

# CELENT

## P&C CLAIMS SYSTEMS VENDORS IN EMEA

2021 EDITION

Craig Beattie  
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This reprint was prepared specifically for Guidewire, but the analysis presented has not been changed from that presented in the full report. For more information on the full report, please contact Celent at [info@celent.com](mailto:info@celent.com).

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# EXECUTIVE SUMMARY

Claims administration is an essential part of the insurance promise: to cover you in the event of a loss. Indemnity, which is the financial side of this equation, is of extreme importance, so traditionally claims admin systems have focused on this aspect. More recently, claims administration has incorporated the relational aspect of the equation—which starts with the customer but goes beyond to include the entire ecosystem involved in the claim transaction.

Moreover, claims administration systems should evolve to take advantage of data, including information gathered through the Internet of Things (IoT), and how it can help with prevention, risk management, and customer service. While these aspects are not yet included out of the box in claims administration systems, at least two vendors are already working on using the power of IoT data as an additional offering.




The final objective is for insurers to look at a claims administration system as a mechanism to solve the entire equation and fulfill the insurance promise with agility, accuracy, and timeliness. To ensure this happens, Celent believes technology must serve as a strategic enabler in the management of this important function.

To that end, this report is targeted at insurers looking to improve the efficiency of their claims management processes through technology.

This report provides an overview of the claims administration systems available in the EMEA region for property and casualty (P&C) insurance. The report profiles 20 core claims solutions and provides an overview of their functionality, customer base, lines of business supported, technology, implementation, pricing, and support.

The awards in this report are awarded as follows:

Table 1: 2021 XCelent Awards

Award	Vendor
 <b>XCELENT Functionality 2021</b>	Guidewire: ClaimCenter
 <b>XCELENT Customer Base 2021</b>	Guidewire: ClaimCenter
 <b>XCELENT Service 2021</b>	Guidewire: ClaimCenter

Source: Celent

The report was most recently updated on the 8<sup>th</sup> May 2021, the chart in Figure 2: Advanced Technology and Breadth of Functionality – was updated as a result. More details are given on page 12.

## INTRODUCTION

This report is part of a series on claims administration systems in North America, Latin America, EMEA, and Asia-Pacific. It profiles the majority of the P&C claims administration systems available in the EMEA region today.

This report should help insurers in defining their core systems requirements and, where appropriate, creating a short list of vendors for evaluation. Expanded claims functionality and improved technology mean that insurers continue to have a wide spectrum of systems and vendors to consider when seeking a solution to fit their needs. Insurers should leverage their access to the author through analyst access to learn more about the vendors.

# CORE CLAIMS SYSTEMS: DEFINITION AND FUNCTIONALITY

## DEFINITION

A core claims system is a transaction-enabled system of record that an adjuster or claims handler (or an automated process) uses to do the following:

- Gather and process information regarding the underlying policy and coverages, the claim, and the claimant.
- Evaluate and analyze the circumstances of the claim.
- Make decisions and take actions, including payment.
- Execute transactions and preserve a record.

A core claims system performs these actions over the entire life cycle of a claim: from first notice of loss through final settlement and closing the active claim file. A claims system typically integrates with policy administration systems to support coverage verification and to provide information back to the underwriter for ongoing decision-making. It integrates to a general ledger and often to a disbursement solution. Claims systems that do not include document creation, document management, reinsurance, and reporting typically integrate with those systems. Additionally, claims systems may integrate with a CRM solution, a variety of third party data services, and a wide variety of additional third party applications to support capabilities such as estimations, bill review, and sophisticated analytics. There is increasing interest in providing claim information back to the policy record for use in underwriting renewals.

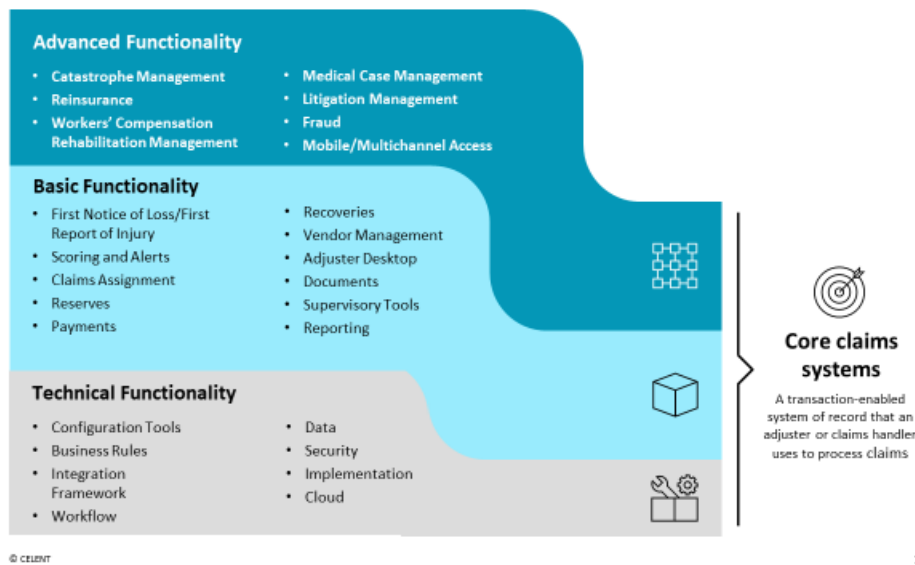
For the purpose of analyzing solutions, Celent makes the distinction between basic, advanced, and technical functionality, as explained below.

## BASIC FUNCTIONALITY

All modern core claims systems provide basic functionality for the most standard tasks performed by an adjuster.

Figure 1: Core Claims Systems

### CORE CLAIMS SYSTEMS



Source: Celent

**First Notice of Loss/First Report of Injury (FNOL/FROI):** This is the start of the claims process. The solution typically has a data input mechanism to gather information about the claim. Many solutions provide dynamic questions which allow for a more streamlined approach to the user interface by presenting questions only when they are needed. Some solutions provide a sidebar or overlay that includes a script for a claims intake representative to help guide a consistent claims experience. Many solutions can extend the FNOL intake mechanism to a portal with a simplified interface for a claimant. Some also provide mobile intake mechanisms. Integration with a policy administration system allows some coverage verification to occur during the FNOL/FROI. Some solutions use this integration to prefill information for the FNOL/FROI. Some claims solutions allow an insurer to open a claim without a policy in force, while others require the policy to be in force.

**Scoring and Alerts:** Many solutions can handle some type of scoring in the background. Some do this by explicitly identifying claims characteristics and assigning points. When the total points exceed a certain threshold, an alert is created. Alerts are typically used when some kind of special handling is needed, either because of potential fraud or due to the complexity of the claim. This scoring mechanism is often a key aspect of an insurer's operationalization of a predictive model. Solutions that do not have explicit scoring mechanisms can often reach a similar capability by using business rules.

**Claims Assignment:** While many insurers still assign claims manually, more insurers are looking for automated support in the assignment process. Solutions handle claims assignment in a variety of ways. Look for claims assigned using a round-robin capability or assigned to specific individuals. Some solutions can assign a claim granularly based on line of business, claim complexity, geography, and workload. Most systems allow multiple adjusters to be assigned to work on a single claim, handling different suffixes or subclaims. Insurers also look for capabilities for manual assignment or reassignment for both bulk transactions and single claims or suffixes/subclaims.

**Reserves:** All claims solutions provide the capability for setting and changing reserves. Areas of variation include the level of granularity and hierarchy of reserve setting. Typically, those that provide limited levels of reserves do provide more granularity for the actual payments, allowing insurers to analyze spending. Some systems allow automatic reserve setting. Most solutions that support automatic reserves do so using a table. An insurer can pre-identify certain claim types and populate a table with the reserve type and amount. Some solutions can calculate a reserve dynamically using business rules based on specific claim characteristics. Look for the ability to not only change the total reserve amount but also add a specific reserve change amount (e.g., either add \$5,000 to the current reserve or change the total reserve to \$25,000). Some solutions do a nice job of aggregate tracking to monitor the erosion of policy limits. Many, but not all, also include deductible tracking for both small deductibles and self-insured retentions. For workers' compensation, look for tools that tie reserves to jurisdictional rate and wage calculations. Some solutions include reserve worksheets that assist adjusters in calculating the appropriate reserve.

**Payments:** All claims solutions can create payments; however, there is a wide variation in the functionality across solutions. Typically, the payment functionality includes an authority verification, confirmation against reserve limits, and integration to a third party payments module to print checks. Some are tightly linked to the reserve process and allow reserves to be changed at the same time the payment is being made. Others require that the adjuster exit the payment process, increase the reserve, and then return to issue the payment. Many, but not all, solutions support split payments, multiparty payments, and recurring payments. Those with recurring payments may allow temporary payment suspension, making it easy to change payment dates, and automatically run holiday calculations. Some solutions allow bulk payments if that preference is specified at the vendor level. Others handle bulk payments by requiring that each payment be manually marked as bulk. Some solutions allow payments, such as expenses, to be made against closed claims, while others do not support this functionality.

**Recoveries:** Subrogation and salvage are functions performed by all insurers. However, there is wide variation in how software solutions handle these functions. Some solutions have specific modules with separate workspaces, workflows, calendaring, and even analytical tools to help score and evaluate demand strategies and percentage at fault. Other solutions assume the insurer will set up subrogation as a separate set of workflows within the existing functionality. Some solutions permit reserving for recoveries, while others allow the insurer to set up an expected recovery without hitting the reserves. Some solutions lack all of these capabilities.

