CELENT

PROPERTY CASUALTY BILLING SYSTEMS: EMEA EDITION

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Karlyn Carnahan, Fabio Sarrico, and Andrew Schwartz

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CONTENTS

Executive Summary	3
Billing Systems—Definition and Functionality	4
Transactional Servicing Features	5
Common Functionality	8
Technical Functionality	9
Report Methodology	12
Approach	12
About the Profiles	12
Limitations	12
Celent Technical Capability Matrix	13
Profiles	15
Guidewire Software: Guidewire BillingCenter	16
Company and Product Snapshot	16
Functionality	17
Lines of Business Supported	18
Customer Base	19
Technology	20
Partnership	22
Implementation, Pricing, and Support	23
Conclusion	24
For Insurers	24
For Vendors	25
Leveraging Celent's Expertise	26
Support for Financial Institutions	
Support for Vendors	26
Related Celent Research	27

EXECUTIVE SUMMARY

The billing function continues to transition from its traditional role as the most "back office" of back office processes to a key component of delivering a great customer experience. Insurers realize the significant role that billing, and especially the quality of service provided during the billing process, plays in financial operations and in building relationships with customers and distributors. In most cases, legacy billing systems will not meet the challenge of higher service expectations from today's consumers, business customers, and especially distribution partners.

This report provides an overview of the billing systems available in EMEA for property and casualty insurance carriers.

The report profiles 18 billing solutions, providing an overview of their functionality, customer base, lines of business supported, technology, implementation, pricing, and support. Some vendors also appear in a companion report profiling these systems that are available in North America, Asia Pacific, and Latin America.

We asked firms that provide billing systems to enter information about their company and products into Celent's free digital catalog, VendorMatch (https://www.celent.com/vendormatch). This report presents certain extracts of that information. Additional details about each product are available in VendorMatch, subject to VendorMatch's terms of use.

This report should help insurers define their core billing system requirements and can be used as the first step toward creating a short list of vendors for evaluation. Expanded billing 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 can leverage their access to the author through analyst access calls to learn more about the vendors.

BILLING SYSTEMS—DEFINITION AND FUNCTIONALITY

Billing systems are the primary system used by an insurance carrier to set up payment plans, calculate payments due by customers (including fees), produce invoices, create reports for management, and record premium payments made to customer accounts. These systems may be available on a stand-alone basis or may be tightly integrated with a policy administration system.

Billing continues to be an important part of an insurer's customer service strategies. Billing is not purely a financial issue but has a significant role to play in the overall experience. After all, over the course of five years, a policyholder will have a single new business experience, four renewals, perhaps a claim or two (depending on the LOBs written), and 60 billing transactions—if they are on monthly billing.

Billing presents an opportunity to fulfill a brand promise of convenience and trust. But errors can be costly. These costs can be direct, as in the case of a mistaken cancellation or billing errors leading to increased call volume. And there is also an indirect cost on customer experience and retention.

Insurers are looking for several key capabilities when they determine whether to invest in a new billing solution:

- Improved customer experience. The prevalence of Internet purchasing and bill payment in other industries continues to increase the pressure on insurers to deliver web capabilities such as electronic bill pay and presentment, mobile transactions, and policyholder/producer portals. Many legacy systems "just can't get there from here," and updated technology must be introduced to fully enable these functions.
- Transparency. Progress is being made to deliver transparency across product lines. The ability to bill multiple policies on a single bill is still elusive for many with legacy systems or those with multiple billing systems in production. The ability to see the equity date or easily identify how payment might change with different payment plans is a growing need.
- Increased use of billing analytics. As the function transitions to a strategic service differentiator, different information is required to respond to new challenges. Billing reporting has historically been more operational in nature, reporting on number of invoices issued, average payments, number of days outstanding, etc. Questions such as "Are my current billing plans attracting

profitable business?" and "What happens if I increase specific fees?" require analytics, not simply reporting. Vendors differ in their approach, some offering tools embedded as part of the base system and others providing utilities to extract information into specialized, enterprise analytic engines.

