing models and other data sources to inform the rating, underwriting rules, and pricing. Increasingly, however, both actuaries and pricing leads are leaning more and more on advanced analytics, machine learning, and AI to inform rating and pricing. This requires building a data science pipeline into the rating and pricing capability to create, update, and realize the utility of these models at run time. For more discussion on the data science pipeline and DataOps, see *Demystifying Artificial Intelligence in Insurance: The Tools Supporting Data Science and the Rise of DataOps*.

Fraud at quote: Fraud analytics at the point of sale is another new area we are starting to see, particularly in markets with significant fraud issues. Many policy administration systems can integrate with a third party solution in this area. Some are beginning to work on creating this capability themselves.

Reinsurance: One of the newer areas that vendors have begun to invest in is reinsurance capabilities within the policy administration system. Most solutions do not include this functionality. The most robust solutions allow for full program definition. Carriers can identify multiple treaties based on perils, lines of business, geographies, or other dimensions. Treaties can be assembled into programs with specific inurements identified. The solution will create bordereaux reports tracking the exposures, the commissions, and the premiums back to the reinsurer. Some allow an underwriter to manually mark a policy as reinsured with some basic information about any facultative contracts. Some have set up

¹https://insurwave.com/

reports that allow for basic reporting on policies that meet basic treaty requirements.

Common Functionality

Common Functionality

There are a variety of functions that are not specific to underwriting or product management but can generally be found in a policy administration system.

Workflow: Some solutions serve more as data capture tools. Workflow is simulated with screen flow. Other solutions have true workflow capabilities—the ability to automatically generate and assign tasks based on changes in a policy, on elapsed time, or on data changes in a field. Some of the solutions profiled have the capability to visualize the workflow through graphical depictions. Some have a graphic design environment, with automated background code generation. This means graphical depictions are actionable: clicking on a step allows the carrier to modify that step, or steps can be dragged and dropped to rearrange the sequencing. It is not uncommon for a software vendor to use a third party or open source tool to manage the workflow requirements.

Document creation: Most of the solutions include some sort of correspondence or forms library for the most common forms and letters. Many integrate to third party solutions to provide additional capabilities because many of the built-in solutions are not robust enough to handle production-level policy generation. Look for standard templates out of the box. In addition to policy forms and documents, many systems can automatically generate correspondence using business rules and task generation capabilities. When an event occurs, or the data within a field changes, correspondence can be automatically created, delivered using a variety of mechanisms: mail, email, or SMS.

Document management: Some systems contain a document management capability allowing for storage of internally generated documents and external documents such as photos, videos, and other media. Many integrate to external third party solutions to provide more scalability. Look for the level of detail in indexing forms being created. When a policy file holds hundreds of items, being able to rapidly sort to find the document needed can save time. Look for not just the ability to search the metadata about the document, but also the ability to search within the document.

Reporting: Reporting capabilities vary widely across solutions. Virtually all solutions integrate to a third party reporting tool. Some include a third party reporting tool out of the box. Some solutions use open source reporting tools, and some have solutions built in-house. Most include some level of prebuilt standard reports that can be subscribed to or scheduled. Standard reports typically deliver operational reports, performance measures, and some level of financial reporting. Look for the number of reports included out of the box. Ad hoc capabilities vary widely, and some are quite easy to use, with the ability to drag and drop data elements and build a report very simply. Many include dashboards with graphical views of data, and many of those include drilldown capabilities.

Mobile/multichannel access: Almost all solutions are browser-based and so are available via a tablet or mobile device for an underwriter in the field. More and

more have been optimized for a mobile device using HTML 5 or responsive design. Some solutions come with mobile applications out of the box meant for a potential policyholder to access their policy, pay their bill, or get proof of insurance.

Technical Functionality

Technical Functions

While assessing features and functionality is a critical step in selecting a policy administration system, there are a number of technical aspects to be considered as well.

Configuration tools: A general trend in insurance software is to create tools that allow carriers to do more modifications of the system through configuration tools rather than through code. The most robust tools allow carriers to easily add data elements, create business rules, modify workflows, create forms, create screens, modify the user interface, and even map interfaces, all using configuration tools. Some tools are extremely intuitive with drag-and-drop and point-and-click capabilities. Others require knowledge of a scripting language to make the changes. Many vendors are moving toward a dual development environment with simplified tools and wizards meant for business analysts to make general changes and for a more robust environment that technical staff can utilize.

Business rules: Look for the ability to design and execute business rules and underwriting rules that are separate from the core program code. Carriers should assess the ability to reuse and share rules. Some tools are extremely intuitive and use natural language; others require knowledge of scripting. Some have visualization tools that allow a carrier to use a Visio-like tool to build business rules, while some solutions include a searchable and version-controlled rules repository. A few solutions offer tools to help carriers conduct impact analysis of the rules or traceability tools to help them understand how and when rules are being used. Since many carriers create hundreds or thousands of rules, there should be a strong rules management environment with a well-organized repository, version control, and version storage, etc.

Data: Data is more and more important for carriers, and software vendors are acknowledging this by building in more tools to help with data needs. Some solutions deliver a certain number of extra fields that users can modify for their own use. More common are configuration tools that allow the easy creation of data elements, including the ability to mask data, encrypt data, add context-specific help text, and also allow for modification of the data model. Self-documenting data dictionaries are available. Some solutions come with an Operational Data Store (ODS) out of the box and may even include a data warehouse with the appropriate ETL tools. Most solutions are built on an industry standard model such as ACORD.

Release management: Some solutions include workflow capabilities to handle the release management within the policy administration system. Some feature full ticket management. Look for the ability to package a group of changes or filings together, managed as a release, as well as the ability to assign and track the work packets.

Versioning and change control: Versioning and update management is a critical component for a policy admin system. Rating plans may be used for new business on one date and on a different date for renewals. Effective dates may differ by jurisdiction or product. Look for multiple date-management capabilities, for example: new, renewal, effective, available, expiration, and so on.

The easiest solutions to use are those that have fields to enter the type of date and the actual date by product or state. Some tools require the developer to enter the date in Extensible Markup Language (XML). These are harder to audit.

