

P&C CLAIMS SYSTEMS VENDORS IN EMEA

2021 EDITION

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21 April 2021

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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
	Duck Creek Technologies: Duck Creek Claims
	Duck Creek Technologies: Duck Creek Claims

Source: Celent

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.

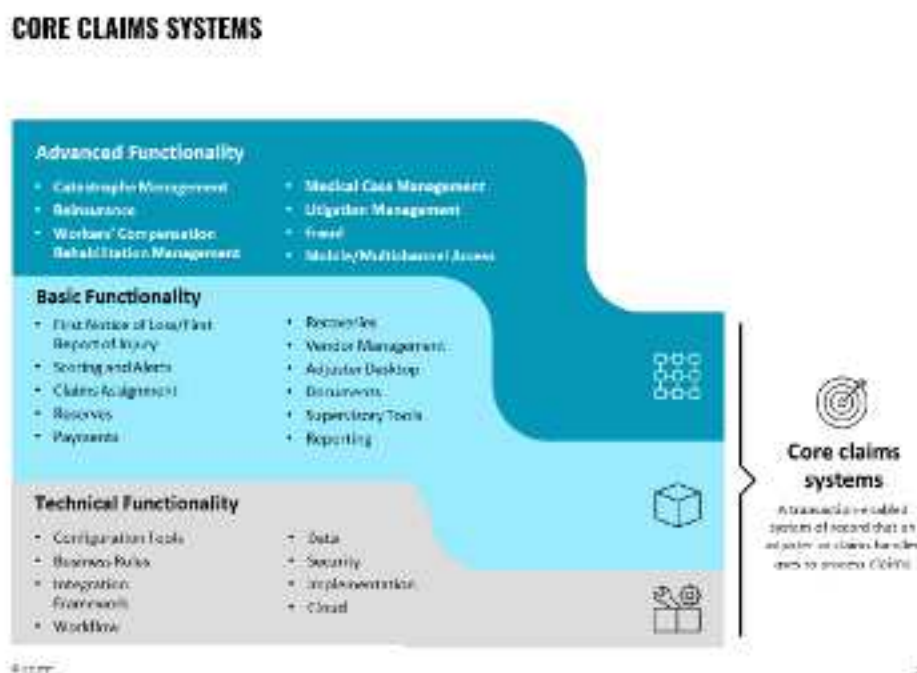
A core claims system performs these actions over the entire life cycle of a claim: from first notice of loss through final settlement and closing the active claim file. A claims system typically integrates with policy administration systems to support coverage verification and to provide information 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



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 28th April 2021 to correct some typos in the introductory text.

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

DUCK CREEK TECHNOLOGIES: DUCK CREEK CLAIMS



COMPANY

Duck Creek is a publicly owned company headquartered in Boston, MA with sales and professional services personnel located throughout the North American, European, and Asia-Pacific regions. The company has 1300+ employees available to provide professional services / client support for their solutions. The majority of their employees are physically located in North America.

Duck Creek Technologies operated as a private entity starting in 2000 and conducted an initial public offering (IPO) on August 14, 2020. Duck Creek is now a public entity operating under the name Duck Creek Technologies, Inc. The company's stock symbol is DCT and trades on the Nasdaq Stock Exchange. The vendor offers an annual user conference called FORMATION that is attended by customers, prospects, partners, industry analysts, and thought leaders. FORMATION provides these constituents with access to Duck Creek product and services insights, networking opportunities with the Duck Creek employee and customer base, and an opportunity to explore ways to maximize the value of Duck Creek's products and services.

Table 3: Company Snapshot

YEAR FOUNDED	2000
NUMBER OF EMPLOYEES	1,300
REVENUES	Revenue for 9 months ending May 31, 2020, was \$153M USD. For more financial details see the DCT Investors Relation site: https://ir.duckcreek.com/
FINANCIAL STRUCTURE	Company Financial Structure: Public company

Source: Duck Creek Technologies RFI

Table 4: Product Snapshot

NAME	Duck Creek Claims
YEAR ORIGINALLY RELEASED/DEPLOYED	1997-01-01 / 1998-01-01
CURRENT RELEASE AND DATE OF RELEASE	Duck Creek Claims 2019 Release / 2019-01-01
UPGRADES	The vendor supports current versions and up to two prior.

TARGET MARKET	Duck Creek software is capable of serving all P&C Insurance carriers in all tiers and all geographies, although it focuses primarily on carriers with DWP >= \$100M. Our software supports the standard P&C lines out of the box, but we are uniquely positioned to meet the more complex requirements of specialty and nonstandard carriers more effectively than other providers. The prospects that find the most value in our solutions are carriers who are looking for ways to both modernize their platform and set themselves up for change in the future. At the heart of our value proposition is the ability to provide carriers with speed to market on both the initial implementation and, more importantly, future changes. Carriers who are looking to protect their future flexibility as main goal of their digital transformation fit best with the Duck Creek solution.	
INSTALLED BASE	North America:	29
	EMEA:	7
NEW CLIENTS SINCE 2017	North America:	11
	EMEA:	1
COUNTRIES DEPLOYED IN (SUITE)	North America: United States, Canada and Bermuda EMEA: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Finland, France, Greece, Hungary, Ireland, Italy, Malta, Netherlands, Norway APAC: Australia, Azerbaijan, Georgia, Hong Kong, India, Indonesia, Japan, Kazakhstan, Malaysia, New Zealand, Pakistan, Papua New Guinea, Philippines, Singapore, South Korea, Sri Lanka, Taiwan, Thailand, Uzbekistan, Vietnam LATAM: Mexico, Argentina, Brazil	
NOTABLE CLIENTS	Chubb Group of Insurance Companies, Berkshire Hathaway Specialty Insurance, UPC	
REVENUE FROM PRODUCT/SERVICE	Confidential	
FTES PROVIDING PROFESSIONAL SERVICES FOR PRODUCT	1100	
USER CONFERENCES / PRODUCT WORKING GROUPS	The vendor offers an annual user conference or customer event	