- Increased flexibility. Seeking new ways to differentiate, insurers are looking for the ability to easily add new bill plans, new payment options, and new ways of interacting with customers through the bill.
- Increased control. Seeking more flexibility and speed, insurers increasingly
 want to control their own destiny and perform updates themselves. Some of
 these companies maintain a billing system in a traditional IT organization.
 Others seek to move some parts of the maintenance into end user areas.

Transactional Servicing Features

A variety of features are available to handle the day-to-day transactional activities of billing. Insurers will want to make sure that the features available in the solution they choose will support their business goals both now and in the future.

Billing Types: While it's easy to think that all insurers simply send a bill directly to the policyholder, a wide variety of billing types are actually used. Not every billing solution supports every bill type. Direct bill is supported by all billing vendors that we're aware of. But some carriers still require support for agency bill (both account current and statement). And a wide variety of other billing types are also in use—list or group bill, third party bill (such as mortgagees), and split or multipayer billing.

Other nuances include whether the solution supports account bill—billing multiple policies on a single invoice—and how they handle multiple policies with different payment plans, payment types, and due dates. Some carriers also expect to use the billing system to bill for large deductibles. Those carriers that use billing types beyond direct bill will want to examine the capabilities closely, as not all solutions support all types.

Payment Plans: User-configurable payment plans allow insurers to create flexible options. Payment plans need to be defined in several dimensions: amount of the initial down payment, number of additional payments and the amounts, and due dates. For example, an insurer may configure a payment plan that requires 30% down and four equal payments following that, with the first payment due 30 days after inception and every two months after that. Billing systems often have wizards that let a Business Analyst easily set up the parameters of the payment plans.

One feature we've seen more billing systems begin to implement is the ability for the policyholder to change the terms of their payment plan. Not only can they move from, say, quarterly billing to monthly, but they may also be able to change the date that the payment is due. Rather than having a payment due on the 1st of the month, they can choose to make their payment due on the 17th of the month. This allows them to manage their cash flow more easily. It also requires that the insurer have payment plans that can calculate catch-up amounts easily.

Equity Billing: The traditional mechanism to avoid providing unpaid coverage is to define billing plans where the amount of down payment, future payment amounts, and due dates assure that payments are made prior to running out of premium. However, for many, there is still an exposure of unpaid coverage if the initial down payment isn't received in a timely manner, if large endorsements are issued that increase premium (and then the invoice isn't paid), or for repeat NSF transactions.

Some billing systems address this problem by supporting equity billing, which allows insurers to avoid providing unpaid coverage. Equity billing essentially uses the premium paid to calculate how many days of coverage have been paid for. It calculates earned and unearned premium and determines the open balance due from policyholders for any earned premium. For example, if the policy premium equals \$3,650, then the cost of insurance is \$10 daily. A policyholder with a balance of \$1,000 of paid premium has insurance coverage for 100 days. The system can then modify the invoiced premium based on the equity left on the policy—or can process a notice of cancellation prior to running out of equity.

Fees: Insurers impose a wide variety of fees that are related to billing transactions. They may have installment fees for each payment after the initial down payment and there may be fees for insufficient funds, reinstatements, or for the use of credit cards. Allowable fees may vary by transaction type and jurisdiction. A billing system needs the ability to easily create and apply fees based on events and business rules. Users also must be able to override the application of fees—either on an individual basis or for a particular book of business. For example, late payment fees may be waived during a catastrophe event.

Payment Types: Increasingly, policyholders are looking for different mechanisms for making premium payments. Certainly the ability to track inbound checks is the most common mechanism, often meaning the insurer must interface with a lockbox. But credit card payments, EFT/ACH payments, and, more recently, the use of digital wallets such as Zelle or Venmo are desired. Some billing systems are easily integrated with the different payment rails. Others integrate to third parties, such as billing-as-a-service providers, that manage different payment types on behalf of the insurer.