Tools are available in some solutions that allow for auditability of versioning, and version comparison reports come out of the box for some solutions. And, of course, look for controls to manage concurrent changes on a release, e.g., locking out changes when another is working on it.

Change control functions include the ability to track and document changes that are made, indicate who made the change, and identify the reasons for making the change. Some automatically document the activity and changes to allow for easy traceability. Some include the ability to see which fields, formulas, and tables are being used.

As systems use more real time data enrichment and models in their pricing, version and change control will increase in complexity, as will audit requirements from regulators. These capabilities may start to stretch into models and integrations that support changes in the products.

Security: Security is becoming increasingly important to insurers, especially as policy administration solutions are frequently accessed by web quoting applications. Ask about the security standards the vendor complies with and which certification and assurance methods are used. Take a look at how the system handles security for managing APIs for application-level integration. While many policy admin systems don't need to be PCI compliant, some are. Look at which authentication capabilities the system leverages for internal and external users. There is a broad range of capabilities, ranging from one-time passwords, security tokens/PINS, multifactor authentication, and federated identity support up to biometric security support. With regards to cybersecurity, look for whether the software has penetration security and how the system has been tested.

Scalability: While we typically think of scalability in terms of the number of policy transactions, or the number of users, an additional area to examine is how the system handles multiple locations or vehicles on a policy. Performance as the system scales is another important consideration.

Integration: Policy administration systems integrate to large numbers of third party systems and external data sources. Most solutions have been designed with a service-oriented architecture and have a variety of ways of handling integration, with many settling on the use of RESTful APIs as the common standard. Most systems have some kind of accelerator, or experience integrating to the most common third party data sources and the most common general ledgers. With the rise of InsurTech, new data platforms, and the position of rating as a participant in a wider ecosystem, fast integration capability will be a deciding factor in insurers' agility.

Implementation: Vendors use a wide variety of implementation methodologies. Some prefer to handle all of the implementation themselves. Others prefer to work with third party system integrators. More and more vendors are moving to an agile or hybrid methodology. Look to see what methodology the vendor uses and how it aligns with your own. Some vendors are very good at helping carriers transition to an agile approach. Look for the artifacts they have available for gathering requirements, documenting the product architecture, and capturing the business rules. Vendors claiming very fast implementation timeframes may indeed have better artifacts and more configurable solutions, or they may be touting very simple single product implementation with little or no configuration. Be sure to do customer reference checks to understand how well the vendor handles project management, knowledge transfer, and scope creep with carriers of a similar size and complexity as your company.

Cloud: Few technologies are as talked about as cloud computing. Cloud-enabled solutions are on the rise, with most of the responding vendors reporting that they have cloud-enabled core systems. When it comes to the term "cloud," there are many different variations available. Most vendors offer a hosted version of their software. The software is licensed by the carrier and is hosted by the vendor either in its own data center, in a private data center like Rackspace, or in a public data center like Amazon or Microsoft. Look for the level of managed services available if you are interested in this option.

Suite Capabilities

Celent has limited the definition of a PAS to include a set of core processes and key supporting capabilities. However, vendors do not necessarily limit their definitions of a PAS in the same way, and many have attempted to build out some or all of the end-to-end components that an insurer might need. Some insurers are just looking for a best-of-breed PAS to work with other core systems already installed, but other insurers may be looking for a vendor who can offer broad solutions for multiple areas of their insurance operations.

Some of the additional end-to-end components defined here are also listed as core processes of the PAS. This is not a contradiction. A vendor might bundle a component with their PAS (for example, rating), but also consider it (and also sell it as) a separate, stand-alone product. Alternatively, a vendor might provide a basic level of functionality in one area, but also have an upgraded, higher-cost product or an independent software vendor (ISV) partnership with a different vendor to provide an advanced solution (e.g., document creation).

In order to help insurers with their comparison of different solutions, each profile in this report has a table summarizing whether the vendor in question offers one or more of the following end-to-end components and whether the components are part of the base offering or sold as a stand-alone system. We use the description "Yes—integrated into the policy admin module" to mean that the functionality is part of a monolithic code base. We use the description "Yes—

separate module available from this vendor" to mean there is a separate module available that has been integrated with the policy administration system.

| Table 1: Suite Components | | | |
|----------------------------|---|--|--|
| Suite | Availability | | |
| Claims Administration | A system to record and transact all matters relating to a claim from first notice of loss through final settlement. | | |
| Billing | A system to create invoices and handle collections from producers and policyholders. It typically handles basic commission processing as well. It may include deductible billing. | | |
| CRM | Allows the aggregation of data on a customer or at an account-level view and provides utilities that streamline the communication and management of customer data. Typically includes lead management and campaign management in addition to tracking the demographics of the customer. | | |
| Reinsurance | A system to record any reinsurance contract related to a policy or set of policies and a claim or set of claims. The solution typically will calculate the bordereaux, manage inurements, calculate claims reimbursements, and manage the financial and reporting interactions with reinsurers and brokers including commissions. | | |
| Rating Engine | A stand-alone rating engine should be capable of handling complex pricing algorithms and should integrate easily with multiple policy administration systems. They typically include more robust rate analysis tools and can usually operate on a headless basis if required. | | |
| Digital Tools | Digital tools can be thought of as software or applications that augment the core system to provide additional digital capabilities. For example, chat bots, digital marketing tools, and video communication would all be considered digital tools. | | |
| Distribution Management | A system that manages the compliance aspects of agency management, including onboarding of agents and tracking the licenses and appointments as well as complex compensation transactions across multiple policy administration solutions. This includes incentive compensation. | | |
| Business intelligence | Designing, storing, and accessing reports ranging from simple lists to multidimensional calculated variables. In general, reports are used to monitor activities by a user and by all levels of management. Tools generally allow standard reports with scheduling tools and ad hoc reporting. | | |
| ETL Tools | ETL tools allow any organization to extract data from numerous databases, applications, and systems, transform the data into a usable format, and load the data from all of these sources into a single database, data mart, or data warehouse for reporting, analysis, and data synchronization. | | |

| Suite | Availability |
|----------------|--|
| Data Hub | A data hub is a centralized service that connects an insurer's IT system, including core systems, web applications, Internet of Things (IoT) devices, or other applications in use. The data hub manages the connections to each of the systems and orchestrates the data flow among them. |
| Data Warehouse | A data warehouse is a system that pulls together data from many different sources within an organization for reporting and analysis. |
| Source: Celent | |

REPORT METHODOLOGY

Celent's objective in this report is to include as many of the leading policy administration systems being used or actively sold to insurers in EMEA as possible. Celent actively reviews vendor systems in the insurance software market and invites the vendors to participate at no cost in reports like these.

