CELENT

POLICY ADMINISTRATION SYSTEMS: P&C INSURANCE; NORTH AMERICA EDITION

2023 XCELENT AWARDS, POWERED BY VENDORMATCH

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INTRODUCTION

This report is part of a series on policy administration systems (PAS) in North America, Latin America, EMEA, and the Asia-Pacific. This report profiles major property casualty policy administration systems available in North America today. It uses Celent's ABC Vendor View—our standard representation of a vendor marketplace and designed to show at a glance the relative positions of each vendor in three categories: Advanced Technology, Breadth of Functionality, and Customer Base and Support.

This report should help insurers define their core systems requirements and, where appropriate, create a short list of vendors for evaluation. Insurers continue to have a wide spectrum of systems and vendors to consider when they look for a solution to fit their needs. Insurers should take advantage of their access to the authors through analyst calls to learn more about the vendors.

POLICY ADMINISTRATION SYSTEMS: DEFINITION AND FUNCTIONALITY

Definition

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

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

Transactional Servicing Features

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

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

Quick quote and full quote: Agents and underwriters often want to get a quick indication of risk acceptability and price and to compare the price of different options. Quick quote functionality allows a price to be generated with minimal data entry. The data entry screen contains only those questions needed to calculate a rate or to determine the basic terms and conditions of the policy. Sometimes the questions will address basic risk acceptability, but quick quote is not usually intended to handle full policy underwriting. Many solutions support dynamic questions that expand, and change based on the answers to specific

questions, allowing the system to prompt the broker or underwriter to get more detailed information based on the insured's responses. Multiple versions of the quote can be generated to see the impact of different terms, conditions, and product choices. Some solutions handle side-by-side quoting by opening separate windows. Some allow different quote versions to be saved. More and more are offering side-by-side quoting in a single window.

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

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

Automated underwriting: Many solutions have the ability to use business rules to automate the underwriting process. The solutions use business rules to determine if the transaction can proceed without human intervention. If intervention is required, a task is generated for the underwriter to review and act on. Some solutions can handle basic yes/no questions only. Others can perform very sophisticated underwriting. The capabilities are heavily influenced by the level of sophistication of business rules and workflow capabilities.

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

Endorsements: All systems can handle endorsements. Almost all systems can handle out-of-sequence endorsements as well. When it comes to out-of-sequence endorsements, there are a variety of techniques in place.

Product Management Capabilities

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

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

Look for a base set of insurance products that can be leveraged for building new lines or new products. Some solutions allow easy cloning of product/rating rules and structures. Many solutions have a product architecture that is depicted as a tree, which allows inheritance across jurisdictions for common features. Some include color coding that helps a carrier easily identify where a product does not conform to the nationwide version. Some keep their product architecture in an Excel or Excel-like format, which can be easy for the business to maintain. Some solutions include wizards that make it very easy for a business user to make basic parameter-driven product updates.

Rating: Most, but not all, solutions include rating engines as a key feature. As vendors create more sophisticated configuration tools, rate changes can be done by business analysts rather than developers. The rate tables, rules, and algorithms are externalized from the programming code. The level of sophistication of the rating engines varies widely. As carriers have moved to more complex rating algorithms, rating engines have expanded their ability to support complex algorithms, including multivariate rating and by-peril rating. The more precise an algorithm, the more precisely a risk can be priced. As insurers extend their use of predictive models, they need algorithms that can accommodate these models. Look for the ability to easily create subroutines; built-in functions to handle minimum premiums, rate capping, or prorating; and the ease of ordering the expression. Interpolation of rates is sometimes needed, such as when a specific rate is not provided in a rate table.

Rating maintenance tools: For the easiest management and maintenance, rate tables should be kept separate from the algorithms, and business rule definition and management (e.g., automatic driver assignment) should be maintained separately from the rating algorithms. It's also helpful to keep deviations in a separate layer. Most solutions allow the import or export of rating tables to or from spreadsheets.

Testing, modeling, and analytical tools: Some solutions include very robust tools for handling the rate analysis function. Testing, modeling, and product analysis tools that allow an insurer to do an impact analysis to calculate the overall impact of a rate change or a displacement analysis to identify the number of policyholders that will be affected are included. Some include tools that make it easy to compare current rates against proposed rates. Not all vendors have these types of tools built in.