Payment Processing Rules: A variety of rules govern how payments are processed. For example, how long is a grace period? Should endorsement transactions be spread out over all future payments or billed in the next payment? How will partial payments or overpayments be treated? Look for the ease of creating these rules—including jurisdictional variations—as well as the ability to manage the rules going forward.

Cancellations: Billing systems receive bank NSF and rejected payment files and trigger automatic workflow to process cancellations. This includes automatic generation of required communications to the insured, the broker, and any other additional interests such as mortgagees. It also includes updating any accounts receivable accounts.

Billing systems must manage a variety of rules to process these in a regulatorily sound manner. Different jurisdictions and LOBs have different cancellation cycles,

timeframes, rules, and notice dates. Consequently, billing systems need to not only track those dates but also account for grace periods in receiving late payments and underpayment rules. (Will you really cancel a policy that is \$1 short? What about \$100 short?) Notice of Cancellation documents must comply with the jurisdictional required language, so forms attachment logic must be jurisdictionally based. An insurer may want to cancel all policies on a billing account if a single policy is canceled for nonpayment, or may want to configure that by jurisdiction or line of business.

Reinstatement rules may vary. For example, if there have been three NSFs resulting in nonpay cancellations, perhaps an underwriter should look at the reinstatement prior to processing. Or perhaps the system should automatically reinstate—but change the payment plan to full pay. Under either option, the insurer will want automated notification of the underwriter when specific events have occurred.

The system may need rules as to whether the policy can be reinstated if it has lapsed—and will need the ability to accept payment after policy lapse without reinstatement—and refund any overpayments.

Lastly, as mentioned above, insurers need the ability to set up special handling procedures to override an automatic cancellation or create different workflows under certain circumstances, such as in the event of a catastrophe. They may want to be able to suspend cancellations but continue to bill for individual accounts, policies, or groups of accounts or policies.

Accounting: Not only do billing systems manage invoices and transactional payment tracking, they are also used by the finance department to manage the ongoing accounting processes associated with billing. The most commonly supported process is cash reconciliation and discrepancy processing—tools that allow cash received to be reconciled against invoices. But other tasks also need support.

Finance often is involved in researching payments that are unable to be reconciled or customers who have questions or disputes. Finance needs support for easy viewing of historical account and policy changes, as well as account merges, splits, and policy movement across accounts.

Finance needs the ability to stage cash when money is collected but cannot be immediately posted to a specific account (e.g., needs to wait for policy change to be completed, research conducted, identification).

Finance also needs to be able to suspend or hold an individual bill and to issue a bill on demand—or reschedule a prescheduled bank debit.

Collections and Escheatment: Moving unpaid items to collections is a typical task for finance. Some solutions provide collections support or integration to collections agencies. If an item has been written off, they need the ability to post a payment against that item and effectively "undo" the write-off. Finance is also the team that will process escheatments. Some billing systems provide support for escheatments.

Customer Service: Customers have a lot of questions about their bills, and a billing system must make it easy to answer those questions. Look for features such as side-by-side payment options where the policyholder or agent can easily see how payments change depending on the plan chosen. Most solutions include a full audit trail, so it's easy to see every transaction billed, every payment received, and how the payments were allocated. Self-service capabilities through a policyholder or agency portal allow users to make payments online, conduct a billing inquiry, or even change payment plans, accounts, or dates. Look for what level of tools are provided and the level of roles-based security that can be applied.

Commissions: Billing systems often handle transactional commission calculations and payments. Look for support for both traditional percentage of premium and also flat-rate agent commissions. Make sure you can easily have different commissions by state, LOB, agency segment, product, and effective date—with the ability to override standard commissions. Check for whether 1099 processing is supported. And look to see what kind of agency statements are provided and whether online support for those statements is included.

Common Functionality

There are a variety of functions that are not specific to the billing process but can generally be found in a billing system.