Criteria for Inclusion

This report contains 41 profiles. Each of the profiles presents information about the vendor and solution, available professional services and support capabilities in the region, customer base, functionality and lines of business deployed, technology and partnerships, and implementations.

It is important to note that the information available in this report is also available through Celent's online resources. Prior to relying on the information for a vendor, we suggest reviewing their online company and product profiles in Celent's digital platform, which may be more current.

Data from the request for information (RFIs) received from every vendor is included in the system profiles presented in this report. All vendors had an opportunity to review their profiles for factual accuracy, but they could not influence the overall evaluation of the system.

Celent has retained final authority over the content of the published profiles. Some of the vendors profiled in this report are Celent clients, and some are not. No preference was given to Celent clients either for inclusion in the report or for the subsequent evaluation.

Not all data gathered from the detailed RFIs has been included in the profiles. Rather, Celent has attempted to capture key points and values about each vendor at an appropriate level. Unpublished information remains in the Celent knowledge base and is available to Celent's subscription or consulting clients.

Limitations

Celent believes that this study provides valuable insights into current offerings in policy administration solutions. However, readers are encouraged to consider these results in the following context. The vendors self-reported. Participants in the study were asked to indicate which policy administration capabilities are provided in addition to providing generic information about their client base. While this information was supplemented with publicly available information where possible, Celent did not confirm the details provided by the participants.

CELENT'S ABCD VENDOR VIEW

Celent has developed the ABCD framework for evaluating vendors. This is a standard representation of a vendor marketplace designed to show at a glance the relative positions of each vendor in four categories: Advanced and agile technology, Breadth of functionality, customer base (i.e., relative number of customers), and pepth of client services. The Celent Vendor View shows relative positions of each solution evaluated and does not reflect an abstract evaluation. Each vendor solution is judged relative to the others in the group.

While this is a standard tool that Celent uses across vendor reports in many different areas, each report will define each category slightly differently. For this report, some of the factors used to evaluate each vendor are listed in Table 2. The final rating is determined by Celent's score of these factors, as well as Celent's view of the relative importance of the factors, as they apply to both the solution and vendor's capabilities.

Table 2: Examples of Possible Factors Used in Celent's ABCD Policy Administration System

| ABCD CATEGORIES | POSSIBLE FACTORS |
|---|--|
| Advanced Technology (and Flexible Technology) | Platform and modernity (Code base, platform, databases, localization capabilities, etc.) |
| | UI (ease of use, mobility) |
| | Data and adaptability/extendibility (openness of application, code base, data model, etc.) |
| | Integration (web services, APIs, reference comments) |
| | Scalability and cloud (cloud readiness, largest installations, etc.) |
| | Ease of change (change tooling, debugging capabilities, etc.) |
| Breadth of Functionality | Functions and features provided in base offering |
| | In production lines of business and number of deployments for each |
| | Countries where the system is live |
| | User experience |
| | |

| ABCD CATEGORIES | POSSIBLE FACTORS |
|---------------------------|---|
| Customer Base | Number of live insurers using the system for personal, commercial, or specialty lines of business |
| | New client momentum |
| Depth of Customer Service | Size of professional services and support team in region |
| | Insurers' postimplementation experiences |
| Source: Celent | |

Technology and Functionality Awards

Figure 1 positions each vendor along two dimensions: the vertical axis displaying the relative rankings for Breadth of Functionality and the horizontal axis showing relative Advanced Technology rankings.

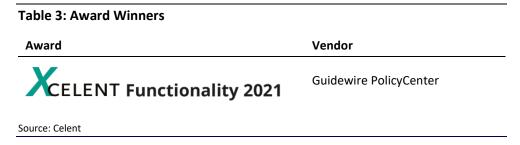
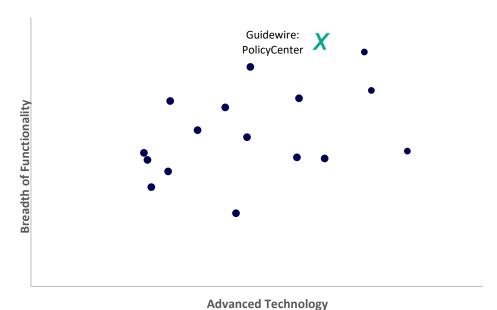


Figure 1: Advanced Technology and Breadth of Functionality



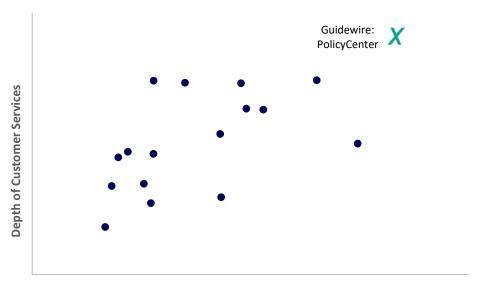
Source: Celent

Customer Base and Service Awards

Figure 2 positions each vendor along two dimensions: the vertical axis displaying the relative level of depth of customer service and the horizontal axis displaying the relative customer base.



Figure 2: Customer Base and Depth of Customer Service



Customer Base

Source: Celent

COMMENTARY ON READING THE ABCD CHARTS

Celent advises insurers to consider past vendor results but not to compare the placement of vendors in the charts from prior years, because the market and our analysis is changing. The criteria used to determine the A, B, C, and D rankings in this report are broadly similar, but not identical, to the criteria used in the previous Celent PAS vendor report published in 2018. For example, in this report, we are considering new criteria in Advanced Technology related to microservices and integration approaches. The market is also evolving due to acquisitions and partnerships, solutions development, and alternative delivery models.

