CELENT

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Policy Administration Systems for General Insurers in Europe 2011

This authorised reprint contains material excerpted from a recent Celent report profiling and evaluating 40 different policy administration systems. The full report is 250 pages long. This report was not sponsored by RDT in any way.

This reprint was prepared specifically for RDT, but the analysis presented has not been chagnes from that presented in the full report. For more information on the full report, please contanct Celent (www.celent.com or info@celent.com. Reprint granted to RDT.

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Executive Summary

This report is part of a series of reports on policy administration systems (PAS) in Europe, the United States, and Asia, and profiles many of the general insurance administration systems available in Europe today. An upcoming report will cover European policy administration systems in the life insurance industry.

This report is the fourth in Celent's biennial looks at policy administration systems available to insurers in Europe. Since the first report in 2005, activity level has remained high among both insurers and policy administration system vendors. In the two years from January 2009 to January 2011, over 130 insurers licenced a new policy administration system.

This report profiles 40 policy administration systems in use for general insurance, with 20 full profiles and 20 limited profiles.

Several of the profiled vendors have issued a major new release since 2009 that: upgraded their technology platform; broadened their range of functionality; or did both. Essentially all vendors have made a major investment in enabling their solution to work in an insurer's service-oriented architecture (SOA) environment. Many solutions have also made important advances in usability and personalization—with benefits for new and experienced underwriters and service representatives. System administration capabilities for configuring products, rules, workflow, document management, and user interfaces have also improved—although, overall, these changes have occurred at a more modest pace than improvements for end users.

Policy Administration Systems: Definition and Functionality

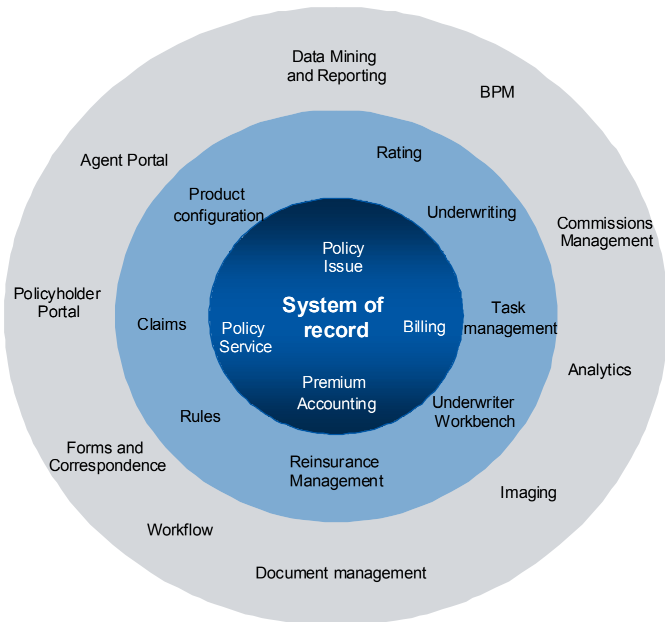
Definition

In one sense, the definition of a policy administration system is very simple: it is the system of record for all policies an insurance company has written. At this most basic level, a policy administration system is a repository of policy-level data related to objects of insurance, coverages, conditions, exclusions, duration of the policy, endorsements, beginning and end dates, 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, or reinstatement.

Core Processes

In actual practice, an insurer uses a policy administration system—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, as shown in Figure 1.

Figure 1: The Elements of a Policy Administration System



Source: Celent

There are four core processes, as shown in the center section of Figure 1.

- Product configuration: Specifying the rates, rules, and forms associated with a specific product or line of business.
- Rating and underwriting: Rating is the process of calculating the rate that an insurer's pricing algorithms indicate should be charged for a specific submission. (Rating for all but the most complex risks is normally done by a rating engine, which may or may not be a completely integrated element of a policy administration system.) Underwriting includes rating as well as the activities of modifying rates, quoting, negotiating, and issuing or renewing a policy.
- Policy service: These are the activities that begin with issuance of a new or renewed policy and continue through the life of the policy, including endorsements, midterm adjustments, cancellations, etc.
- Premium accounting: Calculating the gross and net written premiums as well as the earned premiums associated with a given policy; for use in financial reports, billing, reinsurance, commissions, and other systems.