Source: Duck Creek Technologies RFI

CELENT OPINION

Duck Creek continues to invest in usability in Claims. Responsive design is built in by means of a responsive JavaScript library.

Duck Creek Claims has a different focus compared to the other components. The user interface is oriented around helping claims adjusters better handle their time and tasks. The solution offers a streamlined first notice of loss approach. The task dashboard helps claims handlers manage their time and understand the tasks that are outstanding. The task dashboard is well suited for team leaders as well. When opening a claim, the claim file view provides a great dashboard or portlet style view of all the data and activity in the claim. Duck Creek also demonstrated their collaboration tools, allowing users of Duck Creek Claims to reach out to each other and work through complex claims through the

system, rather than through email and faxes. The user interface also includes a notifications capability called pulse that enables collaboration and task management.

The solution is increasingly using some of the key features of Azure, and Duck Creek continues to expand their menu of cloud-based services—making this a nice solution for those that are looking for full cloud deployments.

Duck Creek Claims continues to enjoy significant market acceptance. During the past two years, it gained 15 new clients globally. Duck Creek has built out its ecosystem of digital and InsurTech partners and has also substantially increased its network of SI partners for system implementation. Duck Creek Claims is a strong, modern solution deployed in multiple countries and will be of interest to insurers across Europe.

OVERALL FUNCTIONALITY

Duck Creek offers the following modules in the core system application. Duck Creek Claims is available on a stand-alone basis.

Table 5: Suite Availability

SUITE	AVAILABILITY
POLICY ADMINISTRATION	Yes - Separate Module available from this vendor
BILLING	Yes - Separate Module available from this vendor
CRM	Yes - Integrated into the Claims Admin Module
REINSURANCE	No
RATING ENGINE	Yes - Separate Module available from this vendor
DIGITAL TOOLS	Yes - Separate Module available from this vendor
DISTRIBUTION MANAGEMENT	Yes - Separate Module available from this vendor
BUSINESS INTELLIGENCE	Yes - Integrated into the Claims Admin Module
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: Duck Creek Technologies RFI

The Duck Creek Suite is an end-to-end insurance offering composed of solutions that can be implemented together or stand-alone, including policy, rating, billing, and claims solutions. Additional capabilities include rules and product definition and configuration, as well as product templates, document management, and sales enablement tools. The Duck Creek Suite and each of its individual solutions can be implemented primarily via Duck Creek OnDemand (SaaS) where all system management and maintenance is handled by Duck Creek or alternatively in an on-premises deployment.

The Duck Creek Suite has functionality built on web-enabled, service-oriented, event-based architecture, which can support insurers of all sizes. According to Duck Creek, implementing two or more Duck Creek products unlocks their “suite advantage,” providing optimal benefits needed to manage the business, reduce risk and costs, and respond quickly to capitalize on changes in the marketplace.

Figure 2 shows Duck Creek Technologies' functionality and production status of key features for claims administration systems.

Figure 2: Key Functionality

Function	In Production with Clients	Supported but Not in Production with Clients	Not Supported
Desktop			
User desktop / workbench	●		
Claims overview	●		
Data Services			
Upload ACORD or FNOL	●		
Integration and prefill with 3rd party data	●		
Documents			
Includes a correspondence and forms library	●		
Can attach documents, emails, phone calls, or notes	●		
Includes a content repository and document management	●		
Notes			
Includes a notes facility	●		
Ability to search text within notes and diaries	●		
Other			
eSignature	●		
Consumer portal	●		
Agent portal	●		
Supervisory Tools			
Escalation based on authority	●		
Dashboard to manage employee's workload	●		
Underwriter/Adjuster Assignment			
Automated underwriter assignment	●		
Out of office / vacation rules	●		
Workflow			
Automatic task generation	●		
FNOL/FROI			
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	●		
Injury Management			
Track utilization review and recertification	●		
Can create, document, and track special programs such as return to work	●		
Claim Investigation			
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 rd party data	●		
Reserving			
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
Payments			
Recurring payments	●		
Multiple pay parties (e.g., garnishments)	●		
Subrogation and Recoveries			
Separate tasks, workflow, diaries, business rules for subrogated cases	●		
Fraud			
Workflows specific to fraud and special investigations	●		
Litigation Management			
Separate tasks, workflow, diaries, business rules for litigated cases	●		
Vendor Management			
Vendor management tools	●		
Reinsurance			
Manually tag a claim when reinsurance applies	●		
Automatically identify claims subject to reinsurance	●		
Catastrophe			
Can define catastrophes by peril, geography, date, or other criteria	●		
Automatic identification of cat claims	●		
Additional LOB Functionality			
Functionality specific to auto insurance	●		
Functionality specific to property insurance	●		
Functionality specific to liability insurance	●		
Functionality specific to workers compensation insurance	●		
TPA			
Ability to track hours/activities	●		
Ability to manage different fee schedules	●		
Support for Lloyds Claims Processes			
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: Duck Creek Technologies RFI

REPORTING FEATURES

Duck Creek Insights supports reports, dashboards, and other analytic content made available through both out-of-the-box reports as well via their Content Exchange, utilizing Microsoft Tools, in the form of prebuilt PowerBI and SSRS files and blue prints, serving as accelerators for their clients. However, their customers may utilize other reporting and analysis tools. Graphical reporting tools (charts, graphs, etc) and report scheduling are available via integration with a third party solution.