We suggest that insurers consider each vendor for what it offers against their own specific needs. Although vendors are very successful in one or more of the criteria, the XCELENT Award winners may or may not be the best match for an insurer's specific business goals and solution requirements.

VENDOR PROFILES

Each of the profiles presents information about the vendor and solution, professional services and support capabilities, customer base, functionality and lines of business deployed, technology and partnerships, and implementations and cost.

About the Profiles

The profiles also include a list of in production and supported lines of business and a table showing specific functionality capabilities. Additionally, the profiles include a table of technology options.

Concerning implementation costs and fees, Celent asked vendors to provide the following cost estimates:

- The average Year One Total Cost of Ownership (TCO) of their current client base for costs associated with software license, initial installation, customization, annual maintenance, and training
- An estimate of the remaining costs for full implementation for their current client base including license fees, maintenance, customization, and other fees

When discussing insurance customers, the profiles may use the terms very small, small, medium, large, and very large to refer to insurers:

- Very small insurers (tier five) have under US\$100 million in annual premium
- Small (tier four) have US\$100 million to \$499 million
- Medium (tier three) have U\$\$500 million to \$999 million
- Large (tier two) have US\$1 billion to \$4.9 billion
- Very large (tier one) have US\$5 billion or more

GUIDEWIRE SOFTWARE: GUIDEWIRE POLICYCENTER



Company

Guidewire Software is a public company headquartered in San Mateo, California, with sales and professional services personnel located throughout the NA, EMEA, APAC, and LATAM regions. The company has 2,690 employees, of which 758 are in professional services and 378 in cloud operations and technical support.

With each major release of Guidewire's InsuranceSuite, and its associated products PolicyCenter, BillingCenter, and ClaimCenter, Guidewire has upgraded the application, underlying tools, third party libraries, Java versions, and required application stack options, often expanding the list of vendors supported.

Future development plans include:

- Broadening user base (and serving digital channels);
- Business agility;
- Intelligent claim handling and analytic insight.

Guidewire's spend on research and development over the past two years has been approximately 40% of license and maintenance revenues.

Guidewire offers an annual conference.

| Table 5: Company Snapshot | | | |
|---------------------------|---|--|--|
| Year Founded | 2001 | | |
| Number of Employees | 2,690 | | |
| Revenues (USD) | Total corporate revenue: ~\$740M (2020) | | |
| | Product revenue: Confidential | | |
| Financial Structure | Public company (NYSE: GWRE) | | |
| Source: Vendor RFI | | | |

| Table 6: Product Snapshot | ; | | | |
|--|---|---|--|--|
| Name | Guidewire PolicyCenter | | | |
| Year originally Released / Deployed | 2005 / 2006 | | | |
| Current Release and Date of Release | Aspen, 2020 | | | |
| Upgrades | Client can skip multiple versions, e.g., go directly from version 4.0 to version 7.0. They support current versions and more than two priors, but not all versions. | | | |
| Target Market | Mid- to large-size property and casualty insurers; personal and commercial lines of business, including workers' compensation. | | | |
| Installed Base | EMEA: United Kingdom: Germany: France: Switzerland: Italy: Russia: Belgium: Finland: Poland: Bulgaria: Czech Republic: Denmark: Hungary: Romania: Slovakia: Africa: South Africa: | 9 7 4 4 3 3 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | |
| | APAC: LATAM: | 18 12 | | |

| New Clients Since 2017 | EMEA: | | | |
|--|--------------------------|-------------------------|--|--|
| | Germany: | 6 | | |
| | France: | 3 3 2 2 | | |
| | United Kingdom: | | | |
| | Finland: | | | |
| | Italy: | | | |
| | Russia: | 2 | | |
| | Switzerland: | 2 | | |
| | Bulgaria: | 1 | | |
| | Czech Republic: | 1 | | |
| | Denmark: | 1 | | |
| | Hungary: | 1 | | |
| | Poland: | 1 | | |
| | Romania: | 1 | | |
| | Slovakia: | 1 | | |
| | | | | |
| | North America: | 50 | | |
| | APAC: | 6 | | |
| | LATAM: | 1 | | |
| Notable Clients | Nationwide | | | |
| | The Hartford | | | |
| | Farmers ZurichAviva | | | |
| | PZU Sompo JapaniCare | | | |
| | QBE | | | |
| Revenue from | Confidential | | | |
| Product/Service | | | | |
| FTEs Providing Professional Services for Product | 758 | | | |
| User Conferences/Product | The vendor offers an ann | nual user conference or | | |
| Working Groups | customer event. | | | |

Source: Vendor RFI

Celent Opinion

Guidewire is a longtime participant in the EMEA reports and continues to be a significant presence in Europe and South Africa. Since the last report Guidewire has a new CEO, has invested significantly in their support for the cloud and in the configuration capabilities in InsuranceSuite.

Guidewire's PolicyCenter has had a significant revamp of its UI. The most significant addition is a left side, context sensitive navigation pane that provides relevant actions, indicators for sequences to be completed, and links to pages for other information or functions. Other features supporting ease of use include: a quick quote wizard having predefined (and modifiable) coverage levels, an indicator of missing or erroneous data that pops-in from the right margin, an easy to use table format for resolving out of sequence endorsement issues, and options for making renewals automated or manually processed.

There are also several effective add-ins to PolicyCenter. ProducerEngage and CustomerEngage are digital portals for agents, prospects, and policyholders.

CustomerEngage has a graphic timeline showing the time-stamped sequence of actions related to a policy before and after issue. There is also a profitability predictor for a given policy quote. Using predictive analytics, it shows the projected profitability for a given policy configuration on a 1 to 1,000 scale where 500 is average profitability. That projection changes as coverages, limits, deductions and other product characteristics change. Additional license fees are required for all of these add-ins.

Configuration has been significantly changed with the introduction of PolicyCenter's Advanced Product Designer tool, which utilizes XMind's mind mapping software. Essentially, XMind's drag-and-drop UI allows a product designer to gather product requirements visually. Using the Advanced Product Designer tool, the product designer can go through three designated stages to conceptualize, visualize, and finalize any new or modified product. Guidewire believes that using Advanced Product Designer makes the product design process significantly faster than the design processes in earlier PolicyCenter versions. PolicyCenter's rules configuration environment also has some usability enhancements. Workflow can continue to be graphically mapped in Studio's IDE.