Document Creation: Most of the solutions include some sort of correspondence or forms library to create common forms and letters, including invoices and notices of cancellation. 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 invoice generation. Look for standard templates out of the box. And look for the ability to add marketing messaging easily to an invoice.

In addition to billing forms, many systems can automatically generate correspondence 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: mail, email, or SMS. Examples include notification that a payment was received, that a bill is due, or that a notice of cancellation is about to be processed.

Electronic bill presentment typically is supported by sending notification of a bill through email with a link back to the insured's account to make an easy payment. Allowing the insured to set up their preferred communication mechanism for different types of communication becomes important. A carrier may also need to define different mechanisms, depending on the type of outreach. Notices of cancellation, for example, may need both electronic delivery and paper delivery with certified mail.

Reporting: Reporting capabilities vary widely across solutions. Virtually all solutions integrate to a third party reporting tool, and some include reporting 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.

A variety of standard reports are usually available in a billing system. Typical standard reports include tracking receivables at the policy level for direct bill plans; reporting on policies with a credit balance; daily billing transaction data for balancing and controls; daily and monthly trial balances; aging reports at the policy, broker, and producer level; aging reports on the effective date of the installment (not policy effective date); or aging reports based on different billed type.

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.

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 event changes in a policy, time lapse, or 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.

Technical Functionality

While assessing features and functionality is a critical step in selecting a billing system, there are a number of technical considerations 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 use to make general changes and a more robust environment for technical staff to utilize.

Batch Processing: Most insurers batch process bills daily during after-hours. This allows all billing transactions—both outgoing and incoming—to be recorded to the system at a consistent time period every day. However, with increasing use by policyholders, insurers are often looking for more frequent batch processing. A policyholder who makes a payment online expects to see the system recognize that payment immediately. Look for the ability to process batches more frequently than daily if your customers need this kind of instant recognition.

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. 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 carriers 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 also allow for modification of the data model.

Release Management: Some solutions include workflow capabilities to handle the release management within the policy admin system. Some feature full ticket management. Look for the ability to package a group of changes or filings together that you can manage 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 billing system. Different fees may be used, notices of cancellation may change, and new payment plans may be created. Effective dates for these changes 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 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, who made the change, and 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.

Security: Security is becoming increasingly important to insurers, especially as billing 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 billing systems don't need to be

Payment Card Industry (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: Billing vendors differ regarding their proven performance related to the volume of transactions handled successfully. All can offer the results of stress testing performed in laboratories, but the best evidence is from installed reference accounts, which handle volumes equal to or near expected statement, transaction, and inquiry counts.

Integration: Billing systems integrate to multiple internal systems and third party systems. Most solutions have been designed with a service-oriented architecture and have a variety of ways of handling integration, with many using APIs as the common standard. Most systems have some kind of accelerator or experience integrating to the most common third party systems and general ledgers. With the rise of insurtech, new billing rails platforms, and the position of billing 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 vendors are moving to an agile or hybrid methodology. Look to see what methodology the vendor uses and how it aligns with your preferred methodology. Some vendors excel at helping carriers transition to an agile approach. Look for the artifacts they have available for gathering requirements and capturing 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. Conduct 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. Many variations of "cloud" are available. Many vendors offer a hosted version of their software, which is licensed by the carrier and hosted by the vendor in its own data center or in a private data center like Rackspace. Increasingly, software is being hosted in a public data center like Amazon or Microsoft. Look for the level of managed services available if you are interested in this option. Additionally, look to see if the solution includes cloud-native features such as dynamic scaling or AI or machine learning modules. Amazon, Microsoft, and other cloud vendors often include additional support to help insurers use cloud capabilities reliably and efficiently while finding smart ways to manage the costs.

REPORT METHODOLOGY

Approach

To analyze the capabilities of billing solutions that are active in the insurance marketplace, Celent sent an invitation to a broad set of billing vendors to participate in this year's report. There was no cost for vendors to participate.

Some vendors provide billing solutions on a stand-alone basis. Others provide billing solutions as an integral part of their policy administration system. Both types of solutions are profiled in this report.