**Vendor Management:** All solutions allow insurers to track contact information for vendors, and most also track banking information and tax-related data. Some solutions also include scoring mechanisms to rate and rank vendors. Some include integration to vendor scheduling tools to allow a claims intake coordinator to identify nearby vendors and schedule services at the time of FNOL. Other solutions include ready-made portals through which vendors can manage their own information, and some allow vendors to manage their own payments.

**Adjuster Desktop:** A wide variety of tools are available to help the adjuster manage their workload. Adjuster desktops typically include an area where open claims and 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 adjusters to create manual diaries, tasks, and notes. Many are integrated with email, allowing an adjuster to send an email from the desktop. Many also include a claim summary that contains the most important information about a claim and is available at a glance from any location within the claim. Some solutions allow the adjuster to customize their own workspace by 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 adjuster easily navigate through the task.

**Document Creation and Management:** Most of the solutions include some sort of correspondence or forms library for the most common letters and forms. Some also contain document management capability for storing internally generated documents as well as external documents such as photos, videos, and other media. Some integrate with third party solutions to provide additional capabilities. Many systems can automatically generate correspondence or forms using business rules and task-generation capabilities. When an event occurs, or the data within a field changes, the solution can automatically create correspondence that can often be delivered using a variety of mechanisms including mail, email, and SMS. A key item to consider is the level of granularity in indexing forms being created. When a claim file holds hundreds of items, being able to rapidly sort to find the document needed can save time. Consider not only the ability to search metadata about the document, but also the ability to search within the document.

**Supervisory Management Tools:** Claims supervisors look for a variety of capabilities to effectively manage the claims department. Some solutions allow for easy reassignment of work, including individual tasks, individual claims, and bulk changes. Look for the date-driven capabilities that allow a supervisor to preschedule these changes, as some solutions only permit immediate changes. Some solutions allow for temporary reassignments with start and finish dates for events such as vacations. Consider the ability to easily add new employees and to set and manage authority. Also look for automated escalation procedures to route claims easily when additional authority is needed. Workload balancing tools are built into the claim assignment routines for some solutions. For others, reports allow supervisors to get a picture of employees' workloads and key performance indicators. Most solutions include data and timestamps for logging audit trails.

**Reporting:** Reporting capabilities vary widely across solutions. Virtually all solutions integrate with a third party reporting tool; some include this tool out of the box. Some solutions use open-source reporting tools, and some have in-house solutions. 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. 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 drill-down capabilities. Some vendors also provide tools for directing claim data to data stores (typically at an additional cost).

## ADVANCED FUNCTIONALITY

In addition to the basic functionality provided by virtually all solutions, insurers often need advanced functionality depending on the complexity of their business and the lines of business or geographies they write.



**Catastrophe Management:** All insurers are vulnerable to a wide variety of catastrophes. Varying levels of support are available. Some solutions support cat management by running reports to identify claims that are likely to be part of a catastrophe. Some support manual tagging of a claim as a cat claim. Other solutions automate the process by allowing insurers to define catastrophes by peril(s), LOB(s), geography, date, or other criteria. The solution can then automatically tag claims that meet those criteria as potential cat claims. Some have geographic mapping of the claim available, typically through integration with Google or Bing maps.

**Reinsurance:** Like catastrophe management, systems handle reinsurance in a variety of ways. Most assume the insurer will run a report identifying claims subject to reinsurance by specifying a limit or peril. Some allow an adjuster to mark a claim as subject to reinsurance. Occasionally, a solution will provide more ability to define reinsurance contracts and identify claims subject to reinsurance. Tasks related to managing reinsurance, such as notifications and required communications at certain points in a claim, can be handled using business rules and task generation.

**Workers' Compensation Rehabilitation Management:** Functionality specific to workers' compensation is not available in every solution. Those that handle workers' compensation are more likely to have modules to manage the return to work and rehabilitation programs. These solutions may include features such as the ability to calculate recovery dates as well as integration with industry-standard duration guidelines and templates for return-to-work plans, including three-point contact.

**Medical Case Management:** Systems that handle workers' compensation are more likely to have robust medical case management tools with features such as diagnosis tracking, medical records, and the ability to create treatment or action plans. Some allow external parties such as nurse case managers to access the claim. Some feature capabilities such as utilization management, service authorization tools, and bill review—or integration with an insurer's managed care networks (for medical, rehabilitation, drugs, etc.) and bill review solutions. Solutions that do not specialize in workers' compensation may still capture injury and medical treatment details. Many support ICD9 and ICD10. CMS reporting is also included in several solutions.

**Litigation Management:** Most solutions offer the ability to mark claims that are in litigation. Some solutions also offer specific litigation management modules, which may include a separate workspace with a separate set of roles and permissions. These modules can be quite robust, with the ability to keep a record of the litigation process, statutory dates, venues, demands and offers, and even calculation of potential outcomes. Other key litigation features to look for include the ability to configure separate workflows and separate permissions and roles as well as the ability to easily index large numbers of documents. Some solutions also include bill review tools that allow the insurer to electronically receive, review, modify, and pay legal invoices.

**Fraud:** Few solutions have robust fraud analytic tools built in, although most can integrate with third party solutions. Generally, claims systems handle fraud by using scoring mechanisms, automated alerts, and workflow processing that can route claims to a special investigation unit.

**Mobile/Multichannel Access:** Almost all solutions are browser-based and available via a tablet or mobile device for an adjuster in the field. A growing number of them have been optimized for mobile devices using HTML5 or responsive design. Many solutions include some level of role-based security that allows separate access and modified user interfaces to be exposed via a portal to an agent or claimant. Some solutions come with mobile applications out of the box that allow a potential claimant to provide their FNOL through simplified interview questions or wizards and the ability to upload photos.

## TECHNICAL FUNCTIONALITY

While the assessment of features and functionality is a critical step in selecting a claims system, several technical aspects must be considered as well.

**Configuration Tools:** A general trend in insurance software is to create tools that allow insurers to modify the system through configuration tools rather than through code. The most robust tools allow insurers 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. Many vendors are moving toward a dual development environment with simplified tools and wizards meant for BAs to make general changes and a more robust environment for technical staff to utilize.

**Business Rules:** Look for the ability to design and execute rules that are separate from the core program code. Insurers should also assess the ability to reuse and share rules. Some solutions include a searchable and version-controlled rules repository. A few solutions offer tools to help insurers conduct impact analysis of the rules or traceability tools to understand how and when rules are being used.

**Integration:** Claims systems integrate with a large number 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 with the most common third party data sources and the most common document systems. Claims systems, however, integrate with a wide variety of other solution types—medical bill review, fraud analytics, EDI, estimations, and payment systems, to name a few. With the rise of insurtech, new data platforms and fast integration capability will be deciding factors in insurers' agility.

**Workflow:** Some solutions serve more as data capture tools. Workflow is simulated with screen flow. Other solutions have true workflow capabilities that allow them to automatically generate and assign tasks based on event changes in a claim, time lapse, or data changes in a field. Some of the solutions profiled can 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 insurer 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.

**Data:** Data is becoming more important for insurers, and software vendors are acknowledging this by building in more tools to help insurers with their 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 modify 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 extract, transform and load (ETL) tools.

**Security:** Security is becoming increasingly important to insurers. Check the security standards a vendor complies with and which certification and assurance methods are used. Consider how the system handles security for managing APIs for application-level integration. Any claim system's payment functionality should be PCI compliant. Look at which authentication capabilities the system leverages for internal and external users. A broad range of capabilities are available, including one-time passwords, security tokens/PINS, multifactor authentication, federated identity support, and even biometric

security support. With regards to cybersecurity, look for whether the software has penetration security and how the system has been tested.

**Implementation:** Vendors use a wide variety of implementation methodologies. Some prefer to handle all the implementation themselves. Others prefer to work with third party system integrators. More vendors are moving to Agile or a hybrid methodology. Look to see what methodology the vendor uses and how it aligns with your own preferred approach. Some vendors are very good at helping insurers transition to an Agile methodology. Look for the artifacts they have available for gathering requirements, documenting product architecture, and capturing business rules. Vendors claiming very fast implementation time frames 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 insurers 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. The term “cloud” can refer to many different approaches. Most vendors offer a cloud-hosted version of their software. The software is licensed by the insurer and hosted by the vendor in their own data center, in a private data center like Rackspace, or in a public cloud environment like AWS, Azure or Google Cloud. Look for the level of managed services available if you are interested in this option.

## SUITE CAPABILITIES

Celent has limited the definition of a claims admin system to include a set of core processes and key supporting capabilities. However, vendors do not necessarily limit their definitions 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-class claims system to work with other core systems already installed, but others may be looking for a vendor that 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 claims system. This is not a contradiction. A vendor might bundle a component with their claims admin system (e.g., BI and reporting), but also consider it (and 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 ISV partnership with a different vendor to provide an advanced solution (e.g., document creation).

To help insurers compare the different solutions, each profile in this report has a table summarizing whether the vendor offers one or more of the end-to-end components listed in Table 1, 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 claims 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 distinct module available that has been integrated with the claims administration system.