In conclusion, PolicyCenter continues to be one of the leading policy administration systems—as evidenced by its upgraded UI, its various usable improvements, and its introduction of the Advanced Product Designer component. PolicyCenter is on a continuing modernization journey, seeing further development and investment, and Celent will follow with great interest.

Overall Functionality

Guidewire Software offers the following modules in the core system application. Guidewire PolicyCenter is available on a stand-alone basis.

| Suite | Availability |
|-------------------------|--|
| Billing | Yes—Separate module available from this vendor |
| Claims | Yes—Separate module available from this vendor |
| CRM | Yes—Separate module available from this vendor |
| Reinsurance | Yes—Integrated into the Policy Admin Module |
| Rating Engine | Yes—Separate module available from this vendor |
| Digital Tools | Yes—Separate module available from this vendor |
| Distribution Management | Yes—Through a formal partnership with another vendor |
| Business intelligence | Yes—Separate module available from this vendor |
| ETL Tools | Yes—Separate module available from this vendor |
| Data Hub | Yes—Separate module available from this vendor |
| Data Warehouse | Yes—Separate module available from this vendor |
| Source: Vendor RFI | |

Overview

Guidewire PolicyCenter enables property and casualty insurers to meet the needs of a rapidly changing industry with more effective underwriting, agile policy and product management, and excellent customer service.

PolicyCenter embodies 10 years of innovation through partnerships with more than 100 property and casualty insurers. Insurers leverage this experience and Guidewire's commitment to gain market-driven innovation in customer service, underwriting decision-making, and policy management.

The figure below shows Guidewire Software's functionality and production status of key features for policy administration and servicing (PAS) systems.

| Table 8: Key Functionality | | | |
|--|---------------|-----------|---------------|
| | In Production | Supported | Not Supported |
| Desktop | | | |
| User Desktop/Workbench | • | | |
| Policy Detail Overview | • | | |
| Can Display Flags and Alerts on Policies | • | | |
| Data Services | | | |
| Upload ACORD App | • | | |
| Integration and Prefill with Third Party Data | • | | |
| Can Upload or Import Data from Excel (e.g. Locations, Drivers) | • | | |
| Documents | | | |
| Includes a Correspondence and Forms Library | • | | |
| Automated Rendering of Forms and Correspondence | • | | |
| Can Attach Documents, Emails, Phone Calls, or Notes | • | | |
| Includes a Content Repository and Document Management | • | | |
| Notes | | | |
| Includes a Notes Facility | • | | |
| Can Search Text within Notes and Diaries | • | | |
| Other | | | |
| eSignature | • | | |
| Consumer Portal | • | | |
| Agent Portal | • | | |

| | In Production | Supported | Not Supported |
|---|---------------|-----------|----------------------|
| Supervisory Tools | | | |
| Escalation Based on Authority | • | | |
| Dashboard to Manage Employee's Workload | • | | |
| Underwriter/Adjuster Assignment | | | |
| Automated Underwriter Assignment | • | | |
| Out of Office/Vacation Rules | • | | |
| Workflow | | | |
| Automatic Task Generation/Workflow | • | | |
| Quote | | | |
| Multiline, Multilocation Rating on a Single Quote or Policy | • | | |
| Supports Nonbinding Quoting (Quick Quote) Functionality That Only Includes Rating/Risk Acceptability Related Questions. | • | | |
| Side by Side Quotes | • | | |
| Underwriting | | | |
| Automated STP Underwriting | • | | |
| Includes Underwriting Analysis Tools—Such as Loss Analysis | • | | |
| Consolidated View of All Policies of a Single Policyholder | • | | |
| Endorsements, Renewals and Other Transactions | | | |
| Supports Automated Cancellations | • | | |
| Handles Out-of-sequence Endorsements | • | | |
| Supports Automated Renewals | • | | |
| Excess, Layers and Reinsurance | | | |
| Can Document the Layer, Coverage, and Limits When Other Insurers Are Also Covering Parts of the Total Exposure | • | | |
| Can Indicate Any Reinsurance Contracts Which Apply | • | | |
| Product Design Tools | | | |
| Base Insurance Product (Templates) | • | | |
| Inheritance of Product and Rating Rules | • | | |

| | | In Production | Supported | Not Supported |
|---|------------------------------|--|-----------------------------------|---------------------|
| Rate Calculations | | | | |
| Supports Complex Rating Algorithms | | • | | |
| Can Use Third Party Data C Real Time as an Input to the Calculation | | • | | |
| If Legal in Your Territory, t System Provides Price Opt Features | | • | | |
| Rating Maintenance | | | | |
| Rate Table Design and Upo Management Tools | date | • | | |
| Testing, Modeling and An Tools | alysis | | | |
| Includes Testing, Modeling Product Analysis Tools | g and | • | | |
| Versioning and Change Co | ontrol | | | |
| Versioning and Update Management | | • | | |
| Expiry Mechanism for Pro- Ensure That Quotes Are U | | • | | |
| Change Control Functions | | | | |
| = Available out of the box | = Configura | | = Under deveroadmap | elopment / On |
| = Configurable using simple tools for business user | = Available third-party solu | with integration to a ution | = Could devel considered custo | • |
| = Configurable using simple tool for IT user | _ | with integration to a lle provided by this vend | _ | le / Not applicable |
| Source: Vendor RFI | | | | |

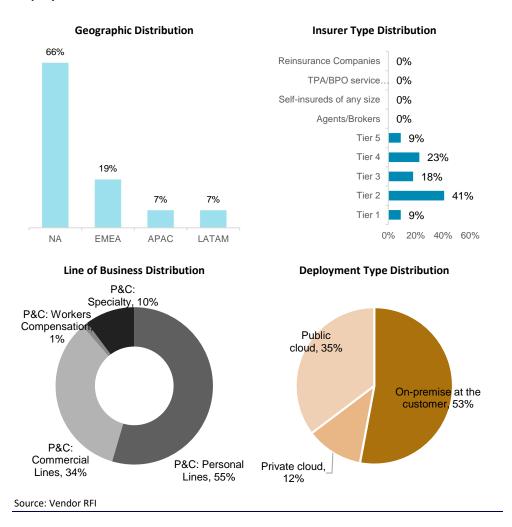
Internationalization

Guidewire Software can support multiple currencies (with USD, GBP, EUR, AUD, CAD, JPY, and RUB currently in production) and multiple languages (with English, French, German, Dutch, Japanese, Spanish, Chinese, Portuguese, Italian, and Russian currently in production).