Supporting Capabilities

A policy administration system will have also have five supporting capabilities.

- Data exchange and integration: Sending and receiving data to other internal and external systems at any point in the policy lifecycle (from configuration through termination/cancellation). Methods include offering and consuming services through EDI messages and more recently through Web services within an SOA framework, as well as a wide variety of other means including application programming interfaces (APIs) and other connectivity methodologies.
- Rules and workflow: Designing, managing, and executing business rules (attached to products or processes) and workflow (person:person, person:system, system:system) during any activity or process. In a more modern policy administration system, rules (especially) and workflow (perhaps) will be externalized from the core code and from the presentation (user interface) layer.

- Document management: creating, managing, and using a broad variety of documents, including policy content, forms, and correspondence.
- Reporting: Designing, storing, and accessing reports ranging from simple lists to multidimensional calculated variables. In general, reports are used to monitor activities by a user and by all levels of management.
- Analytics: Using various forms of statistical analysis to identify and present patterns of relationship and causation which an insurer can use to improve such functions as pricing, underwriting, and claims.

With the exception of data exchange and integration (which is inherently a requirement of any policy administration system), each of the other four supporting capabilities may be performed by a policy administration system itself; alternatively, the policy administration system may access other point solutions, or it may employ some combination of PAS and other point solutions.

Advanced Functionality

A good modern policy administration system will provide most, although not necessarily all, of the advanced functionality. (Note: Each full profile in this report has a table summarizing whether the policy administration system in question offers these advanced functionalities, and if so, in what manner and in what form.)

- Midterm adjustments: Flagging when an out-of-sequence endorsement is made, and providing the ability to construct and calculate premiums for the corresponding in-sequence set of endorsements.
- Automated underwriting (new business): Using rules and scoring methods to automate some (or more rarely all) of the tasks and activities from submission, quick quote, rate, quote, bind, and issue.
- Automated renewals: Using rules and scoring methods to automate some (or, more rarely, all) of the tasks and activities in renewing a policy.
- Premium and billing accounting: As described above, with the expectation that the policy administration system itself performs the calculations and directly feeds the receiving systems.

Additional End-to-End Components

Celent has limited the definition of a policy administration system to include a set of core processes and key supporting capabilities. But vendors don't limit themselves in the same way, and many have attempted to build out some or all of the end-to-end components that an insurer might need. Some insurers are just looking for a best-of-breed PAS to work with other core systems already installed, but, more commonly in Europe, insurers may be looking for vendors that can offer solutions for parts of their insurance operations.

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

(Note: Each full profile in this report has a table summarizing whether the vendor in question offers these additional end-to-end components and whether the components are part of the base offering or sold as a stand-alone system.)

- Product Configuration: Also a core process of a policy administration system, product configuration as a component might have robust tools for managing content (forms) and rules throughout the lifecycle of a product.
- Rating: A stand-alone rating engine should be capable of handling complex pricing algorithms, and should integrate easily with various policy administration systems.
- Underwriting: Like rating, underwriting has a place both inside and outside of the PAS. Stand-alone underwriting systems give an underwriter a robust underwriting desktop and can manage complicated workflow between multiple systems.
- Billing: A billing component will support a broad set of billing methods, such as direct and agency bill, as well as various present and payment options, and configuration capabilities.
- Commission Management: A commission system calculates, reports, and tracks compensation structures and commissions payable to producers. It needs to integrate with several

systems to handle this effectively, but a true system can manage more complicated commission rules and do better incentive planning.

- Reinsurance Management: Insurers that just need basic tracking and gathering of reinsurance data will typically be satisfied with adding a few fields to their policy administration system. A full reinsurance component should support the reinsurance aspects of underwriting and claims, with a strong premium and commission calculation engine.
- Business Intelligence/Analytics: Most systems have some form of reporting. A true BI/analytics tool allows the management of data marts, detailed ad hoc reporting, customized dashboards, and complex data analysis—not just for the policy administration system but for all an insurer's data.
- Claims Management: A fully functional claims system will record and support all steps in the adjustment process from first notice of loss to final settlement. The claims systems will exchange data with a broad set of internal and external systems as well.