Table 2: Suite Components

SUITE	AVAILABILITY
POLICY ADMINISTRATION	The system of record for all policies that an insurance company has written. At this most basic level, a policy administration system (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 includes the complete history of the policy through renewal, termination, cancellation, and/or reinstatement.
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 account and provides utilities that streamline customer communication and data management. These solutions typically include lead management and campaign management as well as customer demographics tracking.
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 will typically 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, chatbots, 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, including incentive compensation.
BUSINESS INTELLIGENCE	Designing, storing, and accessing reports ranging from simple lists to multidimensional calculated variables. In general, reports are used by various insurer staff and all levels of management to monitor activities. Tools generally allow standard reports with scheduling tools and ad hoc reporting.

SUITE	AVAILABILITY
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 these sources into a single database, data mart, or data warehouse for reporting, analysis, and data synchronization.
DATA HUB	A data hub is a centralized service that connects an insurer's IT system, including core systems, IoT devices, web applications, 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

## APPROACH

To analyze the capabilities of claims administration solutions that are active in the insurance marketplace, Celent invited software vendors with these solutions to respond to a detailed request for information (RFI). There was no cost for vendors to participate. The RFI sought information about the features provided in the solution, the technology and architecture, the current client base, the pricing models, and the vendor itself. Vendors had an opportunity to review their profiles in this report for factual accuracy. Some of the vendors profiled are Celent clients, and some are not. All vendor information is presented objectively, regardless of Celent's relationships.

## ABOUT THE PROFILES

Each profile is structured the same way, presenting information about the vendor and its claims offerings, geographic presence, and client base. Charts provide more detailed information about specific features such as lines of business supported, technology, and partnerships.

The profiles are presented in alphabetical order.

## LIMITATIONS

Celent believes that this study provides valuable insights into current offerings in claims solutions. However, readers are encouraged to consider these results in the following context. The vendor information is self-reported. Participants were asked to indicate which claims capabilities are provided and to include 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 participants.

The initial data collection commenced in late 2019 and the vendors have had the opportunity to update the information in here since that initial outreach.

## UPDATES

The report was updated on the 28<sup>th</sup> April 2021 to correct some typos in the introductory text.

Due to delays in completion of the report, the technology and configuration sections for Guidewire ClaimCenter were outdated and did not reflect the most recent version of the software. On the 8<sup>th</sup> May 2021 the ABCD charts and these sections were updated to reflect the investment in Cloud and configuration in the latest release.

# CELENT'S ABCD VENDOR VIEW

## XCELENT Awards 2021

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:

- A**dvanced and agile technology
- B**readth of functionality
- C**ustomer base (i.e., relative number of customers)
- D**epth of customer services

The Celent Vendor View shows relative positions of each solution evaluated, see Figure 2 and Figure 3. 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 the ABCD categories slightly differently. For this report, some of the factors used to evaluate each vendor are listed in Table 3. 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 3: Examples of Possible Factors Used in Celent's ABCD Claims System

ABCD CATEGORIES	POSSIBLE FACTORS
ADVANCED TECHNOLOGY (AND FLEXIBLE TECHNOLOGY)	<ul style="list-style-type: none"> <li>Platform and modernity (code base, platform, databases, localization capabilities, etc.)</li> <li>UI (ease of use, mobility)</li> <li>Data and adaptability/extendibility (openness of application, code base, data model, etc.)</li> <li>Integration (web services, APIs, reference comments)</li> <li>Scalability and cloud (cloud readiness, largest installations, etc.)</li> <li>Ease of change (change tooling, debugging capabilities, etc.)</li> </ul>
BREADTH OF FUNCTIONALITY	<ul style="list-style-type: none"> <li>Functions and features provided in base offering</li> <li>In-production lines of business and number of deployments for each</li> <li>Countries where the system is live</li> <li>User experience</li> </ul>
CUSTOMER BASE	<ul style="list-style-type: none"> <li>Number of live insurers using the system for personal, commercial, or specialty lines of business</li> <li>New client momentum</li> </ul>
DEPTH OF CUSTOMER SERVICE	<ul style="list-style-type: none"> <li>Size of professional services and support team in region</li> <li>Insurers' post-implementation experiences</li> </ul>

Source: Celent

## THE AWARDS

Within this framework, the top performers in each ABCD dimension receive a corresponding **X**CELENT Award:


- **X**CELENT **Technology** for the leading Advanced Technology score
- **X**CELENT **Functionality** for the leading Breadth of Functionality score
- **X**CELENT **Customer Base** for the leading Customer Base score
- **X**CELENT **Service** for the leading Depth of Customer Service score



## TECHNOLOGY AND FUNCTIONALITY AWARDS

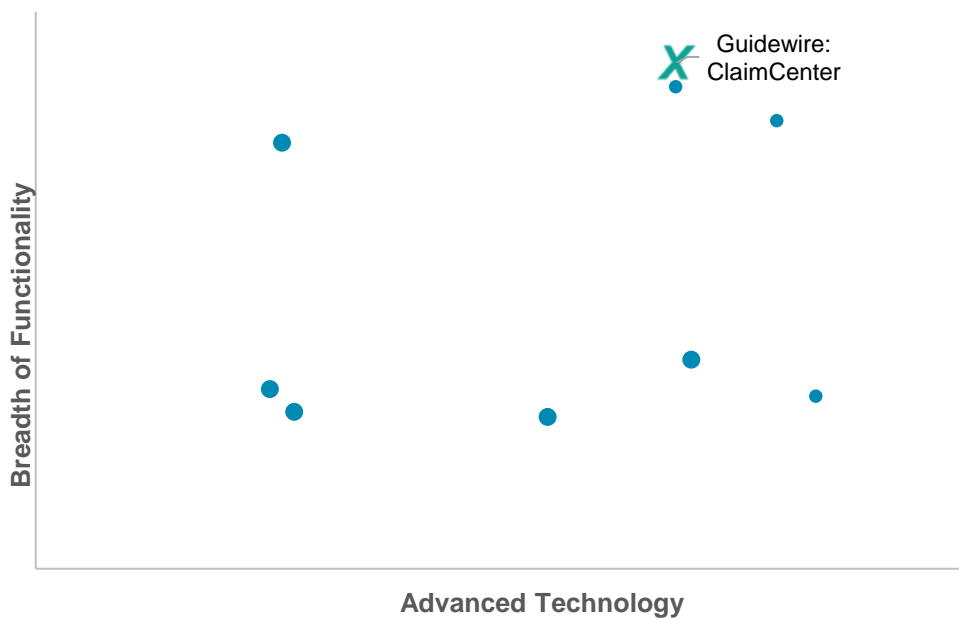
Figure 2 positions each vendor along two dimensions: the vertical axis displaying the relative rankings for Breadth of Functionality and the horizontal axis showing relative Advanced Technology rankings.

Table 4: Award Winners

Award	Vendor
	Guidewire: ClaimCenter

Source: Celent

Figure 2: Advanced Technology and Breadth of Functionality



Source: Celent

In this report the evaluation favoured technology solutions that could be installed on premise or on the cloud, and made good use of cloud capabilities. This did not favour solutions not leveraging public cloud infrastructure, or those that are deployed solely in the cloud.

In terms of functionality, there are clearly two groups in the chart with the current evaluation favouring solutions that have demonstrated broad functionality in many countries in EMEA. Those with lower scores here are still strong claims solutions but are typically less widely deployed.

## CUSTOMER BASE AND SERVICE AWARDS

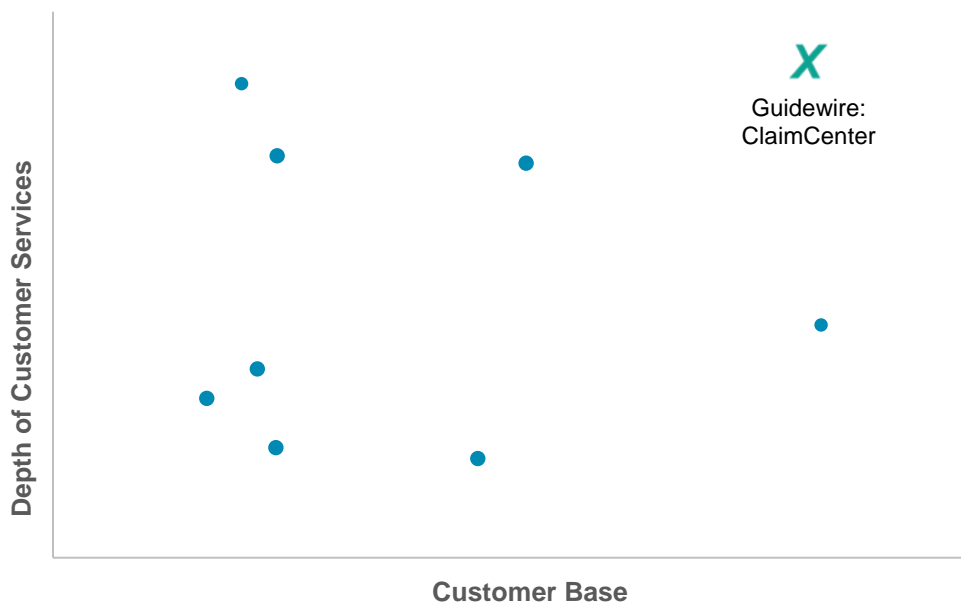
Figure 3 positions each vendor along two dimensions: the vertical axis displaying the relative level of Depth of Customer Service and the horizontal axis displaying the relative Customer Base.