AI FUNCTIONALITY

AI capabilities are provided through integration with third party vendors. Examples of ways insurers are using this includes risk scoring, data prefill, total loss prediction, photo-based estimating, case level reserving, risk mitigation, inspections, risk data prefill, chatbot and Voice UI cases (e.g., contact center automation and personalization of customer communications).

INTERNATIONALIZATION

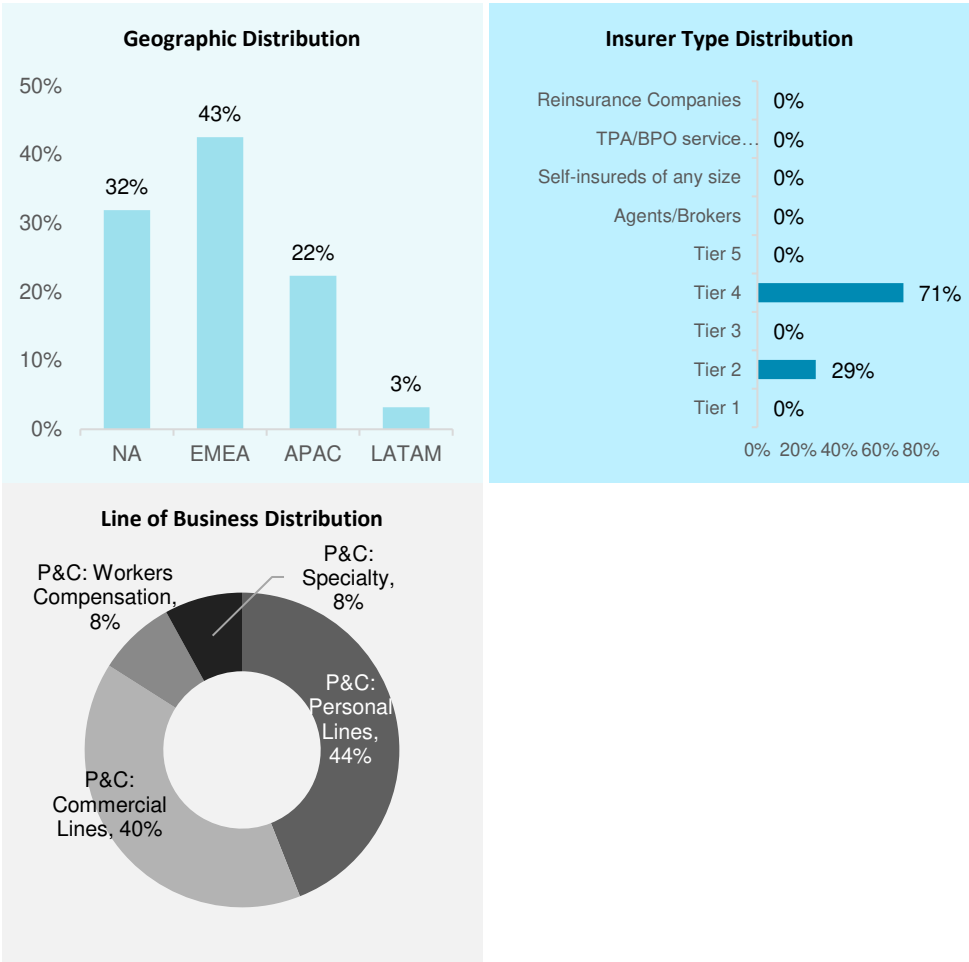
Duck Creek Technologies can support multiple currencies. There are no constraints on currencies the system can support. Duck Creek can support most common and recognized currencies and supports both fixed and floating currency exchange rates.

Duck Creek Technologies can support multiple languages. Duck Creek supports the usage of multiple languages concurrently, including those that require double-byte character sets. The default language displayed to an end user is based on that individual user's profile setting and can be switched through the user's homepage depending on user authorization. Independent of the language preference of a Duck Creek user, a carrier customer's language preference is captured in the customer's Party record and drives business rules for customer interaction in the customer's preferred language throughout the claims life cycle. Duck Creek can support most common and recognized languages. English US and English UK are provided out-of-the-box. Accelerators are available for French, Italian, and Japanese (Kanji) languages. To-date, Duck Creek has also translated the software to French, Italian, and German.

CUSTOMER BASE

Duck Creek Technologies has 177 total customers, with 49 in EMEA. Duck Creek has gained 25 new customers in the past two years, 1 of which is based in EMEA.