Bureau support: In the United States almost all commercial lines insurers rely on ISO or NCCI for rates, rules, and forms. There are several ways in which vendors provide ISO rating support to their clients.

Vendor interpretation: Some vendors have their own teams of people that support ISO content. Employees read the ISO circulars, interpret them, and send the information to the insurer to determine if they wish to adopt the change. If the insurer wishes to adopt the change, the vendor then loads the changes into the policy administration system. The cost for this service is typically loaded on top of the vendor's annual maintenance fee for its solution. Some vendors provide service-level guarantees to ensure the vendor does not miss a filing date.

ISO ERC support: The most significant option for rating engines is the ISO Electronic Rating Content (ERC), which offers ISO rating content in an electronic format.

Price optimization, machine learning, and artificial intelligence: Systems may include price optimization tools (in jurisdictions where this is legal). Some include artificial intelligence capabilities. In some cases, the integration is simply allowing models and other data sources to inform the rating, underwriting rules, and pricing. Increasingly, however, both actuaries and pricing leads are leaning on advanced analytics, machine learning, and AI to inform rating and pricing.

Reinsurance: One of the newer areas that vendors have begun to invest in is reinsurance capabilities within the PAS. The most robust solutions allow for full program definition. Carriers can identify multiple treaties based on perils, lines of business, geographies, or other dimensions.

Common Functionality

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

Workflow: Some solutions serve more as data capture tools. Workflow is simulated with screen flow. Other solutions have true workflow capabilities—the ability to automatically generate and assign tasks based on event changes in a policy, time lapse, or data changes in a field.

Document creation: Most of the solutions include some sort of correspondence or forms library for the most common forms and letters. Many integrate to third party solutions to provide additional capabilities because many of the built-in solutions are not robust enough to handle production-level policy generation. Look for standard templates out of the box. Many solutions will come preloaded with ISO, NCCI, or Bureau forms. The forms attachment logic is typically included as part of the product definition, and templates are included in the document creation tools.

Document management: Some systems contain a document management capability allowing for storage of internally generated documents and external documents such as photos, videos, and other media. Many integrate to external third party solutions to provide more scalability.

Reporting: Reporting capabilities vary widely across solutions. Virtually all solutions integrate to a third party reporting tool—with some included 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.

Technical Functionality

While assessing features and functionality is a critical step in selecting a PAS, 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 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 meant for technical staff to utilize.

Business rules: Look for the ability to design and execute business rules and underwriting rules that are separate from the core program code. Carriers should assess the ability to reuse and share rules. Some tools are extremely intuitive and use natural language; others require knowledge of scripting. Some have visualization tools that allow a carrier to use a Visio-like tool to build business rules. Some solutions include a searchable and version-controlled rules repository.

Data: Data is increasingly important for carriers, and software vendors are acknowledging this by building in more tools to help them 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.

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

Security: Security is becoming increasingly important to insurers, especially as policy administration solutions are frequently accessed by web quoting applications. Ask about the security standards the vendor complies with and which certification and assurance methods are used. Take a look at how the system handles security for managing APIs for application-level integration. While many policy admin systems don't need to be PCI compliant, some are.

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

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

Cloud: Deploying policy administration systems in a cloud has become increasingly common. When it comes to the term "cloud," there are many different variations available. Most vendors offer a hosted version of their software. The software is licensed by the carrier and hosted by the vendor either in its own data center, in a private data center like Rackspace, or in a public data center like Amazon or Microsoft. Many vendors also offer various levels of managed services.

Suite Capabilities

Celent has limited the definition of a PAS to include a set of core processes and key supporting capabilities. However, vendors do not necessarily limit their definitions of a PAS in the same way, and many have attempted to build out some or all of the end-to-end components that an insurer might need. A vendor might bundle a component with their PAS (for example, rating), but also consider it (and also sell it as) a separate, stand-alone product.

REPORT METHODOLOGY

In this report, Celent's objective is to include as many as possible of the leading policy administration systems being used or actively sold to insurers in North America. Celent actively reviews vendor systems in the insurance software market and invites the vendors to participate in reports like these.