Table 5: Award Winners

Award	Vendor
<b>X</b> CELENT Customer Base 2021	Guidewire: ClaimCenter
<b>X</b> CELENT Service 2021	Guidewire: ClaimCenter

Source: Celent

Figure 3: Customer Base and Depth of Customer Service



Source: Celent

The depth of customer service scale here shows a clear distinction between larger vendors with established partnership programs and smaller vendors. It should be noted that to appear in the chart the vendors have to demonstrate delivered projects for their clients.

## VENDOR PROFILES

Each profile 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. These terms are defined as:

- Very small insurers (tier five) have under US\$100 million in annual premiums
- Small (tier four) have US\$100 million to \$499 million
- Medium (tier three) have US\$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 CLAIMCENTER

## **X**CELENT Functionality 2021

## **X**CELENT Customer Base 2021

## **X**CELENT Service 2021

### COMPANY

Guidewire Software has sales and professional services personnel located throughout the world. The company has approximately 2,355 employees, of which 814 are available to provide professional services / client support for their Guidewire ClaimCenter solution.

Regarding ongoing commitment to the solution, Guidewire invests substantial effort and resources to continually track and anticipate changing customer needs and wants, as well as the broader dynamics of the P&C insurance industry and technologies. The product development, strategy, and user experience functions are responsible for identifying key trends within the insurance industry.

Every year, Guidewire product development engages in a series of structured and unstructured programs to capture trends and insights about the industry. These include the Guidewire Strategic Advisory Council; annual Executive Symposiums; Customer Advisory Groups (run by Guidewire and focused on individual product areas); regional- and market-specific User Groups (run by Guidewire customers, but also attended by Guidewire employees); Guidewire Strategy Days; and numerous 1:1 meetings with Guidewire customers around the world.

The Guidewire strategy team has a mandate to engage with insurers and insurtech vendors to identify valuable industry solutions and connect them to the Guidewire ecosystem. Guidewire product development uses this input to help cultivate its near- and long-term product vision, design impactful value propositions for the industry, and identify key enhancements to incorporate into future product releases.

Guidewire has identified several significant industry trends that will affect insurers' expectations of claims systems in the future. The most notable trends are:

- Engage – Enable digital transformation and deliver service excellence
- Innovate – Empower business users and harness open ecosystem
- Grow Efficiently – Reduce IT complexity and drive process improvements
- Intelligent Claims Automation and Analytic Insights

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

Guidewire offers an annual global user conference or customer event. In addition, Guidewire hosts an annual user and customer conference dedicated to the EMEA region.

Table 6: Company Snapshot

YEAR FOUNDED	2001
NUMBER OF EMPLOYEES	2,355
REVENUES	Please refer to Guidewire's Investor Relations site for all available financial information: <a href="http://ir.guidewire.com/phoenix.zhtml?c=248177&amp;p=irol-IRHome">http://ir.guidewire.com/phoenix.zhtml?c=248177&amp;p=irol-IRHome</a>
FINANCIAL STRUCTURE	Public company

Source: Vendor RFI

Table 7: Product Snapshot

NAME	Guidewire ClaimCenter																														
YEAR ORIGINALLY RELEASED / DEPLOYED	2003 / 2004																														
CURRENT RELEASE AND DATE OF RELEASE	Banff (November 2020)																														
UPGRADES	Client can skip multiple versions (e.g., go directly from version 4.0 to version 7.0)  The vendor supports current versions and more than two prior (but not all) versions																														
TARGET MARKET	Mid to large size Property & Casualty insurers; personal & commercial lines of business including Workers Comp.																														
INSTALLED BASE (IN PRODUCTION CUSTOMERS)	<table border="0"> <tr> <td colspan="2"><u>EMEA:</u></td> </tr> <tr> <td>United Kingdom:</td> <td>15</td> </tr> <tr> <td>France:</td> <td>6</td> </tr> <tr> <td>Germany:</td> <td>5</td> </tr> <tr> <td>Belgium:</td> <td>4</td> </tr> <tr> <td>Italy:</td> <td>3</td> </tr> <tr> <td>Poland:</td> <td>2</td> </tr> <tr> <td>Russia:</td> <td>2</td> </tr> <tr> <td>Denmark:</td> <td>1</td> </tr> <tr> <td>Finland:</td> <td>1</td> </tr> <tr> <td>Morocco:</td> <td>1</td> </tr> <tr> <td>Switzerland:</td> <td>1</td> </tr> <tr> <td><u>North America:</u></td> <td>122</td> </tr> <tr> <td><u>APAC:</u></td> <td>32</td> </tr> <tr> <td><u>LATAM:</u></td> <td>12</td> </tr> </table>	<u>EMEA:</u>		United Kingdom:	15	France:	6	Germany:	5	Belgium:	4	Italy:	3	Poland:	2	Russia:	2	Denmark:	1	Finland:	1	Morocco:	1	Switzerland:	1	<u>North America:</u>	122	<u>APAC:</u>	32	<u>LATAM:</u>	12
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NEW CLIENTS SINCE JANUARY 2018	<table border="0"> <tr> <td colspan="2"><u>EMEA:</u></td> </tr> <tr> <td>France:</td> <td>4</td> </tr> <tr> <td>Germany:</td> <td>3</td> </tr> <tr> <td>United Kingdom:</td> <td>3</td> </tr> <tr> <td>Denmark:</td> <td>2</td> </tr> <tr> <td>Italy:</td> <td>2</td> </tr> <tr> <td>South Africa:</td> <td>2</td> </tr> <tr> <td>Spain:</td> <td>1</td> </tr> <tr> <td><u>North America:</u></td> <td>34</td> </tr> <tr> <td><u>APAC:</u></td> <td>8</td> </tr> <tr> <td><u>LATAM:</u></td> <td>1</td> </tr> </table>	<u>EMEA:</u>		France:	4	Germany:	3	United Kingdom:	3	Denmark:	2	Italy:	2	South Africa:	2	Spain:	1	<u>North America:</u>	34	<u>APAC:</u>	8	<u>LATAM:</u>	1								
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<u>LATAM:</u>	1																														

<b>NOTABLE CLIENTS</b>	AXA (multiple countries), RSA, Aviva UK, Zurich Group, Tryg, PZU
<b>REVENUE FROM PRODUCT/SERVICE</b>	Please refer to Guidewire's Investor Relations site for all available financial information: <a href="http://ir.guidewire.com/phoenix.zhtml?c=248177&amp;p=irol-IRHome">http://ir.guidewire.com/phoenix.zhtml?c=248177&amp;p=irol-IRHome</a>
<b>FTEs PROVIDING PROFESSIONAL SERVICES FOR PRODUCT</b>	814 are available to provide professional services / client support for their Guidewire ClaimCenter solution.
<b>USER CONFERENCES / PRODUCT WORKING GROUPS</b>	Guidewire offers an annual global user conference or customer event. In addition, Guidewire hosts an annual user and customer conference dedicated to the EMEA region.

Source: Vendor RFI

## CELENT OPINION

Guidewire ClaimCenter continues to be a popular and capable solution across EMEA with implementations in insurers in Europe—often at the heart of the region's most complex claims transformation efforts. Guidewire has continued to grow its impressive install base in Europe.

ClaimCenter's Aspen and Banff releases move ClaimCenter much further towards Guidewire's cloud vision, which already made headway in the prior version of the software. Guidewire demonstrated their claims functionality as well as their investments in digital engagement, embedded analytics, and their partner ecosystem.

Guidewire showed demos involving the digital interface for producers, as well as a chatbot UI from a partner in the Guidewire Marketplace. These are modern, digital, and well tailored for the use cases presented. The ClaimCenter interface will be familiar to those who have seen the solution before, and it now also benefits from an integrated predictive analytics view that is available to the claims adjuster.

ClaimCenter now includes a business rules configuration feature that taps into the underlying data model. Given the parameters of a specific claim, ClaimCenter can generate a set of planned activities for an adjuster to follow and for a manager to monitor. ClaimCenter's Aspen release represents a significant update in configurability and adaptability of the solution. The investment in the API increases the possibility for further adaptability.

The key story with the release of Aspen is the step change in how InsuranceSuite will be delivered to customers. In addition to the cloud investment and the push towards Guidewire Cloud services, there is the increased cadence of releases—perhaps the greatest change to ClaimCenter in its lifetime. The impact is seen in the changes outlined in this profile.

ClaimCenter has one of the largest install bases of insurers in Europe, with 41 clients in 11 countries. The 16 new clients in the period is also impressive. Overall, ClaimCenter remains the strongest performing claims system in the European market, and now has two customers in South Africa.

## OVERALL FUNCTIONALITY

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

Table 8: Component Availability

SUITE	AVAILABILITY
POLICY ADMINISTRATION	Yes - Separate Module available from this vendor
BILLING	Yes - Separate Module available from this vendor
CRM	Yes - Separate Module available from this vendor
REINSURANCE	Yes - Separate Module available from this vendor
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

Guidewire offered the following observations:

ClaimCenter provides the rich functional depth required to address the entire claims life cycle quickly and confidently. From faster closing times to automated workflows, predictive analytics that drive decisions, digital engagement, and an ecosystem of partners and insurtechs, ClaimCenter brings together core claims functionality and a progressive approach for future-proof management. The result is a solution that can meet the ever-evolving demands of your business, your customers, and the insurance industry at scale.

- Optimize and outperform
  - Reduce cycle times by optimizing talent, processes, and resources.
- Be customer-centric
  - Deliver trust by putting your customer at the center of every experience.
- Embrace innovation
  - Accelerate the adoption of new and emerging technology.

**Error! Reference source not found.** shows Guidewire Software's functionality and production status of key features for claims administration systems.