Figure 3: Duck Creek Technologies_Client Base by Geography, Line of Business, and Institution Type in EMEA



Source: Duck Creek Technologies RFI

CUSTOMER FEEDBACK

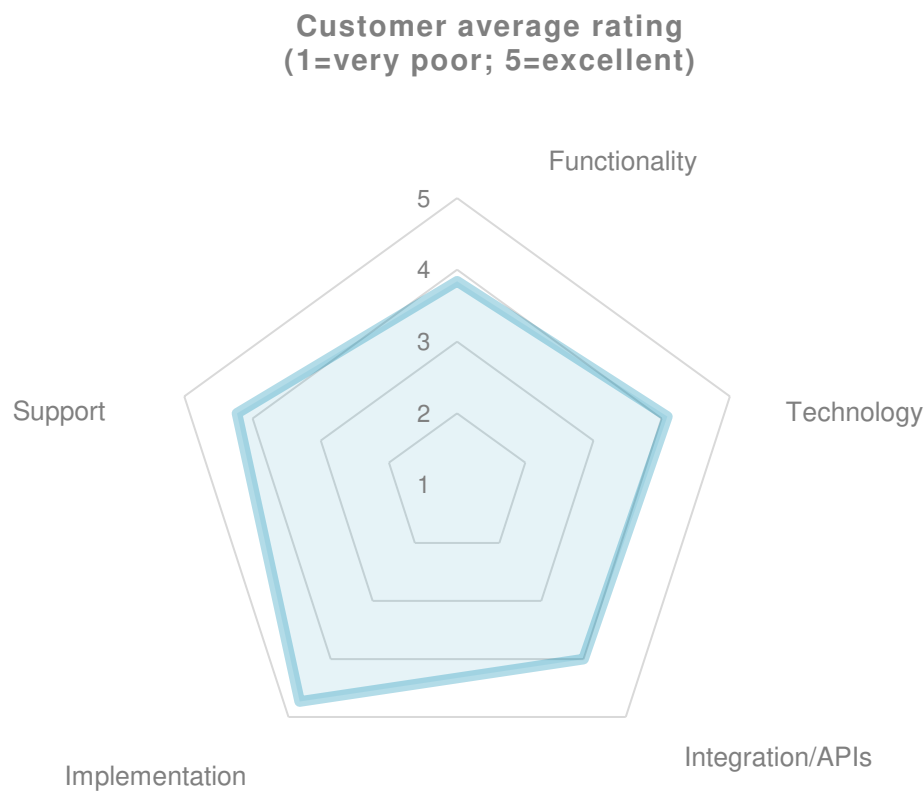
Two clients offered feedback on Duck Creek Technologies based on their use in EMEA. Both were users of the solution for more than three years and one noted they used the solution on the public cloud. Both used the solutions for a mix of commercial and specialty lines.

One reference noted that Duck Creek, “consistently works as a strong partner to help us with all our needs.” Regarding the solution, a client leveraging the SaaS model valued the way they could remain within one version of the latest release at all times, as well as being able to expedite hot fixes as needed.

In terms of areas for improvement, one reference stated, “In some cases with the claims system I would like to see the system more user configurable.” Regarding the vendor, another reference noted that their success in the US had limited the number of available resources—a challenge they note Duck Creek Technologies are looking to address.

One client concluded with the following, “Overall the Duck Creek Claims system has been an excellent system for the claims team. We process all our claims in the system from day one, internationally, and in all currencies.”

Figure 4: Client Feedback



Source: Celent Client Reference Survey

LINES OF BUSINESS SUPPORTED

Table 6: LoB 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: Duck Creek Technologies RFI

TECHNOLOGY

Duck Creek Claims is implemented using contemporary three-tier web architecture. The view logic and business logic are loosely coupled and can be tested independently, providing flexibility in automated testing solutions.

The web layer employs JavaScript and AJAX to provide rich client features. Page layouts and styles are controlled by external Cascading Style Sheets (CSS) for a highly dynamic and responsive end-user experience for personalization of concurrent themes.

The application layer is composed of coarse- and fine-grained business components supporting end-to-end claims processing implemented using Service Oriented Architecture (SOA) design patterns.

The data layer houses referential, transactional, and operational data for system operations and runs on an ANSI SQL-compliant relational database platform.

The claims solution was relaunched (at the time named Accenture Claim Components) as a repeatable, packaged claims software solution. This new release delivered a highly configurable claims solution for carriers of all lines, sizes, and geographies. Prior to this release, the claims software was primarily focused as a custom code solution. The replatformed solution delivers a working solution that any carrier can deploy, using Duck Creek's configuration tools to manage rules, edits, workflows, and other functionality independent of core code changes, which was implemented in version 10.

The primary UI for business users is 100% browser based and provides a touch screen interface; for developers and configurators it is 100% browser based. The vendor does not have plans to change the framework for the future.

Technology details for Duck Creek Claims are provided in Table 7.