Customer Base

Guidewire Software has 400 customers globally, 195 of them using PolicyCenter.

Figure 3: Client Base by Geography, Line of Business, Institution Type, and Deployment Mode

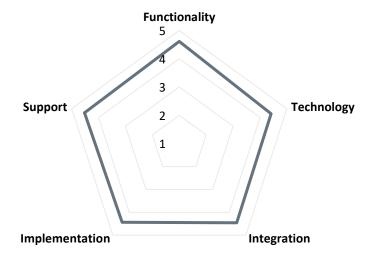


Customer Feedback

Three Guidewire insurance clients provided their feedback about the vendor and its system. One reference uses the system on a private cloud and the two others have implemented the system on premise. One reference client has been using the system for about a year, another one for one to three years, and the last one for more than three years. Two insurers use the system to support a mix of personal and commercial insurance products. The last reference uses the system to administer mostly personal lines.

The following chart shows the average rating provided by the vendor's references in various domains:

Figure 4: Customer Average Rating (1 = Very Poor; 5 = Excellent)



Source: Vendor Customer References

Lines of Business Supported

| P&C Line of Business | Availability in EMEA |
|--|--------------------------------|
| Personal Auto | ✓ |
| Homeowners / Home | ✓ |
| Renters / Contents | ✓ |
| Umbrella | ✓ |
| Commercial Auto | ✓ |
| Commercial Property | ✓ |
| Commercial Liability | ✓ |
| Workers' Compensation | ✓ |
| Medical Professional Liability | Θ |
| Other Professional Liability | ✓ |
| Business Owners Policy (BOP) | ✓ |
| Surety & Fidelity | ✓ |
| Excess Policies | ✓ |
| Directors and Officers Liability | Θ |
| Legend: ✓ = Supported and in production; ⊖= Su × = Not supported purce: Vendor RFI | upported but not in production |

Technology

Guidewire applications are built exclusively for the Java 2 Enterprise Edition (J2EE) platform from a clean-sheet design; they contain no legacy code. Each application runs as a standard three-tier architecture with a web client on the front end, an application server hosting the application, and a database storing the content. Each layer of the application is built using modern, proven technology. The applications run as clustered instances deployed on the J2EE server and connect to the database via standard Java Database Connectivity (JDBC). All application functionality is provided through a web browser interface, making it simple to provision and update the application for internal and external users.

Guidewire's technology core is based on the requirements of Guidewire's customers. Although each insurer is unique, they have a standard set of base requirements that need to be addressed by the technology. Layered on top of the technology core is the base functional content; in this instance, the PolicyCenter application. The final layer is the customer-configured content, which is created using the tools from the technology core.

The underlying technology stack has always been a standard Java Enterprise Edition (Java EE) application server. Each Guidewire application is built and deployed as a Web Application Archive (WAR) or Enterprise Application Archive (EAR) file to the application server. It contains all the configuration, operational data, and data definition files necessary to execute the application. The operational data for the Guidewire application is stored inside a relational database. Only the versions of the underlying databases and application servers have changed to stay current.

The primary UI for business users is a mixture of browser-based and thick clients. The vendor does not have plans to change the framework for the future.

Technology details for Guidewire PolicyCenter are provided in the table below.

| Table 10: Technology Options | | | |
|------------------------------|---|--|--|
| Technology Options | Responses | | |
| Code Base | Java: 86%; GOSU: 13% | | |
| Operating Systems | The system is implemented in Java (JEE). | | |
| | JEE/Java version support: The current release of PolicyCenter (10.0.3) utilizes Java 11. | | |
| | Available operating systems: Unix — Linux; Unix — Other; Windows | | |
| Servers Supported | The system uses/supports Apache Tomcat, JBoss Enterprise Application Platform, IBM WebSphere Application Server, and Oracle WebLogic. | | |
| Databases | Databases available: Microsoft SQL Server and Oracle | | |

| Technology Options | Responses |
|----------------------------|---|
| Integration Methods | Available integration methods: web services, XML, HTML, HTTP, RESTful HTTP style services, JSON format, MQSeries, JMS or similar queue technology, custom APIs, flat files, native messaging, other. |
| | Public API integrations: PolicyCenter's flexible integration platform is integrated with hundreds of third-party systems across their customer base. Google Maps, Facebook, and Bing are common integration points. |
| , | The vendor does provide training for API integrations. |
| Core Code Modifications | Core modifications are the exception to the rule. No modification of the core product has occurred in any Guidewire implementations. Guidewire supports the customer's tailoring and extension of application functionality and behavior via the use of included configuration tooling. Guidewire does not provide access to the source code for the core application. |
| Scalability | Scalability metrics: Guidewire has performed extensive load and stress testing, modeling the demands of high-volume insurers. Current results include successful testing at over twenty million in-force policies and twenty thousand concurrent users. |
| | System performance: PolicyCenter is designed to scale to the needs of the largest property and casualty insurers. The same Guidewire Platform underlies each of the applications in the InsuranceSuite and provides much of the functionality to support scaling to high levels. Clustering logic built into the system enables multiple Guidewire application instances to be joined together to form a cluster, allowing the spreading of load across a greater pool of logical Guidewire application nodes. In addition to the horizontal scaling provided by the integrated clustering, customers can scale vertically via the use of more powerful individual application nodes. Each node in the cluster can be designated to perform specific roles such as UI presentation, batch processing, or third-party messaging, ensuring the applications remain performant for both end users and automated processes. |