Each participating vendor completed an online RFI in Celent's VendorMatch/RFX platform. The RFI requested information about features provided in the solution, the technology and architecture, the current client base, pricing models, and the vendor itself. RFIs were completed on 24 products for North America.

Celent used that data to draft a profile but did not independently confirm the information provided by the vendors. Vendors had an opportunity to review their profiles for factual accuracy. Some of the vendors profiled in this report are Celent clients, and some are not. No preference was given to Celent clients for inclusion in either the report or the subsequent profile.

About the Profiles

Each profile is structured the same way. Profiles present information about the vendor and its billing offerings, geographic presence, and client base. Charts are used to 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 billing 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 billing 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 TECHNICAL CAPABILITY MATRIX

New to Celent's solution reports this year is the Technical Capability Matrix. We have placed each solution into one of five categories based on the sophistication and breadth of its technology and functionality (i.e., plotting the A and B dimensions). Solutions are not ranked within the assigned category; they are listed alphabetically.

The five categories are:

- Luminary: Excels on both Advanced Technology and Breadth of Functionality.
- Technology Standout: Excels in Advanced Technology but doesn't yet have as many features as leading competitors (low on Breadth of Functionality). Often newer, these solutions typically have chosen a focused set of functionalities to begin their journey.
- **Functionality Standout**: Excels in Breadth of Functionality, but the technology isn't as advanced as leading competitors. Often more established, these solutions have built out a robust set of features with technology that may not be cutting-edge.
- **Noteworthy Solution**: Relatively lower on both dimensions, yet still worthy of consideration by some financial institutions.
- Developing Solution: Low on both Advanced Technology and Breadth of Functionality. Often a new solution. Has the potential to mature into a more robust offering over time.

Functionality standouts Luminaries **Breadth of Functionality** GENASYS SAPIENS (TIA Policy Solutions) GUIDEWIRE majesco RGI SAPIENS (IDIT Suite) **Technology Standouts Noteworthy solutions** SAP Floneer **EIS Developing solutions** SAPIENS (Diana Suite) fadata Verisk Cogitate tcs

Figure 1: Celent Technical Capability Matrix – EMEA

Advanced Technology

Source: Celent

PROFILES

GUIDEWIRE SOFTWARE: GUIDEWIRE BILLINGCENTER

Company and Product Snapshot

Table 1: Company Snapshot	
Year Founded	2001
Headquarters	San Mateo, CA
Number of Employees	3,376
Revenues (USD)	\$812.6 million
Financial Structure	Public company
	NYSE: GWRE
VendorMatch Link	https://www.celent.com/vendormatch/discovery/solutions/219502211
Source: Vendor RFI	

Table 2: Product Snapshot

Name	Guidewire BillingCenter
Year Originally Released	2007
Current Release and Date of Release	Garmisch 2023.1H April 2023/2023
Revenue Derived from the Product	Please refer to their Investor Relations site for all available financial information: http://ir.guidewire.com/phoenix.zht ml?c=248177&p=irol-IRHome. They do not report on revenue by product.
R&D Expense	R&D expense over the past two years has been more than 40% of product revenue. Slightly more than 30% of Guidewire's total revenue for FY22 was invested in research and product development. At Guidewire they invest far more in R&D than any other vendor to drive innovation and ensure their products are continuously evolving to meet customers' needs. They do not report on revenue or expense by product.
FTEs Providing Professional Services for Product	1,688

Notable Clients	NA: Nationwide, The Hartford,
	Farmers
	EMEA: Zurich, Aviva, PZU
	AsiaPac: AXA Asia, iCare, QBE
	LatAM: Caixa, Pacifico Seguros,
	Seguros SURA
Source: Vendor RFI	