Table 7: Technology Options

CODE BASE	Core Technology: .Net: 50%; C#: 50%
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OPERATING SYSTEMS	The system is implemented in .NET. .NET version support: The current release of the Duck Creek Suite is certified on Microsoft .NET Framework 4.7.1; Version 4.7.2 is also supported. Available operating systems: Windows
DATABASES	Databases available: SQL
INTEGRATION METHODS	Available methods: Web services, XML (not through web services), HTTP, RESTful HTTP-style services, JSON format, MQSeries, JMS or similar queue technology, Custom APIs, Flat files Public API integrations: Public API includes Salesforce, Dynamics, LexisNexis, Bing Maps, Google Maps, Alexa, Microsoft ChatBot, Microsoft LUIS, etc. Customers have the ability to create their own integrations as extensions. The vendor does provide training for API integrations
MOBILITY	The system uses responsive design and is tested on mobile devices. Mobile-friendly HTML5 App UI and process flows have been designed to be device independent.
ACCESS TO CORE CODE PROVIDED TO CLIENT	Customers can extend the platform using the Duck Creek SDK and standard code design patterns, but they do not change the core code.
CORE CODE MODIFICATION	Core modifications: The exception to the rule % of total cost from core code / development modifications in recent implementations: 0% In recent implementations, there have been no additional costs associated for any core code modifications. Duck Creek does not alter its core code on a one-off basis. Because the system is configuration-driven, all customers receive the same core code, driven by the customer's specific configuration. If a core change is determined to be necessary, it will be included in a general release to all customers as a product enhancement. In recent implementations, Duck Creek has used the core flexibility of their platform configurability to manage all the business requirements of their customers.
SCALABILITY	Scalability Metrics: In performance lab testing, they have demonstrated that the system can process over 37K full-spectrum interactive business transactions per hour with a database loaded with over 1M claims using a single application server. Duck Creek has performance tested the product in a real world customer configuration to process 11K records per hour through the interactive web UI. Duck Creek can be scaled to accommodate the load demands of the largest insurers with proven production installations. Duck Creek is designed to be scalable both "up" and "out." Any number of processors or cores can be employed to support scaling up. To scale out, load balancing may be employed at the HTTP layer to route the requests to any of the machines in the cluster. Duck Creek is thread-safe and effectively supports concurrency. This architecture supports constant availability in case of individual component failures. Through internal and vendor partnerships, performance testing has found linear scalability with node-based infrastructure configurations, where the web and application tiers reside on the same server instance, in comparison to tier-based arrangements, where the web and application tiers are segmented. The largest claims volume customer trends at approximately 5.75 million claims per year and peaked at 6.3 million claims per year.

DEPLOYMENT MODELS

Duck Creek OnDemand, their SaaS offering, is a service model with shared physical infrastructure and support teams hosted on the Microsoft Azure Public Cloud. Geographically distributed Azure data centers are utilized, based on global business locality, for hosting and redundancy.

Duck Creek utilizes IaaS services from Microsoft Azure, where the physical machines and data centers are managed by Microsoft Azure. The Duck Creek OnDemand team provisions and manages all the virtual infrastructure and databases. They also manage all the Duck Creek services, application security services, monitoring, alerting, etc. including all management of carrier data.

Duck Creek OnDemand includes a comprehensive set of value-added services, available as a complete offering as follows:

- Infrastructure Provisioning (the right infrastructure at the right time).
- Infrastructure and Application Monitoring (keeping the system healthy).
- Reporting metrics and Service Level Agreement for OnDemand Subscription (Application Availability, RTO, RPO, Incident Response Time, and Speed to Answer).
- SaaS Dashboard for monitoring system operational health.
- 24x7 Help Desk for incident reporting capabilities.
- Issue triage (ALL incidents), ticketing, and escalation for level 2, 3, 4 support.
- System upgrades of Duck Creek software to make latest functional enhancement and issue corrections available to their clients.
- Selective application of system upgrade content, with optional User Acceptance Testing by customer.
- Third party software and tools integration, supporting base function.
- Disaster Recovery planning and backups, to ensure availability, failover, and recovery success.
- Infrastructure Patching (Operating systems, Antivirus, Database).
- Security (penetration testing, protection of PII through monitoring, and debugging tools).

This core support with the Duck Creek OnDemand offering takes the physical and virtual infrastructure, security, and disaster recovery headaches out of the equation in order for their customers to focus on the business.

The Duck Creek platform can also be installed as a traditional on-premises solution, where the carrier and/or delivery partner fully manages all aspects of the deployment, including hosting in a public cloud, private cloud, hybrid cloud, or on-premises model.

HOSTING LOCATIONS

Based on global business locality

HOSTING DETAILS

Number of instances: 13

Maximum number of clients running on one instance: 1

PUBLIC CLOUD OPTIONS

Public Cloud Options Supported: Microsoft Azure

Source: Duck Creek Technologies RFI

DATA

Data within Duck Creek Claims is housed in a proprietary relational data model. This enables delivery of full-featured solutions for core and customer-specific capabilities required by P&C insurance customers spanning First Notice of Loss (FNOL) claims

adjudication through settlement. The data model is normalized for high performance in transactional processing and supports extended data elements that are preserved through product upgrades. Claims data is migrated to the Insights Data Hub for reporting purposes.

Modifications to the core application logical data model are implemented by updating the data dictionary and simply dragging and dropping fields on pages through browser-based intuitive user interfaces that do not require coding, scripting, or physical data model changes. The data dictionary documents all fields in the data model at a detailed and summary level. Additionally, customer-configured fields are made available for use on application pages, business rule creation, and for storage/retrieval in the database.

Customers extend the Claims data model by using Claims Studio to define new elements and their properties. Extended data elements are available for display on any screen, calculation in any business rule, and can also be optionally pulled into reporting when defining the data element.