Criteria for Inclusion

Celent actively reviews vendor systems in the insurance software market. The minimum criterion for inclusion in this report is that the vendor has a staff person based in the region who is actively selling its policy administration solutions.

Celent's ABC analysis is used to highlight vendors that have attained success selling their systems in the North American market. ABC solutions have at least two customer references, at least one new sale to one new customer in the region within the last 24 months, and at least three live customers in the region (at least one of which must be an insurer) and provided a 90-minute demonstration to a Celent analyst.

Celent also profiles other solutions that are not included in the ABC analysis.

About the Profiles

Each profile is structured the same way. Profiles present information about the vendor and its PAS offering, 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 PAS offerings. However, readers are encouraged to consider these results in the following context: The information in the profiles has been self-reported by the vendors. Celent did not confirm the details provided by the participants.

Evaluation Process

To analyze the capabilities of policy administration solutions that are active in the insurance marketplace, Celent invited a broad set of PAS vendors to participate in this year's report. There was no cost for vendors to participate.

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, current client base, pricing models, and the vendor itself.

The RFIs, demos/briefings, and reference surveys provided quantitative and qualitative data that was used in the ABC analysis of the vendors. This process is described in the next section.

Vendors had an opportunity to review their profiles for factual accuracy and to provide their own perspectives but were not permitted to influence the evaluation.

Some of the vendors profiled in this report are Celent clients, and some are not. No preference was given to Celent clients for either inclusion in the report or in the subsequent evaluations.

Celent used its unique VendorMatch platform to gather RFI data from each vendor. VendorMatch is the world's largest vendor and solutions data store—combined with analytical tools—to help financial institutions find, evaluate, and select a solution. Each profile contains a link to the solution's VendorMatch profile.

The RFI for this market research gathered information across multiple dimensions, including:

- Company information
- Product overview
- Specific information about the vendor and the system—including, among others:
 - Functionality
 - Technology
 - Implementation and support
 - Commercial terms
 - Customer base

Customer Reference Feedback

Celent used an online survey tool to gather feedback from client references provided by each vendor included in the ABC analysis. The survey asked about client views of the solution's business and technology value and assessed the vendor's customer service. The survey also asked each client what it liked best about the vendor they use and asked for suggestions for improvement. Anonymous results of the client surveys are reflected in the profiles, including a diagram that displays the average ratings given to the vendor for functionality, technology, integration/APIs, implementation, and support. Keep in mind that the evaluations and comments may vary according to the specific needs of each reference client.

CELENT'S ABC VENDOR VIEW AND TECHNICAL CAPABILITY MATRIX



To help financial institutions better understand the vendor landscape and compare providers, Celent developed its ABC methodology, which positions vendors across three dimensions:

Advanced Technology

Breadth of Functionality

Customer Base and Support

While this is a standard tool that Celent uses across vendor reports in many different areas, each report will define the ABC categories slightly differently. The final rating is determined by Celent's and customers' score of these factors, when appropriate, 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 1: Examples of Factors Used in Celent Policy Administration System ABC Evaluation

ABC Categories	Possible Factors		
Advanced Technology	 Customer feedback on technology, integration, and APIs 		
	 Configurability and upgrades 		
	 Code, databases, operating systems detail 		
	Integration		
	 Methods, services, and APIs 		
	 Deployment options 		
	 Change tooling 		
	 Upgrade automation 		
Breadth of Functionality	 Customer feedback on features and functions 		
	 Overall support of components and features 		
	 Product support and in production 		

ABC Categories	Possible Factors
Customer Base and Support	 Number and size of insurers running the system
	 New insurance clients won in the last two years
	 Number of countries where the system is implemented
	 Client feedback on implementation and post-implementation services
	 Vendor's partners network
Source: Celent	

Additional Considerations

Celent recognizes that the strength of any policy administration system is somewhat dependent on an insurance company's needs and business. A solution ranked low in Celent's rankings may be a perfect fit for a number of insurers for various reasons: price, business-specific functionality, target customer base, existing technology environments, etc. For this reason, these rankings are purely the opinion of Celent. Insurers should use them in the context of their own specific situations. Additionally:

- Celent's ABC methodology uses a normalized scale. In some cases, this can
 exaggerate quantitative differences. Its purpose is to make the graph easier
 to read.
- A vendor's suitability comes down to the institution's needs compared to the insight offered by this analysis.
- Vendors in this analysis include Celent subscribers and nonsubscribers. We make no distinction between how either is presented, nor does it affect our ratings.