| Technology Options | Responses | | |
|-----------------------------|--|--|--|
| Deployment Model | On-premise at the customer; on-premise at a partner, private cloud, public cloud | | |
| | Guidewire PolicyCenter has been architected to operate in the cloud or on-premise. Cloud deployment options include private, public, and hybrid cloud deployments. Guidewire offers PolicyCenter via Guidewire Cloud, a fully managed SaaS offering that is deployed and managed by Guidewire and hosted on Amazon Web Services. Customers can also choose to manage PolicyCenter directly or through a Guidewire partner as a managed service within a system integrator of their choice. | | |
| | The Guidewire Cloud offering is a cloud-based, single vendor solution that combines Guidewire's software products with their implementation and production management services. In this model, Guidewire Software takes program-level ownership and accountability of the initial implementation effort. Upon going live, the Guidewire Cloud Services team handles all operational and application support functions required to care for the production system. This solution allows insurers to focus on the business of insurance and to better manage risk by transferring much of it to Guidewire. | | |
| Public Cloud Options | Microsoft Azure; Amazon Web Services (AWS); Google Cloud Platform (GCP); Alibaba Cloud; Bluemix/IBM Cloud: Oracle Cloud; Salesforce Cloud/Force.com/AppExchange | | |
| Source: Vendor RFI | | | |
| | | | |

Data

Guidewire Software's data model is designed by Guidewire. These models have been designed to support the full policy as well as billing lifecycles with excellent run-time transactional performance and can be easily extended on a per-insurer basis using the included configuration tooling. During an implementation project, insurers are free to map the data to industry models (such as ACORD) for data exchange in integration. PolicyCenter includes out-of-the-box functionality to process an ACORD FNOL XML file to populate into an initial policy.

The PolicyCenter data model is purpose-built to the Guidewire PolicyCenter business case, which currently serves more than 240 P&C insurers. It is built to balance third normal form (3NF) purity and is tuned for accessibility and scale at some of the largest insurers globally. Guidewire contains data model imports for ACORD, ISO, and other industry standard formats. The PolicyCenter data model also allows insurers to extend the system with their own fields, tables, foreign keys, and data structures supported by 3NF relational database platforms to meet their custom needs through their configuration tool, Guidewire Studio. The configuration is maintained in an upgrade safe configuration layer, which allows support for future compatibility.

The database was designed from the ground up for this product. Clients can change the data model via the included Guidewire Studio configuration tool. Customers never modify the application source code for any reason. The data model can be released to the client; can be easily published to a client's data

model; and can map to an intermediate format to share with a client (such as an industry standard).

PolicyCenter is designed to allow customer extension of the application's base data model. Editors within the Guidewire Studio configuration tool enable insurers to extend the base data model, adding new fields to existing entities as well as defining entirely new entities. The data model editor persists the data model descriptions as XML files. The applications read these files during application deployment, and automatically generate and issue any data definition language (DDL) required to update the database schema to reflect the customer-defined data model extensions

Integrations

Guidewire Software provides web services, XML, HTML, HTTP, RESTful HTTP style services, JSON format, MQSeries, JMS or similar queue technology, custom APIs, flat files, native messaging, and others as integration methods. PolicyCenter's integration platform can integrate with any third party system. They recommend a more loosely coupled approach using web services, or specific sets of Guidewire-provided integration APIs.

API is documented. External systems can trigger an event in the system which can be responded to by a workflow or business rules system. API management supports local or global standards such as ACORD application creation and rendering. API sample codes are available to clients. API developer portal is available for support and descriptions. The system allows API publishing in SOAP, REST, JSON, and XML style services as APIs. API version management is available. Access to the APIs is managed and use of APIs tracked by developers. Guidewire Software provides documentation and training for API integrations.

Configuration

Guidewire Software provides specific tools for versioning parts of the configuration/ code.

Guidewire provides testing tools that help evaluate the impact of change. Configuration changes to the application will follow a build, test, and deploy process. Customers typically have multiple test environments in which impact testing can be performed before moving changes to production. Guidewire Studio, built on JetBrains' IntelliJ IDEA software, offers a wide variety of refactoring options to track down and update any configured code reference automatically. Refactoring options such as changing of class signatures; encapsulating fields; or methods, move, migrate, and replace options can be easily accessible using the Refactor context menu within Studio. Additionally, Guidewire provides a merge tool during the upgrade process to highlight files that have been modified by the customer or modified with new content by

Guidewire. A customer then has the option of taking on the latest changes from Guidewire or maintaining their current configuration.

Table 11: Approach to System Changes Approach to System Changes Availability Business Rule Definition Configurable using simple tools targeted for a business user **Data Definition** Configurable using tools targeted for an IT user Table Maintenance, List of Configurable using tools targeted for an IT user Values, etc. Interface Definition Configurable using tools targeted for an IT user Product Definition (Insurance or Configurable using simple tools targeted for a **Banking Products)** business user Role-Based Security, Access Configurable using simple tools targeted for a Control, and Authorizations business user Screen Definition Configurable using tools targeted for an IT user Workflow Definition Configurable using simple tools targeted for a business user Source: Vendor RFI

Security

Guidewire InsuranceSuite Cloud (including PolicyCenter) and Cyence products are ISO 27001 certified. Guidewire has demonstrated that it meets the Payment Card Industry (PCI) standard and has completed AICPA SOC 1 and SOC 2 audits. One-time passwords, flexible user permissioning, out-of-band identification, security tokens/ pins, multifactor authentication, and federated identity support are available as authentication factors for internal and external users.

Each customer has isolations for all their environments enforced at the network, compute, and storage level by a combination of firewalls, software-defined networks, and container technologies. Guidewire Cloud Platform enables end-to-end encryption with TLS 1.2 and all systems are fully hardened. Additional security precautions are taken for DDoS and malware protection. SOC 2-compliant logging and runtime scanning of containers is enabled to find and mitigate vulnerabilities. Guidewire cloud platform systems have encryption at rest, endpoint security, threat intelligence, and cyberattack response services for its operators.