The data model can be released to the client, can be easily published to a client's data model, and can map to an intermediate format to share with a client (such as an industry standard). The Duck Creek Platform provides a tool suite that enables flexible, codeless configuration, modeling, and testing for full product definition. Configuration changes are applied using prescriptive user interfaces. Those interfaces can be utilized to extend the data model and define new tables and fields to meet business requirements.

Duck Creek states they do not often encounter customer-requested changes to their data model. However, when they do identify enhancement requests that require database changes, they govern these the same way they govern all software enhancement requests. Their product and development teams first work with their customers to understand the needs they have.

Their User Group is a critical aspect of this process. As they begin to implement these changes, they share their approaches with customers via their quarterly User Group meetings and they consider their feedback in the process. Because of this collaborative approach, they state the impact of changes on their customers is reduced and upgrade risks mitigated.

The Duck Creek Suite is regression tested utilizing the Test Automation Center (TAC) and Regression Runner as part of their normal release process. Detailed release notes are available in the online Duck Creek Solution Center.

Duck Creek's TAC is used to automate the wide-scale validations of web-based applications, while Regression Runner executes wide-scale validations of PDF or XML documents as part of functional regression testing.

INTEGRATIONS

Duck Creek Technologies provides web services, XML (not through web services), HTTP, RESTful HTTP-style services, JSON format, MQSeries, JMS or similar queue technology, custom APIs, and flat files as integration methods.

APIs are documented. API management supports local or global standards such as ACORD application creation and rendering. API sample codes are available to clients. An API developer portal is available for support and descriptions. An API testing portal and the ability to use scripts on a website is available. The system allows API publishing in SOAP, REST, JSON, and XML style services as APIs. API version management is available.

Duck Creek Technologies does not provide documentation but does provide training for API integrations. External systems can trigger events in the system, which can be responded to by a workflow or business rule. All of the training formats in the list are supported by Duck Creek for various aspects of the system. API and platform extension training is typically conducted during the implementation phase (on the job or as train the trainer). Their online knowledge base (Duck Creek Solution Center) contains a substantial number of examples, including code samples.

Table 8 shows available products pre-integrated with Duck Creek Claims.

Table 8: Insurance Pre-Integrations

INTEGRATION
Legal bill review systems: Milliman
Address verification tools: Precisely
Agency/broker management connectivity solutions (those that manage the data transfer between a carrier's systems and an agent/broker's systems): Duck Creek Distribution Management, IVANS
Agent portal software: Duck Creek Producer
Agent/Broker management systems: Duck Creek Distribution Management, IVANS
Analytics solutions: Duck Creek Insights, Cape Analytics, Arity, Google Analytics, Gradient AI, FRISS
Business Intelligence systems: Duck Creek Insights, Advisen
CRM solutions: Salesforce AppExchange, Duck Creek Party
Data warehouse: Duck Creek Insights
Distribution management systems (e.g., commissions and licensing): Duck Creek Distribution Management
Document management systems: Hyland OnBase
eSignature systems: AssureSign
Policy administration systems: Duck Creek Policy

Source: Duck Creek Technologies RFI

CONFIGURATION

The configuration toolset allows for the support of management and versioning product definitions to be configured to meet any need. Most of their customers use a method for their filed products to version by Effective Date, which allows for each change (e.g., product, rate, rule) to exist in its own version. This allows multiple versions of one product definition to be live in the production environment simultaneously. The toolset includes a deployment manager that allows a user to promote configuration changes to any server to which they have been granted rights. Most of their customers use a four-tier model to promote configuration changes (development, test, staging, and production) and control the deployment rights in such a way so that each deployment tier requires a different user.

Configurations are applied as data changes and do not require compilation of code or scripts for deployment to environments. Configurations are portable and are versioned for migration from preproduction to production environments using native utilities and/or can be exported to a version control system such as Subversion or Microsoft Team Foundation Server (TFS) for managing releases packaged with Solution Extensions prior to promotion through environments. Configurations and Solution Extensions can be rolled back to restore previous versions. With the Duck Creek High Availability framework, customers have the ability to run two different versions of the application simultaneously

for a period of time until the production support team decides to bring down the previous version of the application.

They use a combination of Azure DevOps, Octopus, Microsoft Team Foundation Server, Subversion, Duck Creek Test Automation Center (UI test automation), Duck Creek Regression Runner (API test automation) and Artifactory. Impact analysis support for developers is provided by the configuration and development user interface.

Duck Creek provides several tools to assist in testing of changes, covering a broad spectrum from unit-based tests to end-to-end testing to business impact.

Duck Creek has also built and distributes a tool called the Test Automation Center (TAC) which allows users to dynamically and interactively build testing scripts against a browser session, "record" the steps and expected results, and run those tests individually or in batch, thereby providing a complete end-to-end set of tests.

Duck Creek provides several tools to assist in change impact analysis, covering a broad spectrum from unit-based tests to end-to-end testing to business impact.

For auditability, configurations are applied as data changes and do not require compilation of code or scripts for deployment to environments. Data is audited at the transaction level capturing user/transaction-based information including related table actions that were executed (creation, modification, deletion). All tables support addition of optional audit tables to capture the historical data trail where full history is required.

Any changes can be deployed without a restart of the server. Deploying a new web service or integration point may cause a web application to be recycled, but the server itself does not need to be restarted.