ABC Vendor View

The Celent ABC Vendor View shows the relative position of each policy administration system evaluated. Each vendor solution is positioned relative to others in the analysis. Within this framework, the top performers in each ABC dimension receive a corresponding **X** CELENT award.

The X CELENT award winners are:



Guidewire PolicyCenter

Duck Creek Policy



Breadth of Functionality 2023

Guidewire PolicyCenter

Duck Creek Policy



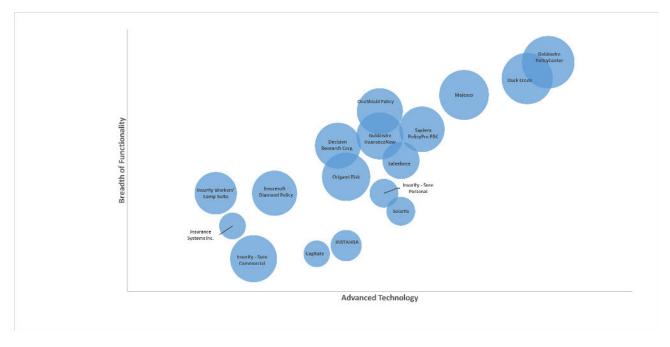
Customer Base and Support 2023

Guidewire PolicyCenter

Duck Creek Policy

Figure 1 displays the relative scoring of each solution, with Advanced Technology on the horizontal axis and Breadth of Functionality on the vertical axis. The bubble size for each vendor represents the third dimension, Customer Base and Support (as noted above, multiple factors determine the size of each bubble).

Figure 1: Celent ABC Vendor View for North American Policy Administration Systems



Source: Celent

Celent Technical Capability Matrix

This report also includes 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. We've

also included the solutions that didn't qualify for the ABC analysis to provide a more comprehensive view of the market.

The five categories are:

- Luminary: Excels on both Advanced Technology and Breadth of Functionality.
- II. 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.
- III. Functionality Standout: Low on Advanced Technology, high on Breadth of Functionality (likely a large installed base). Often more established, these solutions have built out a robust set of features with technology that may not be cutting-edge.
- IV. Noteworthy Solution: Relatively lower on both dimensions, yet still worthy of consideration by some financial institutions.
- V. 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 eBaoTech' GUIDEWIRE Duck Creek Technologia (PolicyCenter) insurity (Bridge Specialty Suite) insurity (Sure MGA) insurity (Policy Decisions Evolution) GUIDEWIRE majesco (InsuranceNow) **SAPIENS** OneShield OneShield (PolicyPro For P&C) (Policy) (Market Solutions) **Technology Standouts Noteworthy solutions** EISA Cogitate Advantage 🔊 ChainThat[®] insurity (Marine Insurance Systems Inc. INSTANDA" **P**insuresoft Suite) insurity (Sure insurity (Sure **Developing solutions** Personal) Commercial) insurity (Workers' Comp Suite) JARUS solartis ORIGAMI RISK **SAPIENS** (PolicyPro For WC) fintechOS **PCMS** ocus technologies y socotra SSP SYSONE WATERSTREET Verisk

Figure 2: Celent Technical Capability Matrix

Advanced Technology

Source: Celent

DUCK CREEK TECHNOLOGIES: DUCK CREEK POLICY





Breadth of Functionality 2023



Customer Base and Support 2023

Company and Product Snapshot

Table 1: Company Snapshot	
Year Founded	2000
Headquarters	Boston
Number of Employees	1,800+
Revenues (USD)	\$302 million
Financial Structure	Public company
	DCT (Note: Duck Creek agreed to be acquired by Vista Equity in January 2023
VendorMatch Link	https://www.celent.com/vendormatch/discovery/solutions/450141065
Source: Vendor RFI	