Functionality

Table 3: Functionality

		In	Supported But Not in	Not
Category	Function	Production	Production	Supported
Billing and Payments	Direct (to policyholder) bill			
	Agency bill			
	Account bill			
	Statement billing			
	Account current billing			
	Mortgagee billing			
	Group billing			
	Payroll billing			
	Equity-based and non-equity-based billing	•		
	Business user configurable bill plan rules and bill plan configuration	•		
	PCI security compliance - capture and store processing within billing system	•		
	PCI security compliance - token processing			
Commissions	Commission calculations			
	Disbursements for commissions			
Workflow	Automated alerts, e.g. bottlenecks, past dues	•		
	Integration with Oden for cancellation information exchange	•		
	Automated alerts, e.g. bottlenecks, past dues	•		
Rules	Payment allocation rules			
	Cash application rules			
	Electronic dispute management, issue tracking and escalation	•		

Category	Function		In Productio	on	Supported But Not in Production	Not Supported
Category		runction	Froduction	011	FIOGUCTION	Supported
Electronic bill		Electronic bill presentment and payment for agents				
		Electronic bill presentment and payment for policyholders				
Business Intelligence	Management reporting dashboard					
 = Available out of the box = Configurable through a scripting language/coding 		a scripting	= roadr	Under development, nap	/on	
= Configurable using simple tools for business user= Available with integration third-party solution		= Available with integrati third-party solution	on to a	_	Could develop, woul dered customization	
= Configurable usi tools for IT user	= Configurable using simple= Available with integraseparate module provided vendor			=	Not available /not ap	pplicable
Source: Vendor RFI						

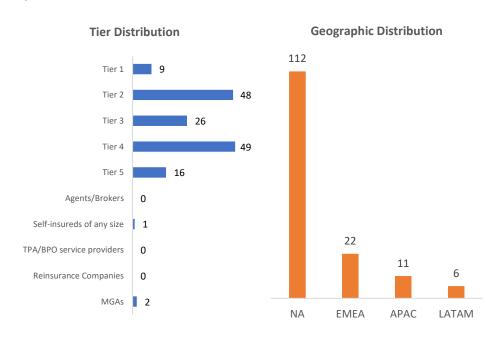
Lines of Business Supported

Line of Business	NA	EMEA	APAC	LATAM
Personal Auto	~	~	~	~
Homeowners / Home	~	~	~	~
Renters / Contents	~	~	~	~
Umbrella	~	~	~	~
Commercial Auto	~	~	~	~
Commercial Property	~	~	~	~
Commercial Liability	~	~	~	~
Workers Compensation	~	~	~	~
Medical Professional Liability	~			
Other Professional Liability	~	~		
Business Owners Policy (BOP)	~	~	~	
Surety & Fidelity	~	~		~
Excess Policies	~	~		~
Directors and Officers Liability	~			
Boat / Motorcycle / ATV / etc	~	~	~	~
Flood	~			
Jewelry	~			
Cyber Insurance				

Customer Base

On a global basis, this product has a total of 151 customers in production, 84 customers in implementation, and the vendor sold 7 new deals in the last two years.

Figure 1: Client Base by Geography, Tier Size, Line of Business, and Deployment Option



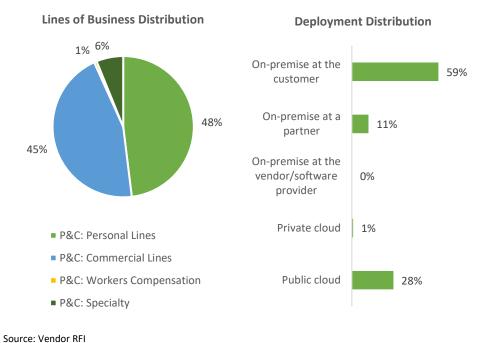


Table 5: Implementations by Country				
Region	Countries			
North America	Canada, United States			
Europe	Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Italy, Poland, Russia, Switzerland, United Kingdom			
Middle East	-			
Africa	-			
Asia-Pacific	Australia, Japan, New Zealand			
Central America	-			
South America	Argentina, Brazil, Colombia, Peru, Uruguay			
Caribbean	Puerto Rico			
Source: Vendor RFI				