Report Methodology

Criteria for Inclusion

Celent's objective has been to include in this report as many as possible of the leading general insurance policy administration systems being used or actively sold to European insurers. In a few cases, vendors have not been included in this report at their request.

This report contains two types of profiles: full and limited. The topics covered in both types of profiles are broadly similar; however, full profiles are written with more detail and include comments from reference insurers. Additionally vendors with full profile policy administration systems are included in the Celent ABCD Vendor View; limited profile vendors are not.

In total, 48 systems from nearly as many vendors were considered, and those vendors were asked to review the inclusion criteria before responding to Celent's request for information (RFI).

The four key criteria were that each system must have:

- At least one new sale to one European insurance customer within the last 24 months.
- At least two European general insurance customers, at least one of which must be an insurer.
- Support for and live implementations of at least two lines of business.
- Participation by at least one reference customer.

These criteria were designed to maximise the number of systems that can be reasonably expected to remain available (and viable) based on vendor size and strength, maturity of each product, its client base, and other important factors.

Some vendors elected not to participate for competitive reasons, and others determined that they could not meet the eligibility criteria after all.

Twenty profiles are included in the “Limited Profiles” section, since they did not fully meet the criteria for a full evaluation but did provide significant information about their offerings.

Evaluation Process

Celent sent a detailed RFI to a broad set of policy administration system vendors. After receiving completed RFIs, each vendor provided a briefing and demo for Celent concentrating on usability and functionality for everyday users, and rules, tools, and connectivity issues for IT or administrative users.

Celent also asked two to three references provided by each vendor to complete a survey and/or an interview to obtain their view of the system’s business and technology value.

Both the RFIs and the reference surveys provided quantitative and qualitative data. Vendors had an opportunity to review their profiles for factual accuracy but did not influence the overall evaluation or the placement in the ABCD vendor view grid. Celent of course has retained final authority over the content of the published profiles. Some of the vendors profiled in this report are Celent clients, and some are not. No preference was given to Celent clients for either inclusion in the report or for the subsequent evaluation.

Not all data gathered from the detailed RFI, vendor briefing and demo, and reference surveys/interviews has been included in each profile. Rather, Celent has attempted to capture key points and values about each vendor at an appropriate level. Unpublished information remains in the Celent knowledge base and is available to Celent’s subscription or consulting clients.

About the Profiles

Each of the profiles presents information about the vendor and solution; professional services and support capabilities; customer base; functionality and lines of business deployed; usability, reporting, and analytics, technology, implementations, and cost; and some summary comments.

Concerning fees, Celent asked vendors to provide first year licence and first year other implementation costs (work by the insurer, vendor, or third parties) for two hypothetical insurance companies:

- National Insurance Company—a single licensed company that writes in the United Kingdom, for eight lines of business, producing annual GWP of €250 million.
- European Insurance Holding Company has four companies, writes in five countries (UK, Spain, France, Italy, and Germany), across 24 personal, commercial, and specialty lines of business, and has GWP of €2.5 billion.

When discussing insurance customers of the various solutions, the profiles use the terms very small, small, medium, large, and very large insurers. Very small insurers (Tier 5) have under €100 million in annual premium; small (Tier 4) have €100 million to €500 million; medium (Tier 3) have €500 million to €1 billion; large (Tier 2) have €1 billion to €5 billion; and very large (Tier 1) have over €5 billion.

The profiles also discuss how many of the advanced policy administration features a given solution provides. These features are:

- Out-of-sequence endorsements
- Automated underwriting (New Business)
- Preconfigured ordering and receiving third party data
- Automated renewals
- Premium and billing accounting
- Statistical reporting

RDT: Landscape

Company and Product Background

RDT is a privately owned UK-based company that was founded in 1991. The PAS solution offered by RDT is called Landscape, and the solution was first released to the market in 1995. Landscape 1.0 was released in 2005, when the solution was redeveloped on the .NET platform. The current release is version 3, which was released in January 2011. The annual revenue from the product is approximately €6 million. The R&D expense on the product has been 40-50% of the product revenue on average over the past two years.