Table 2: Product Snapshot

Name	Duck Creek Policy
Year Originally Released	2004
Current Release and Date of Release	Duck Creek Policy OnDemand 8.0 / 2022
Revenue Derived from the Product	Total company revenue ~\$260M FY 2021, ending August 31, 2021. For details, see https://ir.duckcreek.com/. Duck Creek does not provide product revenue.
R&D Expense	R&D expense was 19% in 2021. For details, see https://ir.duckcreek.com/
FTEs Providing Professional Services for Product	1,043

Notable Clients	North Am: GEICO, Progressive, AIG
	EMEA: RSA UK, Lloyds, Ageas
	Portugal
	APAC: Avant Mutual, Berkshire
	Hathaway Specialty Insurance

Celent Opinion

Duck Creek Policy is the policy administration solution within the Duck Creek OnDemand SaaS offering.

The solution reflects a continuing investment in usability, with well-designed screens for business users. Duck Creek Policy can be integrated with a variety of data sources and analytics solutions. For example, an underwriter evaluating a property submission can access distance-to-shoreline data from CoreLogic, and a roof view and data from Cape Analytics. Duck Creek offers two types of integrations in its Content Exchange: Anywhere Managed Integrations (fully maintained by Duck Creek) and Anywhere Enabled Integration (managed by the customer implementation).

Duck Creek Policy has an integrated rating engine. In addition to standard rating engine features and functions, it also supports impact analyses to evaluate alternative rating formulas and algorithms.

Duck Creek maintains an extensive forms library with over 10,000 forms. Duck Creek manages ISO, AAIS, and NCCI circulars, and also provides a circular adoption tool to facilitate an insurer's decision on which circulars to adapt. Operational reports are created through the use of Power BI.

Duck Creek OnDemand is deployed in the Microsoft Azure Cloud. Duck Creek Policy leverages several Azure capabilities, such as Azure Search, KeyVault, Service Bus, BLOB Storage, Logging and Telemetry, and the overall Azure Infrastructure.

In North America, Duck Creek Policy has a strong presence in all tiers, as well as a good number of public cloud deployments.

Duck Creek Policy has two configuration environments: Product Studio for business analysts and Author for developers. Product Studio provides a set of product prototypes that serve as a base for developing a new product. It also provides a scripted set of questions (for example, concerning coverages and limits) to guide a business user through the definition of both a completely new product and one based on an existing product. It includes out-of-the-box wizards for the most common tasks, such as adding forms, changing rates and algorithms, and adding fields and pages.

Author facilitates the creation of more complex products, processes, functions, and rules. Author's repository is accessed through a navigation tree. Rules can be created using any conditional logic inclusive of scalar and relative comparisons, reference to functions, and logic and tabular lookups.

Page Builder is a design tool for business analysts to create UIs that are completely responsive for viewing on any device.

Duck Creek Policy offers insurers a full set of features and functions, deployable in Azure, with a growing ecosystem of solutions and implementation partners.

Functionality

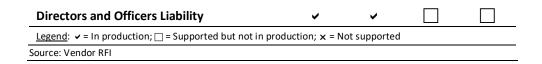
Table 3: Suite Availability Availability Billing Claims CRM Reinsurance **Rating Engine Digital Tools Distribution Management Business Intelligence ETL Tools Data Hub Data Warehouse** Legend:

■ = Integrated into the Policy Admin Module;
= Separate Module available from this vendor;

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■ = Separate Module available from this vendor from Through another vendor; x = Not available Source: Vendor RFI

Lines of Business Supported

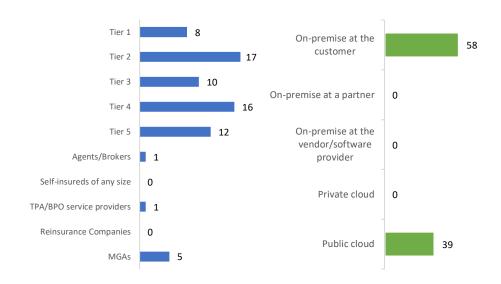
Table 4: Lines of Business Supported				
Line of Business	NA	EMEA	APAC	LATAM
Personal Auto	✓	~		✓
Homeowners / Home	✓	~		
Renters / Contents	✓	~		~
Umbrella	✓	~		~
Commercial Auto	✓	~		~
Commercial Property	✓	~		
Commercial Liability	✓	~		
Workers Compensation	✓	~		
Medical Professional Liability	✓			
Other Professional Liability	✓	~		
Business Owners Policy (BOP)	✓	~		
Surety & Fidelity	✓	~		
Excess Policies	✓	~		