Partnerships

| Table 12: Partnerships | |
|------------------------|---|
| Type of Partnership | Partner Vendor |
| System Integrators | There are currently more than 10,000 system integrator consultants who have been trained on or are experienced in Guidewire applications. |

| Type of Partnership | Partner Vendor |
|--------------------------------------|--|
| Conversion Partners | For a complete listing of partners, please visit https://www.guidewire.com/partnerconnect. |
| Functionality Partners | Their solution partners help drive business value by developing and delivering additional integrations, extensions, and complementary solutions for Guidewire products — Smart Communications, Hyland, OpenText, DocuSign, Mitchell International, Perr&Knight, and FRISS, to name a few. |
| Technology Partners | Guidewire extends their solution footprint by working with third party technology and business advisory companies that complement their solutions and provide significant customer value. They continue to form new partnerships in the technology arena to ensure their customer's ecosystem needs are fulfilled. Furthermore, they have relationships with platform companies like IBM, Microsoft, and Oracle to ensure their technologies are ported and optimized on their infrastructure. They maintain membership in and relationships with standards and industry groups such as ACORD LOMA, ISO, IAIABC, and others. |
| Fintech Partners | Universal Payment, Prelude, and InsurPay |
| Accreditations and Certifications | Guidewire InsuranceSuite Cloud (including PolicyCenter) and Cyence products are ISO 27001 certified. Guidewire has demonstrated that it meets the Payment Card Industry (PCI) standard and has completed AICPA SOC 1 and SOC 2 audits. |
| Source: Vendor RFI | |

Implementation and Support

| Table | 13: | Imp | lementation | and | Support |
|-------|-----|------|-----------------|------|---------|
| Iabic | TJ. | HIID | ieilleillatioii | aliu | JUDDUIL |

| Function | Approach |
|---|---|
| Employees Available / Average Experience Level (years) | Guidewire Software has 758 employees in professional services and 378 in cloud operations and support. |
| Locations of Employees | Guidewire Software has employees across the world with 1,748 employees in the United States and 942 employees internationally. |
| | If implementation resources need to be sourced from different countries, the vendor then applies specific rates by location. |
| Resource Breakdown (vendor, client, system integrator) | Typical implementation team size: 20 to 30 |
| | Vendor: 10% Client: 50% SI: 40% |

| Function | Approach |
|-----------------------------------|---|
| Use of Third Parties | Third party system implementors do most of their implementations. |
| | Conversion options: vendor or third party. |
| Average Time to Implementation | Initial Implementation: 7 to 12 months |
| | 2nd and subsequent LOBs: 4 to 6 months |
| | 2nd and subsequent states/jurisdictions: 4 to 6 months |
| Preferred Implementation Approach | Guidewire uses an Agile methodology approach for rapid configuration and deployment of their products. |
| SLA Availability | Service scope included in base SLA: 24/7 service hours |
| | Services available for additional fee: extended service hours (i.e., beyond 9 a.m. to 5 p.m.) |
| | Features typically included in SLA: incident status updates based on priority level of incident; metrics and reports; ticket prioritization; upgrades |
| | System availability: 96 to 100% |
| Source: Vendor RFI | 5,5tc availability. 50 to 100% |

Pricing

| rm license, enterprise license, subscription-based ense, other pricing models not listed |
|--|
| age-based factors: Confidential |
| er-based factors: Confidential |
| 6 |

| Insurer Scenario | Licensing | Implementation | All Other |
|--|--|--|-----------|
| Average Year 1 Costs | USD \$500,001 to USD \$1 million | USD \$1.01 million to USD \$5 million | 0 |
| Average Year 2 and Beyond Remaining Costs | USD \$500,001 to USD \$1 million | 0 | 0 |

LEVERAGING CELENT'S EXPERTISE

If you found this report valuable, you might consider engaging with Celent for custom analysis and research. Our collective experience and the knowledge we gained while working on this report can help you streamline the creation, refinement, or execution of your strategies.

Support for Financial Institutions

Typical projects we support related to policy administration systems include:

Vendor short listing and selection. We perform discovery specific to you and your business to better understand your unique needs. We then create and administer a custom RFI to selected vendors to assist you in making rapid and accurate vendor choices.

Business practice evaluations. We spend time evaluating your business processes, particularly in policy administration, rating, and claims. Based on our knowledge of the market, we identify potential process or technology constraints and provide clear insights that will help you implement industry best practices.

IT and business strategy creation. We collect perspectives from your executive team, your front line business and IT staff, and your customers. We then analyze your current position, institutional capabilities, and technology against your goals. If necessary, we help you reformulate your technology and business plans to address short-term and long-term needs.

Support for Vendors

We provide services that help you refine your product and service offerings. Examples include:

Product and service strategy evaluation. We help you assess your market position in terms of functionality, technology, and services. Our strategy workshops will help you target the right customers and map your offerings to their needs.

Market messaging and collateral review. Based on our extensive experience with your potential clients, we assess your marketing and sales materials—including your website and any collateral.

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<u>Claims Systems Vendors: Asia Pacific (APAC) Property & Casualty 2020 Edition</u>
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Billing as a Service for Property Casualty Insurers: A Primer

June 2020

Insurance Claims Payments as a Service: A Primer

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Policy Administration Systems: North America Property Casualty Edition

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<u>Claims Systems Vendors: North American Property Casualty Insurance, 2020</u> Edition

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July 2018

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For more information please contact info@celent.com or:

Craig Beattie cbeattie@celent.com

| Asia-Pacific |
|--------------|
| |

USA

99 High Street, 32nd Floor Boston, MA 02110-2320

+1.617.262.3120

Switzerland

Tessinerplatz 5 Zurich 8027

+41.44.5533.333

Japan

The Imperial Hotel Tower, 13th Floor 1-1-1 Uchisaiwai-cho Chiyoda-ku, Tokyo 100-0011

+81.3.3500.3023

USA

1166 Avenue of the Americas New York, NY 10036

+1.212.345.3960

France

1 Rue Euler Paris 75008

+33 1 45 02 30 00

Hong Kong

Unit 04, 9th Floor Central Plaza 18 Harbour Road Wanchai

+852 2301 7500

USA

Four Embarcadero Center Suite 1100 San Francisco, CA 94111

+1.415.743.7960

Italy

Galleria San Babila 4B Milan 20122

+39.02.305.771

Brazil

Av. Dr. Chucri Zaidan, 920 Market Place Tower I - 4° Andar Sao Paulo SP 04583-905

+55 11 5501 1100

United Kingdom

55 Baker Street London W1U 8EW

+44.20.7333.8333