Table 9: 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 simple tools targeted for a business 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 tools targeted for an IT user

Source: Duck Creek Technologies RFI

SECURITY

Duck Creek successfully completed both SOC 1 Type II and SOC 2 Type II examinations for 2019. Copies of the reports are available under NDA and upon request. Both audits were performed by an independent CPA firm for the scope of service covering Duck Creek's OnDemand Software as a Service (SaaS) for the period January 1, 2019 through December 31, 2019. Additionally, Duck Creek has also received their ISO 27001 certification effective as of July 19, 2019 and applicable through July 18, 2022.

Microsoft Azure, which provides the Duck Creek OnDemand hosting facility, adheres to a broad set of international certifications and industry-specific compliance standards. The Azure Cloud strictly adheres to global compliance standards. Certifications include ISO 27001, FedRAMP, SAS70, SOC 1, and SOC 2. To further ensure data security, all data and log files are backed up on a regular basis, with tapes stored off site. Please refer to the following link for more information regarding hosting compliance:

<http://azure.microsoft.com/en-gb/support/trust-center/compliance/>.

PCI compliance is achieved via integration with payment processors using a redirect model and tokenization. Duck Creek never stores card identifiers, only tokens which are returned from the payment processor.

In addition to the SOC 1 and SOC 2 audits and the ISO 27001 certification audit, Duck Creek runs annual third-party pen tests on their OnDemand platform, and they run annual pen tests on each customer implementation within OnDemand. The software also undergoes code review at each major release and/or annually. Duck Creek also conducts an annual risk assessment performed by a third party, and their internal audit function performs annual audits of their ISMS program.

DISASTER RECOVERY

In the Duck Creek OnDemand (SaaS) operating model, high availability (HA) is incorporated at all levels of the physical and virtual infrastructure stack, including database servers, application servers, load balancers, domain controllers, physical routers, and storage devices. HA is implemented using Microsoft Azure Availability Zones. In the Duck Creek OnDemand (SaaS) operating model, geographically distributed Microsoft Azure data centers are utilized, based on global business locality, for hosting and redundancy. The Duck Creek OnDemand deployment utilizes a "primary" and "secondary" data center strategy. Production is hosted in the primary data center, with other environments (including Disaster Recovery) located in the secondary data center.

The Duck Creek OnDemand offering includes a full Disaster Recovery (DR) Plan, including escalation and decision-making procedures, contacts, failover and fallback steps, etc. Their DR solution uses Microsoft SQL Always-On Availability Groups, with synchronous "replication" of data for high availability within the primary data center and asynchronous "replication" of data to a secondary data center for DR purposes. The latency for the data to reach the secondary data center from the time it is committed as a transaction in the primary data center is less than five seconds. This means that there is a minimal chance that more than five seconds of data would be lost in the case of a catastrophic disaster to the primary data center. In this solution, the data tier in DR is always hot, where the application tier is either hot, warm, or cold based on the selected SLA tier. In the Platinum SLA tier where the application tier is hot, automated failover is available.

They conduct DR tests jointly with the customer prior to go-live, again within six months after go-live, and annually thereafter. Additionally, if a customer has an enterprise-wide DR test conducted on an annual basis, they will gladly participate in that effort as well. In the Duck Creek OnDemand (SaaS) operating model, to provide additional assurances in case the SQL Server Always-On Availability Group should ever fail, they also take

transaction log backups every 30 minutes and store them in triplicate in the secondary data center. They also take a daily backup, and they retain one backup for each of the past seven days, one for each of the past eight weeks, one for each of the past 12 months, and one annually. Note that when each backup is taken, there is an automated process to test the restore, and if the restore fails, then a new backup is automatically taken.

PARTNERSHIPS

Table 10: Partnerships

TYPE OF PARTNERSHIP	PARTNER VENDOR
SYSTEM INTEGRATORS	Duck Creek has a formal Delivery Partner (System Integrator - SI) partnership with the following companies: Accenture, Atos/Syntel, Capgemini, Cognizant, Deloitte, DXC Technology, HCL Technologies, HTC Global Services, IBM, LTI, Mindtree, NIIT Technologies, and Wipro.
CONVERSION PARTNERS	Duck Creek provides their product-specific skills to complement their Delivery Partners and/or their customers in developing conversion strategies. The Duck Creek Professional Services team utilizes tools that support various conversion activities, such as loading of the converted data, data integrity, conversion test plans, and so forth. These tools can be leveraged by their Delivery Partners through their own skills with the Duck Creek tools, or through the Duck Creek Professional Services team.