Figure 4: Key Functionality

Function	In Production with Clients	Supported but Not in Production with Clients	Not Supported
<b>Desktop</b>			
User desktop / workbench	●		
Claims overview	●		
<b>Data Services</b>			
Upload ACORD or FNOL	●		
Integration and prefill with 3rd party data	●		
<b>Documents</b>			
Includes a correspondence and forms library	●		
Can attach documents, emails, phone calls, or notes	●		
Includes a content repository and document management	●		
<b>Notes</b>			
Includes a notes facility	●		
Ability to search text within notes and diaries	●		
<b>Other</b>			
eSignature	●		
Consumer portal	●		
Agent portal	●		
<b>Supervisory Tools</b>			
Escalation based on authority	●		
Dashboard to manage employee's workload	●		
<b>Underwriter/Adjuster Assignment</b>			
Automated underwriter assignment	●		
Out of office / vacation rules	●		
<b>Workflow</b>			
Automatic task generation	●		
<b>FNOL/FROI</b>			
Ability to consume FNOL from multiple sources	●		
Supports submission of additional attachments	●		
Can use party's preferred communication method	●		
Location-based guidance at time of FNOL	●		
<b>Injury Management</b>			
Track utilization review and recertification	●		
Can create, document, and track special programs such as return to work	●		
<b>Claim Investigation</b>			
Provides capability for adjuster to explain any coverage exclusion or endorsements that apply	●		
Can display alerts	●		
Can document the case strategy	●		
Add data fields for investigation details	●		
Automatic ordering of 3 <sup>rd</sup> party data	●		
<b>Reserving</b>			
Automatic default initial reserves based on business rules	●		
Multiple levels of reserve categories	●		
Aggregate tracking (erosion of policy limits)	●		
Deductible tracking	●		



Function	In Production with Clients	Supported but Not in Production with Clients	Not Supported
<b>Payments</b>			
Recurring payments	●		
Multiple pay parties (e.g., garnishments)	●		
<b>Subrogation and Recoveries</b>			
Separate tasks, workflow, diaries, business rules for subrogated cases	●		
<b>Fraud</b>			
Workflows specific to fraud and special investigations	●		
<b>Litigation Management</b>			
Separate tasks, workflow, diaries, business rules for litigated cases	●		
<b>Vendor Management</b>			
Vendor management tools	●		
<b>Reinsurance</b>			
Manually tag a claim when reinsurance applies	●		
Automatically identify claims subject to reinsurance	●		
<b>Catastrophe</b>			
Can define catastrophes by peril, geography, date, or other criteria	●		
Automatic identification of cat claims	●		
<b>Additional LOB Functionality</b>			
Functionality specific to auto insurance	●		
Functionality specific to property insurance	●		
Functionality specific to liability insurance	●		
Functionality specific to workers compensation insurance	●		
<b>TPA</b>			
Ability to track hours/activities	●		
Ability to manage different fee schedules	●		
<b>Support for Lloyds Claims Processes</b>			
Support for the Electronic Claims File (ECF2)	●		
Support for ECF Write Back	●		

- = Available out of the box
- = Configurable through a scripting language/coding
- = Under development/On roadmap
- = Configurable using simple tools for business user
- = Available with integration to a third party solution
- = Could develop – would be considered customization
- = Configurable using simple tools for IT user
- = Available with integration to a separate module provided by this vendor
- = Not available/Not applicable

Source: Vendor RFI

## REPORTING FEATURES

Guidewire Software provides reporting capabilities through ClaimCenter, DataHub, and InfoCenter (applications built and maintained by Guidewire). InfoCenter uses IBM Cognos for BI tooling and is included with InfoCenter. DataHub leverages SAP Data Integrator for ETL, which is included with DataHub. Graphical reporting tools (charts, graphs, etc.) and report scheduling are available. Guidewire Software provides the following report types: ad hoc, predefined reports, customized reporting, historical as-of reporting, real time reporting, period end reporting.

## AI FUNCTIONALITY

Guidewire Software has AI capabilities, such as machine learning, deep learning, unsupervised learning, supervised learning, feature extraction, machine vision, natural-language generation (NLG), natural-language understanding (NLU), speech recognition, speech generation, conversational capability, AI workflow, and predictive analytics. Guidewire Predictive Analytics uses machine learning for claims segmentation, severity, total loss calculation, field adjuster optimization, litigation risk, and subrogation detection.

Guidewire Predictive Analytics allows insurers to build models using several machine learning and statistical techniques. This framework is also available for third party providers to integrate into its core Policy, Billing, and Claims solutions for a 360-degree integration.

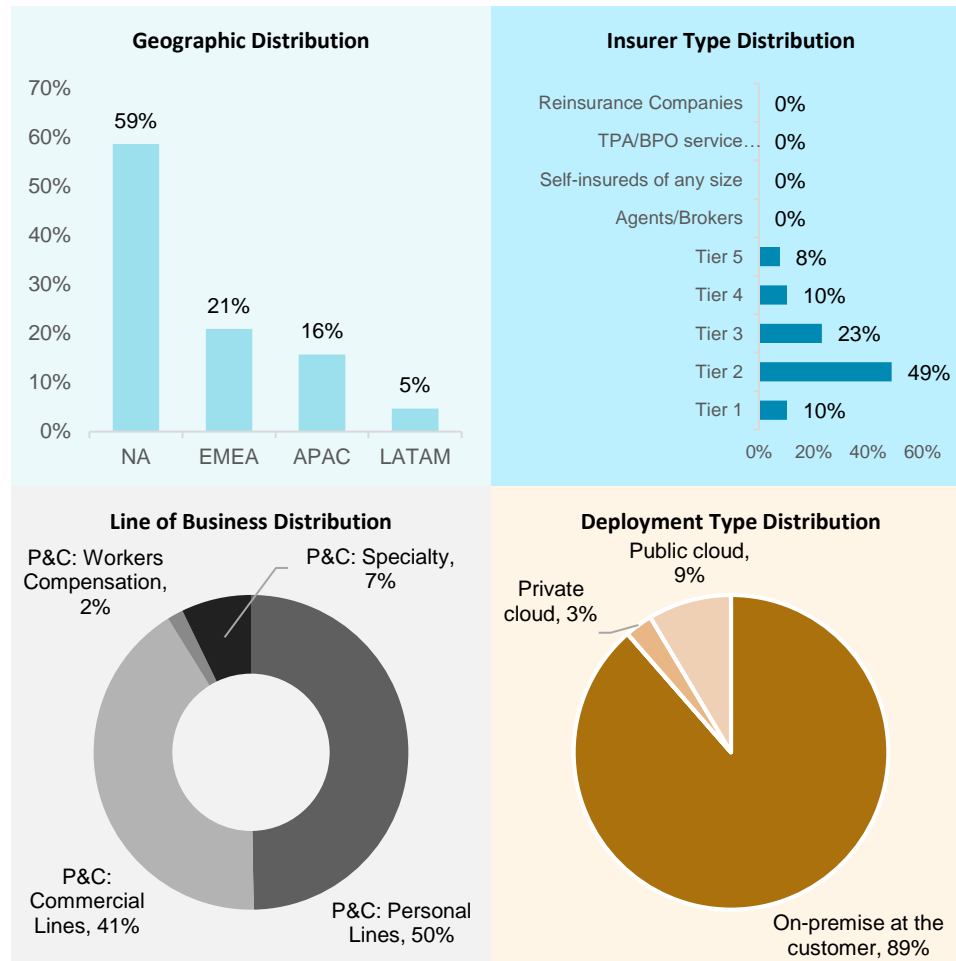
## INTERNATIONALIZATION

ClaimCenter can support multiple currencies out of the box including USD, GBP, EUR, AUD, CAD, JPY, and RUB. Other currencies can also be added as part of implementation. ClaimCenter can support multiple languages and has been implemented in several different languages. It has language packs for English, French, German, Dutch, Japanese, Spanish, Chinese, Portuguese, Italian, and Russian. There is no limit to the number of languages that can be implemented by customers. Additional languages can be implemented through the use of a translation file.

## CUSTOMER BASE

Guidewire ClaimCenter has 275 total customers.