Customer Base

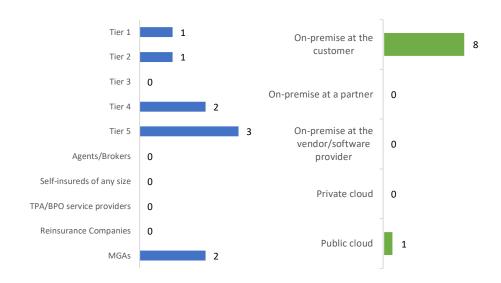
Figure 1: Client Base by Size and Deployment Option

NA



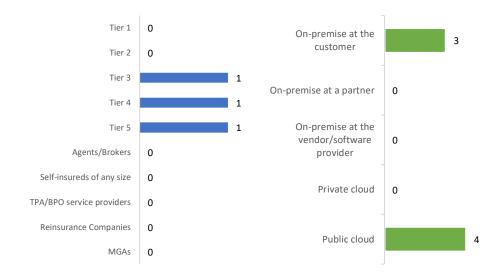
Note: Totals in tiers do not match totals of deployment options because some clients are live with both On-Prem and On-Demand.

EMEA



Note: Totals in tiers do not match totals of deployment options because some clients are live with both On-Prem and On-Demand.

APAC



Note: Totals in tiers do not match totals of deployment options because some clients are live with both On-Prem and On-Demand.

LATAM



Note: Totals in tiers do not match totals of deployment options because some clients are live with both On-Prem and On-Demand.

Source: Vendor RFI

Table 5: Implementations by Country

Region	Countries
North America	Canada, United States
Europe	Ireland, Portugal, United Kingdom
Middle East	-
Africa	-

Region	Countries
Asia-Pacific	Australia
Central America	-
South America	-
Caribbean	British Virgin Islands
Source: Vendor RFI	

Customer Feedback

Three clients provided feedback on Duck Creek. All three systems are deployed on a public cloud. One client has had the system for two to three years, and the other two clients have had the system for three to five years.

Clients rated Duck Creek favorably overall.

Here are the top-rated features in each of the five dimensions:

- Functionality: excess layers and reinsurance
- *Technology:* configurability of the solution
- *Integration:* The solution integrated most easily with their rating engine systems.
- Implementation experience: responsiveness (handling of issue resolution)
- Ongoing system support: work completed on time

Here is what clients told Celent they liked the best:

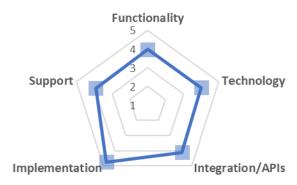
- The people are amazing.
- Configurability and flexibility of ISO commercial lines templates

Suggested improvements from clients included:

- Upgrade path, which I believe is being worked on.
- Workflow, work management, operational reporting and production monitoring/alerting visibility to customer

Figure 2: Customer Feedback

Duck Creek (NA)
Customer average rating
(1=very poor; 5=excellent



Source: Vendor RFI

Technology

Table 6: Technology Options

Technology Options	Responses			
Code Base	.Net: 95%; Angular: 5%			
Integration Methods	Web services; XML/HTTP; RESTful HTTP-style services; JSON format; MQSeries, JMS, or similar queue technology; Custom APIs; Flat files; Native messaging			
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 			
	 API testing portal and the ability to use scripts on website is available 			
	 ✓ The system allows API publishing in SO REST, JSON, and XML style services as API version management is available 			
	Access to the APIs is managed and use of APIs tracked by developers			
	√	Training in extending the system is offered		
Legend: ✓ = Available; □ = Not availabl	e			
Source: Vendor RFI				