TYPE OF PARTNERSHIP	PARTNER VENDOR
FUNCTIONALITY PARTNERS	Duck Creek's Solution Partners expand the capability footprint of their core suite with critical data services and complementary software solutions. Current Solution Partners include: • Advisen – Commercial Risk Data • Arity – Telematics Data • Amali Solutions Group – Subrogation • AssureSign – Electronic Signature • BondPro – Surety • Cape Analytics – Underwriting Imagery Property Data • Clyde Analytics – Predictive Analytics Software • Ebix – Data Services for Duck Creek Claims (OFAC Checking, WC EDI Reporting) • DataCede – Reinsurance Management Software (now owned by Duck Creek) • Finity Consulting – Actuarial & Consulting Services (Alliance is focused on Australia and New Zealand) • FRISS – Fraud Analytics • InsurePay – Payments • IVANS Insurance Solutions – Carrier/Agency Management Solutions • LexisNexis – Data Services for Duck Creek Suite • OnBase by Hyland – Enterprise Content Management • OpenText Exstream – Customer Communications Management • Perr&Knight – Actuarial, Regulatory, and Compliance Consulting • Precisely – Address Validation, Geocoding, Location Intelligence • Preview – Consulting Services (Alliance is focused on Australia and New Zealand) • Roost – Home Sensors • Splice – Communications • UrbanStat – Property Analytics • WCL – London Market • WeGoLook – Property Inspections • Verisk Analytics – Insurance Data Exchange
TECHNOLOGY PARTNERS	Microsoft
FINTECH PARTNERS	FRISS, Screenshot, Amali, InsurePay, Gradient, Transunion, Samba Safety, Roost, Arity, Splice, WeGoLook, and Clyde.
ACCREDITATIONS AND CERTIFICATIONS	At Duck Creek, a number of team members have attained IT and Insurance accreditations such as PMP and CPCU.

Source: Duck Creek Technologies RFI

IMPLEMENTATION AND SUPPORT

Table 11: Implementation and Support

FUNCTION	APPROACH
EMPLOYEES AVAILABLE / AVERAGE EXPERIENCE LEVEL (YEARS)	Duck Creek Technologies has 1100 staff with 6.3 average years of experience providing professional services / client support for this solution. The average number of customers per professional services / client support staff is 0.085.
LOCATIONS OF EMPLOYEES	Duck Creek has North American offices in: Bolivar, MO; Boston, MA; Rosemont, IL; Columbia, SC; and Basking Ridge, NJ. Duck Creek has EMEA offices in: Madrid, Spain; Barcelona, Spain; and London, England. Duck Creek has Asia-Pacific offices in: Chandigarh, India; Chennai, India; Mumbai, India; and Sydney, Australia. If implementation resources need to be sourced from different countries, the vendor uses blended rates.
RESOURCE BREAKDOWN (VENDOR, CLIENT, SYSTEM INTEGRATOR)	Typical implementation team size: 6 to 10 Vendor: 20% Client: 20% SI: 60%
USE OF THIRD PARTIES	Duck Creek regularly works with third party system integrators. Conversion Options: Vendor or 3rd Party
AVERAGE TIME TO IMPLEMENTATION	Initial Implementation: 4 to 6 months 2nd and subsequent LOBs: 1 to 3 months 2nd and subsequent states/jurisdictions: 1 to 3 months
PREFERRED IMPLEMENTATION APPROACH	Duck Creek engagements leverage the use of the Duck Creek Delivery Methodology (DCDM), an integrated methodology encapsulating methods, processes, tools, architecture, and metrics. DCDM captures key components of Duck Creek's delivery experiences, crystallized into simple, easy-to-use delivery methods, tools, and architectures. It encompasses multi-workforce, multi-site delivery of systems integration projects and can accommodate all delivery approaches (including Waterfall, Iterative, and Agile).
SLA AVAILABILITY	Service scope included in base SLA: 24x7 service hours, extended service hours (beyond 9 am to 5 pm), service during working hours at client location, service during working hours at vendor location Features typically included in SLA: Compensation to client if the software vendor fails to meet its promises, incident resolution time based on priority level of incident, metrics and reports, recourse for downtime, ticket prioritization, other System availability: 96 to 100%

Source: Duck Creek Technologies RFI

WARRANTIES

Warranty and Service level agreements typically vary by customer.

TRAINING

Duck Creek University offers live and remote instructor-led training along with web-based online training. Recommended training starts with their two-week Boot Camp training, which orients participants to the product and teaches them how to build effectively and quickly. The Boot Camp training is an instructor-led, hands-on training in which participants see the process through to a working product and learn best practices, test

features, and problem solving in the product. The opportunity to earn certification is included in this course. Online training is very useful for supplemental and specialized training. Courses are grouped by topic, and suggested role-based training plans are available.

Duck Creek also has a defined knowledge transfer strategy that focuses on three major areas:

- Configuration Knowledge for business-focused IT resources or technology-capable business resources.
- Functional Knowledge for business analysts and product managers.
- Technical Knowledge for technical architects, DBAs, network engineers, and developers.

New training modules are periodically added, and online video training is available.

For business users, Recommended for Business Analysts or other nontechnical roles is an abbreviated form of the training applicable to their role on projects. Role-based Learning Plans that include courses from the Duck Creek University Online Learning Center are also recommended and targeted at 30-, 60-, and 90-day completion plans.

PRICING

Table 12: Pricing Models

PRICING MODELS AVAILABLE:	Term license, Perpetual license, Enterprise license, Subscription-based license
FACTORS USED TO DETERMINE PRICING	Usage-based factors: Per functional components/modules used, Annual premium volumes/revenues Tier-based factors: Annual premium volume/revenues Other: None

Source: Duck Creek Technologies RFI

Table 13: Five-year Pricing Estimates

INSURER SCENARIO	LICENSING	IMPLEMENTATION	ALL OTHER
AVERAGE YEAR 1 COSTS	US\$1.01 million to US\$5 million	US\$500,001 to US\$1 million	Under US\$100,000
AVERAGE YEAR 2 AND BEYOND REMAINING COSTS	US\$1.01 million to US\$5 million	US\$500,001 to US\$1 million	Under US\$100,000

Source: Duck Creek Technologies RFI

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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