Figure 5: Guidewire ClaimCenter Client Base by Geography, Line of Business, Institution Type, and Deployment Mode in EMEA



Source: Vendor RFI

## CUSTOMER FEEDBACK

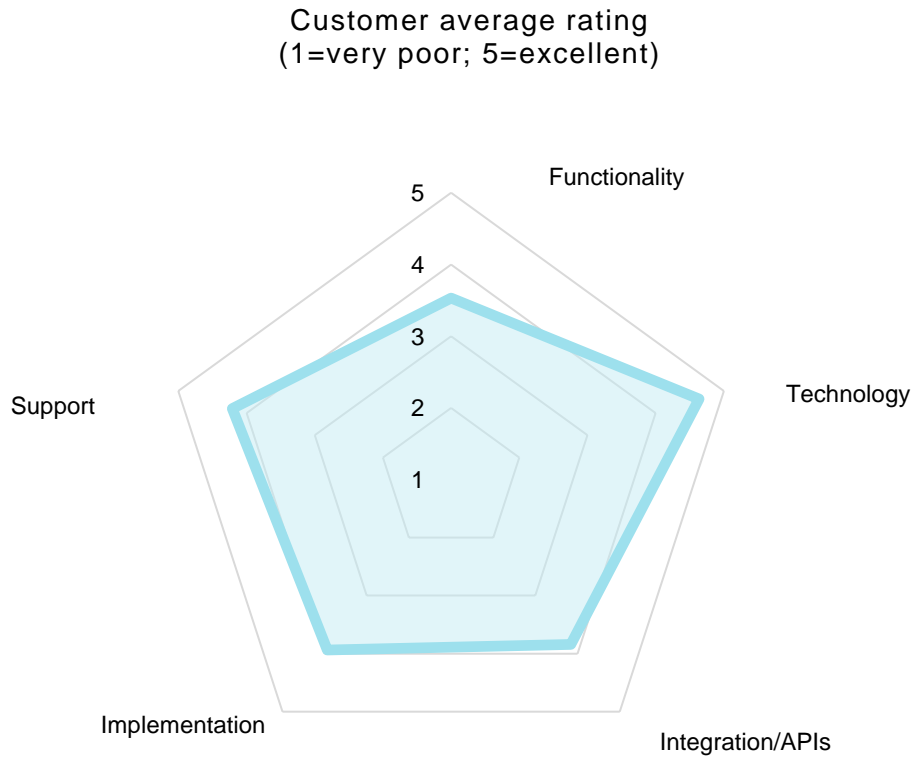
Three clients provided feedback on Guidewire. Two clients installed the solution on premise, and one is shifting to the cloud. Two clients had been using the system for 1 to 3 years, and one for 3 to 5 years. One for client uses the solution for all or mostly commercial lines, and two use the solution for a mix of personal and commercial lines.

In terms of good feedback, one client described Guidewire as “functionally rich.” Another client commented on the cloud version: “Scalable, reliable (cloud based) good core from which to develop new capabilities/integrations.”

In terms of areas for improvement, one client noted cost, “ease of integration to 3rd party services,” and “ETL data into data warehouse.” Regarding the vendor, one client sought “more proactive engagement to leverage the existing asset to its full potential”

Overall, the feedback for Guidewire was good, including from long-standing customers with older versions of the platform.

Figure 6: Client Feedback



Source: Client reference survey

## LINES OF BUSINESS SUPPORTED

Table 9: Line of Business Support

P&C LOBS	AVAILABILITY IN EMEA
Personal Auto	✓
Homeowners / Home	✓
Renters / Contents	✓
Umbrella	✓
Commercial Auto	✓
Commercial Property	✓
Commercial Liability	✓

P&C LOBS	AVAILABILITY IN EMEA
Workers Compensation	✓
Medical Professional Liability	✓
Other Professional Liability	✓
Business Owners Policy (BOP)	✓
Surety & Fidelity	✓
Excess Policies	✓
Directors and Officers Liability	✓

Legend: ✓ = Supported and in production; ⊖ = Supported but not in production; ✖ = Not supported

Source: Vendor RFI

## TECHNOLOGY

### Guidewire Cloud

In Guidewire Cloud, ClaimCenter is a single-tenant enterprise application that is Dockerized and placed within a Kubernetes cluster. This cluster is configured to enable both performance and redundancy. There is a cloud native hierarchy which also sits above the single tenant model.

Guidewire has also built upon the use of microservice architecture and continues to do so with every new release. This new architecture includes such services as Rules, Ratings, Authentication, etc. The development of these microservices enables developers to focus on specific improvements and innovations in this technology and enables the team to release new improvements with no-down-time in most cases.

The combination of the single-tenant ClaimCenter core complimented by the multi-tenant microservices come together to form a hybrid-tenant architect that has the advantage of the ability to optimize and scale while still maintaining the security and data separation that carriers expect for their core data.

The database supported in Guidewire Cloud is AWS Aurora. This is also a single tenant model of deployment creating a solid isolation barrier between customer's data.

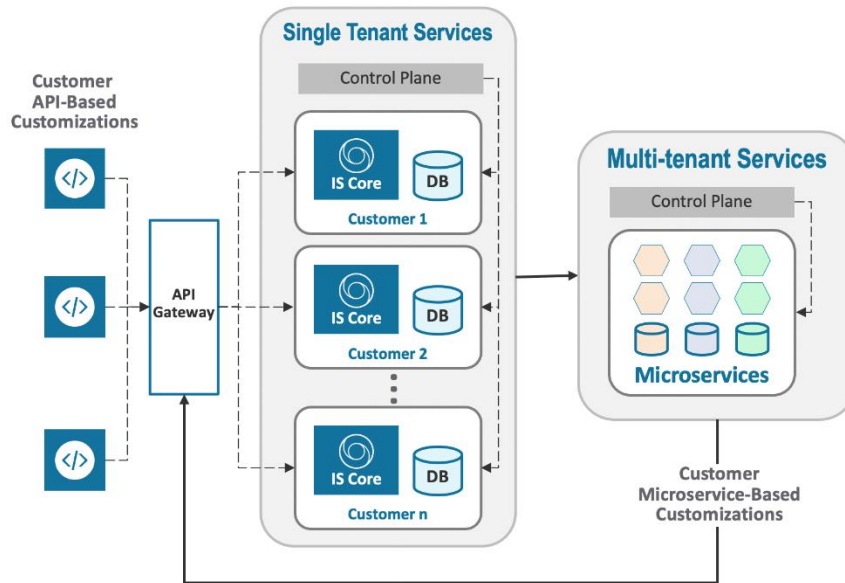
Customers are relieved from much of the technical considerations for integration via Guidewire Cloud in that Guidewire maintains an integration gateway for each customer. This enables the pass through of external services from either third-party vendors or on-premises resources. This gateway is managed by the Guidewire Cloud Ops team and provides an additional layer of security via whitelisting only those services deemed acceptable for operations.

Customers also are presented with the Guidewire Cloud Console, which enables users to not require any knowledge of how to work with AWS specifically. Instead, Guidewire provides an interface to ensure the users and developers have access in a clean, unfettered fashion to key operational requirements to the development environments. This includes spinning up and down new deployments, checking in new code, managing the build variables, accessing log information, and viewing operational reporting.

Additionally, Guidewire provides a yearly update as part of the Guidewire Cloud subscription. Upgrades are performed by Guidewire; they are scheduled and coordinated with customers to ensure timing fits within business needs. Upgrades are designed to be low impact to customers, with new features and functionality turned off by default. Features can be enabled by customers when ready to adopt new functionality.

Below is a diagram of our operational overview of how these components are placed within the Guidewire Cloud and some of the key elements of any deployment.

Figure 7: Guidewire Cloud Overview



Source: Celent

### Self Managed Implementations

Guidewire applications are built exclusively for the 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. The applications run as clustered instances deployed on the J2EE Server and connect to the database via standard 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 its customers. Although each carrier 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 ClaimCenter application. (Note: BillingCenter and PolicyCenter are also built upon the same architecture). The final layer is the customer-configured content, which is created using 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 data, 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 UI for business users is 100% browser based. Developers use an application based on IntelliJ called Guidewire Studio for coding work. Neither has a touch screen interface.

Technology details for Guidewire ClaimCenter are provided in Table 10.

Table 10: Technology Options

<b>CODE BASE</b>	Core technology: Java: 86%; GOSU: 13%
<b>OPERATING SYSTEMS</b>	<p>The system is implemented in Java and JEE.</p> <p>JEE/Java version support: The current release of ClaimCenter 10.0.3 utilizes Java 11.</p> <p><b>Self-Managed:</b> Available operating systems: Unix - Linux, Unix - Other, and Windows</p>
<b>SERVERS SUPPORTED</b>	<p><b>Guidewire Cloud:</b> Tomcat</p> <p><b>Self-Managed:</b> The system uses/supports Java servers Tomcat, JRun and JEE servers Boss, WebLogic, WebSphere, Apache Tomcat, JBoss Enterprise Application Platform, IBM WebSphere Application Server, and Oracle WebLogic</p>
<b>DATABASES</b>	<p><b>Guidewire Cloud:</b> Amazon Aurora (PostgreSQL-compatible database)</p> <p><b>Self-Managed:</b> Microsoft SQL Server and Oracle</p>
<b>INTEGRATION METHODS</b>	<p><b>Guidewire Cloud:</b> InsuranceSuite Cloud APIs (REST APIs for ClaimCenter), ClaimCenter App Events Streaming API (Webhooks) for event-based integration, and Integration Gateway (based on Apache Camel).</p> <p>Public API integrations: ClaimCenter's flexible integration platform is integrated with hundreds of third-party systems across the customer base. Google Maps, Facebook, Bing are common integration points.</p> <p>The vendor does provide training for API integrations.</p> <p><b>Self-Managed:</b> Web services, XML (not through web services), HTML, HTTP, RESTful HTTP-style services, JSON format, MQSeries, JMS or similar queue technology, Custom APIs, Flat files.</p>
<b>MOBILITY</b>	Access to the system is browser based. Native application support is not available. UI and process flows have been designed to be device independent.
<b>ACCESS TO CORE CODE PROVIDED TO CLIENT</b>	No, source code is never modified by customers. All changes to fit customer needs reside in ClaimCenter's configuration layer.
<b>CORE CODE MODIFICATION</b>	<p>Core modifications: The exception to the rule</p> <p>% of total cost from core code / development modifications in recent implementations: \$0</p> <p>In all Guidewire implementations, no modification of the core product has occurred. 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.</p>

## SCALABILITY

### **Guidewire Cloud:**

System performance - ClaimCenter testing on Guidewire Cloud has exceeded benchmarks for Self-Managed, with 90% of user actions taking less than 1 second for a test system of 10 million claims and 10,500 users.