Technology

Table 6: Technology Options

Technology Options	Responses		
Code Base	GOSU: 13%; Java: 86%		
Integration Methods	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; Native messaging; Other integration methods		
Scalability	The vendor's largest deployment (total number of transactions processed daily): 12,000 users and the largest Guidewire customers are running with over 20,000 concurrent users and operating more than 16 million in-force policies and 8 million annual claims (across different customers, not a single customer site). The configuration utilized will determine maximum concurrent users, TPS, and daily volume.		
API Details	✓ 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 		

Technology Options	Response	es ·	
	1 1	API testing portal and the ability to uscripts on website is available	se
	v	The system allows API publishing in SC REST, JSON, and XML style services as	
	✓ API version management is available		
	v	Access to the APIs is managed and us APIs tracked by developers	e of
	√ 7	Training in extending the system is offered	
Legend: ✓ = Available; □ = Not available	2		
Source: Vendor RFI			
Table 7: SaaS Capabilities			
Elements		Availability	
Support a multi-tenant architec	ture	✓	
Type of effort required to upda	te the solutio	Automated scripts mostly automated	_
Cadence of upgrades for multi-t	enant deploy	ments Three times per ye	ar
Deployment approach support	elasticity	Yes, within less tha	n a day
Current APIs-related strategy		Pre-connected clou environment (fully connected and rea use)	
Ability of the deployment mode approach	el to leverage	a serverless X	
Ability to enable independent s	ervices (micro	oservices)	
Proportion of the system archit	ected as micr	oservices 25% to 50%	
Support automation of develop processes (DevOps)	ment and de	ployment	
Ability to run and deploy under application deployment	containers to	improve the	
Need for containerization to rui	n in a cloud	✓	
Ability of the system's functions distributed among a private clo	-	→	
<u>Legend</u> : ✓ = Yes x = No			
Source: Vendor RFI			
Table 8: Change Tooling and L	Jpgrades		
Types of Changes		Availability	,
Business Rule Definition		✓	
Data Definition			

ypes of Changes Availability			lity		
Table Maintenance, List of Values, et	c.				
Interface Definition					
Product Definition			✓		
Role-Based Security, Access Control,	and Authorization	ons	~		
Screen Definition					
Workflow Definition			~		
<u>Legend</u> : ✓ = Configurable via tools for business scripting; ⊖ = Configurable via the vendor; ● =	. —		IT users; ■ = Co	onfigurable via	
Source: Vendor RFI					
Table 9: Public Cloud Options					
Providers	NA	EMEA	APAC	LATAM	
Microsoft Azure	×	×	×	×	
Amazon AWS	×	×	×	×	
Google Cloud Platform (GCP)	×	×	×	×	
Alibaba Cloud	×	×	×	×	
IBM Cloud / Bluemix	×	×	×	×	

X

×

X

×

X

×

X

X

 $\underline{\text{Legend}} \colon \checkmark = \text{In production}; \square = \text{Supported but not in production}; \ x = \text{Not supported}$

Source: Vendor RFI

Oracle Cloud

AppExchange

Salesforce Cloud, Force.com,

Other (Guidewire Cloud on AWS)

Partnership

Table 10: Implementation and Support

Type of Partnership	Partner Vendor
System Integrators	Currently more than 21,300 system integrator consultants have been trained or are experienced on Guidewire applications. For a complete listing of partners, please visit https://www.guidewire.com/partnerconnect.