Table 7: SaaS Capabilities	
Elements	Availability
Support a multi-tenant architecture	×
Type of effort required to update the solution	Other
Cadence of upgrades for multi-tenant deployments	0
Deployment approach support elasticity	Yes, within less than a day
Current APIs-related strategy	Enabled by consumable APIs
Ability of the deployment model to leverage a serverless approach	•
Ability to enable independent services (microservices)	×
Proportion of the system architected as microservices	Under 25%
Support automation of development and deployment processes (DevOps)	✓
Ability to run and deploy under containers to improve the application deployment	×
Need for containerization to run in a cloud	×
Ability of the system's functions and capabilities to be distributed among a private cloud and a public cloud	•
Legend: ✓ = Yes x = No	
Source: Vendor RFI	
Table 8: Change Tooling and Upgrades	
Types of Changes	Availability
Business Rule Definition	~
Data Definition	~
Table Maintenance, List of Values, etc.	✓
Interface Definition	✓
Product Definition	~
Dala Based Consuits: Access Control and Authorizations	

Role-Based Security, Access Control, and Authorizations

Screen Definition

Workflow Definition

Legend: ✓ = Configurable via tools for business users; ☐ = Configurable via tools for IT users; ☐ = Configurable via the vendor; ⊖ = Configurable via scripting; ● = Coding required; × = Not available

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	×	×	×	×
Oracle Cloud	×	×	×	×
Salesforce Cloud, Force.com, AppExchange	×	×	×	×
Other	×	×	×	×
Legend: ✓ = In production; ☐ = Supported but r Source: Vendor RFI	not in production;	; 🗴 = Not suppor	ted	

Partnership

Table 10: Implementation and Support

Type of Partnership	Partner Vendor
System Integrators	Duck Creek has formal Delivery Partners including Accenture, Capgemini, Cognizant, Mindtree, Atos/Syntel, DXC Technology, HCL, HTC Global Services, IBM, LTI, Coforge, Wipro, and Deloitte—all of whom have Centers of Excellence for Duck Creek services. In addition, Duck Creek has a formal partnership with Avanade for systems integration projects, and teams with many other systems integrators for specific projects per customer preference. Partners bring unique delivery methodologies, tools, and assets to support implementations and directly engage with the customer to determine implementation strategies. Additional partnership information can be found at: https://www.duckcreek.com/partners.
Fintech Partners	FRISS, Snapsheet, Amali, InsurePay, Gradient, TransUnion, Samba Safety, Roost, Arity, Splice, WeGoLook, and Clyde
Source: Vendor RFI	

Implementation, Support, and Pricing

Table 11: Implementation, Support, and Pricing

Typical Implementation Team Size	6 to 10	
Resource Breakdown	Vendor: 10%; Insurer: 20%; Third party: 70%	
Location of Employees	Duck Creek Technologies has employees in North America, EMEA, and APAC, with 492 in North America, 18 in EMEA, 533 in APAC	
Average Time to Implementation	Initial Implementation: 4 to 6 months 2nd and subsequent line of business: 1 to 3 months 2nd and subsequent states/jurisdictions: 1 to 3 months	
Pricing Models	Subscription-based license, Term license, Enterprise license	
Source: Vendor RFI		

CONCLUDING THOUGHTS

For Insurers

The good news is that there are many policy administration system options for almost every conceivable type of insurer. An insurer seeking a new PAS should begin the process by looking inward. Every insurer has its unique mix of lines of business, geography, staff capabilities, business strategies, operational objectives, and financial resources. This combination and 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. Other vendors are better suited to an insurer with a small IT group that wants the vendor to take a leading role in maintaining and supporting its applications.

We recommend that insurers that are looking for a policy administration system narrow their choices by focusing on four areas:

- The most important features and functions for the insurer's current for foreseeable operating model and strategic objectives.
- Technology that will support the continually evolving use of cloud, data/analytics, and customer experience.
- The vendor's stability, knowledge, and investment in the solution.
- Total cost of ownership for implementation and at least a five-year time horizon.

For Vendors

The technological foundations of policy administration systems are evolving rapidly—which in turns allows greater operational efficiencies and enables better decisions.

Given these trends, Celent recommends vendors differentiate themselves by:

- Focusing on improving usability for both new and experienced users and managers.
- Making implementation faster and less expensive.
- Utilizing open APIs and other integration frameworks to facilitate orchestration of processes and data across internal and external sources.
- Making product and process configuration faster and easier.

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