Scalability: - ClaimCenter 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 also 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.

### **Self-Managed:**

System performance - ClaimCenter undergoes high-water benchmark testing as part of each release cycle. Loads are simulated for a typical customer production system, including user actions, messaging, and batch processes. ClaimCenter achieves the goal of 90% of user actions taking less than 2 seconds. High-water tests are conducted with 10 million claims and 10,500 users.

## DEPLOYMENT MODELS

### **Guidewire Cloud:**

Guidewire ClaimCenter is a SaaS solution that combines Guidewire's software products with its implementation and production management services. In this model, Guidewire takes program-level ownership and accountability of the initial implementation effort. Upon go-live, the Guidewire Cloud Services team handles all operational and application support functions required to care for the production system. This solution allows carriers to focus on the business of insurance and to better manage risk by transferring much of it to Guidewire.

### **Self-Managed:**

Customers can also choose to manage ClaimCenter directly (on premises or in the public cloud of their choice) or as a managed service with the systems integrator of their choice.

## HOSTING LOCATIONS

NA, EMEA, APAC, LATAM

## HOSTING DETAILS

Number of instances: 10

Maximum number of clients running on one instance: 1

## PUBLIC CLOUD OPTIONS

**Guidewire Cloud:** Amazon AWS

### **Self-Managed:**

Options supported: Microsoft Azure, Amazon AWS, Google Cloud Platform (GCP), Alibaba Cloud, IBM Cloud/Bluemix, Oracle Cloud, Salesforce Cloud, Force.com, AppExchange

Source: Vendor RFI

## DATA

ClaimCenter uses data models designed by Guidewire. These models have been designed to support the full policy, claims, and billing life cycles with excellent run-time transactional performance, and can be easily extended on a per-carrier basis using the included configuration tooling. During an implementation project, carriers are free to map the data to industry models (such as ACORD) for data exchange in integration. The solution supports industry standard data model schemas.



The ClaimCenter data model is purpose-built to the Guidewire ClaimCenter business case, which currently serves over 240 P&C carriers. It is built to balance third normal form purity and is tuned for accessibility and scale at some of the largest carriers globally. Guidewire contains data model imports for Accord, ISO, and other industry standard formats. The ClaimCenter data model also allows carriers to extend the system with their own fields, tables, foreign keys, and data structures supported by third normal form relational database platforms to meet their custom needs through the Guidewire Studio configuration tool.

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. All extensions, including data model changes, are done using the included Guidewire Studio configuration tool. Customers never modify the application source code for any reason.

Data integrity is maintained at the database level using standard primary and foreign keys. The integrated object-relational mapping functionality of the underlying Guidewire Platform automatically maps and presents the underlying relational data as objects at run time and design time for individuals performing configuration of the system. Customer extensions to the data model are performed using Guidewire Studio, with the system automatically implementing the required database schema updates at system startup to align it with the expressed customer extensions. An included utility allows customers to generate a data dictionary on demand, reflecting the current state of the data model (including any extensions made by the customer).

For InsuranceSuite applications, database interaction is abstracted by Object-Relational Mapping (ORM) in the platform layer of the Guidewire applications. The platform layer ORM, which connects via JDBC, acts as a database gateway and secures and optimizes the database layout and communication.

## INTEGRATIONS

Guidewire Software provides web services, XML, HTML, HTTP, RESTful HTTP-style services, JSON format, MQSeries, JMS or similar queue technology, custom APIs, and flat files as integration methods.

API details for the vendor are as follows:

- The 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.

Table 11 shows available products pre-integrated with Guidewire ClaimCenter.

Table 11: Insurance Pre-Integrations

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**INTEGRATION**

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Other (Integration Type: Vendor): Claims History: ISO ClaimSearch

Other (Integration Type: Vendor): FNOL Reporting: Safelite

Agency/broker management connectivity solutions (those that manage the data transfer between a carrier's systems and an agent/broker's systems): Validas Verify - for Subro

Agent portal software: Guidewire ProducerEngage

Analytics solutions: Guidewire InfoCenter, Guidewire Live (Explore)

Billing systems: Actuarial modeling tools or software

Business Intelligence systems: IBM Cognos

Claims management systems: Guidewire ClaimCenter

CRM solutions: Salesforce for Financial Services

Data warehouse: Guidewire DataHub

Document creation systems: Smart Communications SmartComm, Quadient Inspire, OpenText Extream

Document management systems: OnBase, Sharepoint

Enterprise Risk Management systems (ERM): Oracle Financials

eSignature systems: DocuSign

Fraud analytics software: FRISS Fraud Detection, Guidewire Predictive Analytics, BAE NetReveal, Fraud analytics software HIS integration as part of the IPG, Shift

Loss control or premium audit systems: Utilant LC360; Guidewire Checking Audits

Policy administration systems: Guidewire PolicyCenter

Price optimization tools: Guidewire Predictive Analytics

Product configurator: Guidewire Studio, Guidewire Product Designer

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Source: Vendor RFI

## CONFIGURATION

In ClaimCenter, Guidewire provides history tables allowing customers to audit parts of the application they feel are most important for all deployment models. Whether in workflows or rules or during the regular flow of the application, information can be written to history tables so customers can audit these activities. In addition, Guidewire logs fine-grained application events using log4j.

When ClaimCenter is deployed via Guidewire Cloud, subscriptions include a Guidewire review of all code changes before they are deployed (i.e., Guidewire Cloud Assurance Services). Guidewire provides a variety of nonproduction environments for customer's development and testing needs in a pay-as-you-go model. TeamCity is used for continuous build processes and Bitbucket is used for source code management. A series of jobs are configured to detect changes made in development environments to automatically build, test, and deploy (if desired) the application changes.

Guidewire provides testing tools that help evaluate the impact of change. Configuration changes to the application will follow a build, test, deploy process. Customers typically

have multiple test environments in which impact testing can be performed before moving changes to production.

For auditability, Guidewire provides history tables allowing customers to audit parts of the application they feel are most important.

The following changes require a restart of the server to take effect: Table maintenance, list of values, etc.; Change to underlying data model; New product creation; and New web service or integration point. Upgrades are typically handled by scripts doing the majority of the upgrade task, or tooling (or leverages third party tools) that helps identify use of deprecated or old services / APIs to assist with upgrades, or tests or test tooling assisting with validating upgrades.

Table 12: 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 values, etc.	Configurable using simple tools targeted for a business user
Interface definition	Configurable using tools targeted for an IT user
Product definition (insurance or banking products)	Configurable using simple tools targeted for a business user
Role-based security, access control, and authorizations	Configurable using simple tools targeted for a business user
Screen definition	Configurable using simple tools targeted for a business user
Workflow definition	Configurable using simple tools targeted for a business user

Source: Vendor RFI

## SECURITY

Guidewire InsuranceSuite Cloud (including ClaimCenter) and Cyence products are ISO 27001 certified. Guidewire has demonstrated that it meets the Payment Card Industry (PCI) standard and has completed AICPA SOC1 and SOC2 audits. Security certifications are the responsibility of the customer in a self-managed ClaimCenter implementation.

Guidewire maintains an Information Security Policy. The controls in this policy align with the ISO 27002 Code of Practice for Information Security Management, an internationally recognized industry standard for security.

All Guidewire locations employ security control measures to prevent unauthorized physical access, damage, or interference to the premises and information systems. Defined security perimeters protect all data center rooms with appropriate security access and monitoring controls.

Whenever selecting and retaining any third party service provider, Guidewire takes reasonable steps to confirm that the service provider is capable of maintaining appropriate information security measures consistent with all applicable laws and

regulations. As applicable, Guidewire also requires its third party service providers to deliver a periodic statement of assurance or undergo a third party audit of the effectiveness of the appropriate controls.

For cybersecurity arrangements, Guidewire's information security program is built on a control framework of over 400 controls. Controls are drawn from the Payment Card Industry Data Security Standard (PCI DSS), AICPA SOC1 and SOC2, NIST Cyber Security Framework, and ISO 27001. Each Guidewire Cloud customer is single-tenant hosted in an isolated Virtual Private Cloud (VPC) in Amazon Web Services (AWS), which acts as a secure network for all aspects of system access.

Guidewire has an extensive Information Technology Security Policy that covers all aspects of how Guidewire Cloud customers' environments are designed for security, monitoring, and logging. InsuranceSuite Cloud (including ClaimCenter) is ISO 27001 certified. Guidewire provides SOC1 Type 2 reports and SOC2 Type 2 reports and PCI ROC Attestation of Compliance. Guidewire has a large dedicated security team to ensure best-of-breed cybersecurity practices. Third party compliance audits are also conducted to stay up-to-date on operational excellence and help provide Guidewire Cloud customers with a safe, secure, and quality hosting solution. Guidewire is also working towards obtaining ISO 27001 certification in the coming year.

Additionally, Guidewire includes 24x7 internal and external system monitoring and penetration tests as part of a subscription to the Guidewire Cloud hosted offering.

For Guidewire Cloud customers, each customer implementation receives an application and network penetration tests before each major release and go-live. Monthly vulnerability scans are performed, and application and network penetration are performed at least annually if there has been no major release.

## DISASTER RECOVERY

Guidewire applications are expected to remain online 24x7 (there is no batch outage requirement), coming down only to deploy specific changes to the system such as upgrades to the underlying product version and some configuration changes. Many types of configuration changes can be deployed using a rolling deployment mechanism, avoiding downtime related to the release of new functionality. An included utility ascertains if a given configuration is suitable for the rolling update approach.