Type of Partnership	Partner Vendor
Fintech Partners	ACI Universal Systems
	Prelude
	InsurPay
	One, Inc.
	Vpay
	Split Limit
	Commerce Bank
Source: Vendor RFI	

Implementation, Pricing, and Support

Table 11: Implementation, Pricing, and Support

Typical Implementation Team Size	11 to 15
Resource Breakdown	Vendor: 10%; Insurer: 30%; Third party: 60%
Location of Employees	Guidewire Software has 469 employees in North America, 409 employees in EMEA, 109 employees in APAC, 9 employees in Latin America
Use of Third Parties	Third party system implementors do most of the vendor's implementations.
Average Time to Implementation	Initial Implementation: 7 to 12 months 2nd and subsequent line of business: 4 to 6 months 2nd and subsequent states/jurisdictions: 1 to 3 months
Pricing Models	Subscription-based license
Source: Vendor RFI	

CONCLUSION

The options for insurers in the billing market have expanded, bringing increased complexity along with them. Although integrated administration suite products have enhanced their billing features, some insurance providers may prefer using independent billing systems due to specific business reasons.

For Insurers

No universal billing solution is ideal for every insurance provider. A variety of suitable options are available for insurers with diverse requirements. When searching for a new billing system, an insurer should start by examining its own unique characteristics. Factors such as lines of business, geographical location, employee skill sets, business goals, and financial resources, as well as the organization's risk tolerance, will affect the list of potential vendors.

Certain insurers might prefer a standalone billing system that can connect with multiple policy administration systems, while others may appreciate the simplicity of a billing solution integrated with the policy administration system.

Some vendors cater to insurance companies with large IT teams proficient in the latest platforms and tools. In contrast, other vendors are more suitable for insurers with smaller IT teams and limited resources.

We recommend that insurers looking for a billing solution narrow their choices by focusing on four areas:

- Understand the art of the possible—what can be done with advanced tools. Consider
 what functionality is needed and available out of the box for the lines of business and
 states desired. Check to see what is actually in production.
- Technology—both the overall architecture and the configuration tools and environment. Perform proof-of-concept exercises with short-listed vendors. This is a chance for providers to show what they can do.
- The vendor's stability, knowledge, and investment in the solution. Consider the
 partnership dimension carefully. Key functional gaps are quickly closed by leading
 vendors.
- Implementation and support capabilities and experience. The relationship between an insurer and its billing vendor likely will stretch for 10 or more years.

For Vendors

As a collective, vendors persistently allocate substantial resources toward the development and enhancement of billing solutions. These solutions are progressively offering enhanced features, refining configuration tools, and embracing greater connectivity through the adoption of APIs and RESTful web services as prevailing industry standards. While these trends are decidedly advantageous for insurers, they simultaneously present formidable challenges for vendors in the increasingly competitive landscape.

In this rapidly evolving environment, vendors must consistently strive to innovate and distinguish themselves from their competitors. The continuous enhancement of billing solution features and functionalities is vital to maintaining relevance and appeal in the eyes of insurers. By prioritizing development of cutting-edge technologies, user-friendly interfaces, and efficient configuration tools, vendors can ensure they remain at the forefront of the industry.

Additionally, the growing importance of seamless connectivity necessitates that vendors adapt their solutions to support and integrate with various policy administration systems. By embracing modern industry standards, such as APIs and RESTful web services, vendors can enable insurance providers to easily integrate their solutions into existing workflows and systems, thereby improving overall efficiency and operational flexibility.

While the ongoing advancements in billing solutions are undeniably beneficial for insurers, vendors must face the increasingly daunting competitive landscape head-on. To achieve long-term success, they must continuously invest in the development and enhancement of their offerings, ensuring they remain in step with the latest industry trends and insurer demands. By doing so, vendors can not only survive but also thrive in the dynamic insurance billing market.

Celent recommends vendors differentiate themselves by:

- Continuing to expand functionality—especially in those areas that impact the customer experience.
- Continuing to build out configuration environments to put change controls in the hands
 of the insurers. Configuration tools that can be used by business analysts continue to get
 high scores from insurers assessing these solutions.
- Making implementation faster and less expensive.
- Investing in embedding cloud-native capabilities into the product.

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

Karlyn Carnahan kcarnahan@celent.com

Andrew Schwartz aschwartz@celent.com

Fabio Sarrico@celent.com

Americas	EMEA	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

Ital

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