Guidewire applications are deployed as a cluster of application instances. A cluster can tolerate the failure of a subset of its instances. The load balancer would be able to route subsequent user load across healthy instances, continuing to serve the user base.

ClaimCenter is defined as a Tier 1 product. For a Tier 1 product, a disaster impacting two or more Availability Zones in a Geographical Region for the RPO is 4 hours, and the RTO is 24 hours, while for a disaster affecting one Availability Zone the RPO is 30 mins and the RTO is 1 hour.

For customers who require geo-diverse disaster recovery, Guidewire offers an option for cross-region failover. The company will provision failover capacity in the alternate region and replicate data between regions. Because the distances involved in geo-diverse distribution preclude synchronous data replication, recovery time objectives (RTO) and recovery point objectives (RPO) will depend on physical distances and replication intervals.

Guidewire database backups are done using third party tools provided by the database vendors, but the Guidewire applications do not need to be shut down to back up the database, thus supporting periodic and complete backups.

## PARTNERSHIPS

Table 13: Partnerships

TYPE OF PARTNERSHIP	PARTNER VENDOR
SYSTEM INTEGRATORS	There are currently more than 10,800 system integrator consultants who have been trained or are experienced on Guidewire applications. For a complete listing of partners, please visit <a href="https://www.guidewire.com/partnerconnect">https://www.guidewire.com/partnerconnect</a>
CONVERSION PARTNERS	For a complete listing of partners, please visit <a href="https://www.guidewire.com/partnerconnect">https://www.guidewire.com/partnerconnect</a>
FUNCTIONALITY PARTNERS	Guidewire's solution partners help drive business value by developing and delivering additional integrations, extensions, and complementary solutions for Guidewire products. Partners include Smart Communications, Hyland, OpenText, DocuSign, Mitchell, Perr & Knight, and FRISS. For a complete listing of partners, please visit <a href="https://www.guidewire.com/partnerconnect">https://www.guidewire.com/partnerconnect</a>
TECHNOLOGY PARTNERS	Guidewire extends its solution footprint by working with third party technology and business advisory companies that complement its solutions and provide significant customer value. It continues to form new partnerships in the technology arena to ensure customers' ecosystem needs are fulfilled. Guidewire also has relationships with platform companies like IBM, Microsoft, and Oracle to ensure its technologies are ported and optimized on their infrastructure. It maintains 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 ClaimCenter) and Cyence products are ISO 27001 certified. Guidewire has demonstrated that it meets the Payment Card Industry (PCI) standard and has completed AICPA SOC1 and SOC2 audits.

Source: Vendor RFI

## IMPLEMENTATION, AND SUPPORT

Table 14: Implementation and Support

FUNCTION	APPROACH
EMPLOYEES AVAILABLE / AVERAGE EXPERIENCE LEVEL (YEARS)	Guidewire Software has 781 staff in professional services and 198 in technical support and licensing operations staff, with 15 average years of experience providing professional services / client support for this solution.  The average number of customers per professional services / client support staff is 4.26.
LOCATIONS OF EMPLOYEES	Guidewire Software has employees across the world, with 1,472 employees in the United States and 883 employees internationally.  If implementation resources need to be sourced from different countries, the vendor 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 perform most of the implementations. Conversion Options: Vendor or 3rd 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 its products.
SLA AVAILABILITY	Service scope included in base SLA: 24x7 service hours 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

## WARRANTIES

Guidewire's standard warranty as found in the Software License Agreement is as follows:

For a period of ninety (90) days from the Notification Date, Guidewire warrants that the Software will materially conform to the Documentation. "Notification Date" means the first date on which Guidewire initially notifies Licensee via email that the Software is available for electronic download. This warranty only covers reproducible errors reported to Guidewire in writing during the warranty period. Licensee's exclusive remedy for breach of this warranty shall be prompt correction or replacement of the Software affected or, if Guidewire is unable to do so, then to cancel the license for the defective Software and receive a refund of the License Fees paid for the defective Software. The warranty applies only to unmodified Software as delivered by Guidewire and not to any derivative works made by or for Licensee.

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## TRAINING

Guidewire product training provides a solid foundation for team members to immediately become contributing members of the project team. Students receive valuable hands-on experience and learn how to leverage the Guidewire network and tools that are essential to project success. The structured curriculum is designed to equip resources to become effective at defining requirements, implementing configuration changes, and/or building integrations with other systems immediately following the training. Courses are a combination of lessons and labs, with the labs designed to enable students to exercise their newly gained knowledge and cement their understanding of the different topic areas. This enables the team to effectively produce deliverables and achieve optimal velocity for delivering work earlier in the project.

# PRICING

Table 15: Pricing Models

<b>PRICING MODELS AVAILABLE:</b>	Term license, Enterprise license, Subscription-based license, other pricing model not listed
<b>FACTORS USED TO DETERMINE PRICING</b>	Usage-based factors: None Tier-based factors: None

Source: Vendor RFI

Table 16: 5-year pricing estimates

INSURER SCENARIO	LICENSING	IMPLEMENTATION	ALL OTHER
AVERAGE YEAR 1 COSTS	US\$500,001 to US\$1 million	US\$1.01 million to US\$5 million	0
AVERAGE YEAR 2 AND BEYOND REMAINING COSTS	US\$500,001 to US\$1 million	0	0

Source: Vendor RFI

# CONCLUSION

## FOR INSURERS

There is no single best-claims solution for all insurers. There are a number of good choices for an insurer with almost any set of requirements. An insurer seeking a new core claims system should begin the process by looking inward. Every insurer has its own unique mix of lines of business, geography, staff capabilities, business objectives, and financial resources. This unique combination, along with the organization's risk appetite, will influence the list of vendors for consideration.

Some vendors are a better fit for an insurance company with a large IT group that is deeply proficient with the most modern platforms and tools. Others are a better fit for an insurance company that has a small IT group and wants a vendor to take a leading role in maintaining and supporting its applications.

Most core claims systems bring some level of out-of-the-box functionality for various lines of business and operating models. Many systems offer powerful configuration tools to build capabilities for both known and future requirements.

We recommend that insurers narrow their choices for a claims system by focusing on four areas:

- Functionality needed and available out of the box for the applicable lines of business and states. Check to see what is actually in production.
- Technology, including the overall architecture as well as the configuration tools and environment.
- Vendor stability, knowledge, and investment in the solution.
- Implementation and support capabilities and experience.

## FOR VENDORS

As a group, vendors continue to make significant investments in their core claims systems. The solutions are delivering more functionality, improving configuration tools, and becoming more connected, with APIs and Web services becoming the de facto standards.

Although these trends are all very good news for insurers, they do make the competitive challenges facing vendors that much more daunting.

Celent recommends vendors differentiate themselves by doing the following:

- Focusing on improving usability for both new and experienced users and managers.
- Making implementation faster and less expensive.
- Continuing to build out configuration environments to put change controls in the hands of insurers.

*Was this report useful to you? Please send any comments, questions, or suggestions for upcoming research topics to [info@celent.com](mailto:info@celent.com).*



## 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 claims management 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 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.

## RELATED CELENT RESEARCH

P&C Claims Systems Vendors in Latin America  
May 2020

Claims Systems Vendors: North American Property Casualty Insurance, 2020 Edition  
March 2020

Image Recognition in Insurance: Applied Machine Learning  
February 2020

Unlocking the Value of Unstructured Documents: Insurance Use Cases  
February 2020

Claims Fraud Detection Systems: 2018 IT Vendor Spectrum  
May 2018

Reinventing Claims: Pioneering a New Approach  
October 2016

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For more information please contact [info@celent.com](mailto:info@celent.com) or:

Craig Beattie

[cbeattie@celent.com](mailto:cbeattie@celent.com)

## AMERICAS

### USA

---

99 High Street, 32<sup>nd</sup> Floor  
Boston, MA 02110-2320

Tel.: +1.617.262.3120  
Fax: +1.617.262.3121

### USA

---

1166 Avenue of the Americas  
New York, NY 10036

Tel.: +1.212.541.8100  
Fax: +1.212.541.8957

### USA

---

Four Embarcadero Center, Suite 1100  
San Francisco, CA 94111

Tel.: +1.415.743.7900  
Fax: +1.415.743.7950

### Brazil

---

Rua Arquiteto Olavo Redig  
de Campos, 105  
Edifício EZ Tower – Torre B –  
26° Andar  
São Paulo SP 04711-904

Tel.: +55 11 3878 2000

## EUROPE

### France

---

1 Rue Euler  
Paris  
75008

Tel.: +33.1.45.02.30.00  
Fax: +33.1.45.02.30.01

### United Kingdom

---

55 Baker Street  
London W1U 8EW

Tel.: +44.20.7333.8333  
Fax: +44.20.7333.8334

### Italy

---

Galleria San Babila 4B  
Milan 20122

Tel.: +39.02.305.771  
Fax: +39.02.303.040.44

### Switzerland

---

Tessinerplatz 5  
Zurich 8027

Tel.: +41.44.5533.333

## ASIA

### Japan

---

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

Tel: +81.3.3500.3023  
Fax: +81.3.3500.3059

### Hong Kong

---

Unit 04, 9<sup>th</sup> Floor  
Central Plaza  
19 Harbour Road, Wanchai

Tel.: +852 2301 7500