RDT considers the following factors to be differentiators of the product.

- Landscape is a packaged solution with all customers sharing a common code base. Customers benefit from continual upgrades and combined investment of others.
- Landscape supports full cycle policy administration, quote and buy, MTA's and renewals for all channels via all routes to market; intermediated, EDI, call centre, web, aggregators. Supports both personal and commercial lines.
- Modern interface means staff are effective in days not weeks, product launch times are collapsed, business process changes effective in minutes rather than months.
- The system is rich in functionality, modern and proven.

Professional Services

RDT has 48 corporate employees, 46 of whom are providing professional services and support for Landscape. The staff average 11 years experience.

Customer Base

RDT has 13 deployments of Landscape in Europe who are using the latest version of the software. Landscape has eight clients in UK, and two in each of Ireland and Gibraltar. Two European clients are implementing the latest version of the software. The clients are fairly evenly spread among the different insurer sizes in the RFI. RDT has one client outside Europe. Three news clients have purchased the solution since the first of January, 2009. RDT states the target market for Landscape comprises of insurers and large intermediaries. Well known clients include Towergate Partnerships, Royal Bank of Scotland Insurance and Markerstudy Group.

Table 1: Number of European Clients by Country

Country	Live Clients
UK	8
Ireland	2
Gibraltar	2

Source: Vendor RFI

RDT has no clients using Landscape for Business Process Outsourcing operations.

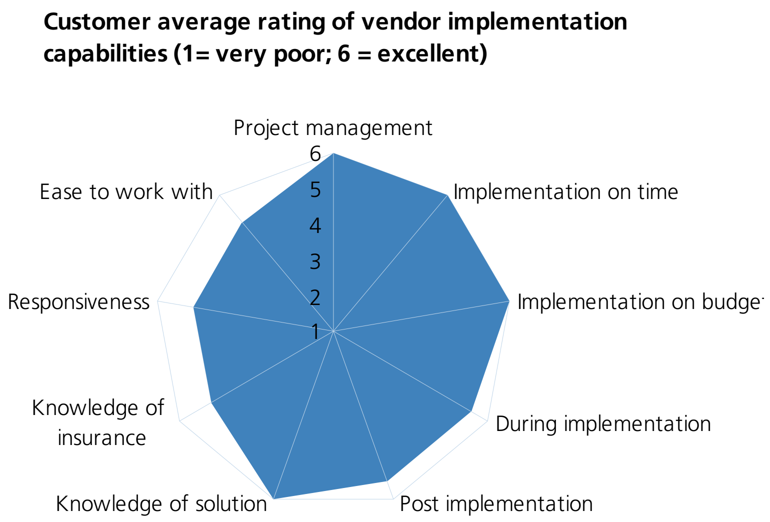
Customer Feedback

Two RDT customers provided feedback for this report. These companiess—Tier 2 and Tier 4—were using the system for personal lines. One company has used Landscape for less than one year, and the other between one and three years. The customers used a full set of features and functions but had not implemented any portals.

Implementation experiences—as shown in the diagram below—were excellent or very good in all areas, and overall, RDT receives one of the highest ratings in this area for this report. Customers refer to the company approach as “down to earth” and “no nonsense.”

When making product changes, customers reports that cloning a product or creating a new product can be done within a few days. Within one customer, the business users are empowered to make almost all the changes required to the system. Training to get a new user productive on the system is moderate. Experiences of integrating Landscape with other insurer systems was reported as excellent, with customers using web services and XML. The positive score card continues with features and functions were rated as either very good or excellent.

Figure 2: Customer Feedback on Implementation Capabilities



Source: Customer Feedback

Functionality and Lines of Business

Landscape offers all of the additional end-to-end. Components for underwriting, rating and update services for industry standard rates, rules and forms can be licensed as stand-alone components. Components for commission management, reinsurance management, claims management and business intelligence/analytics are only available bundled with the Landscape solution. RDT also partners with external IT vendors to offer additional components. For instance, components for document production are provided by a partnership with Thunderhead and Streamserve, and components for document management are provided by a partnership with Invu and Infonics.

Table 2: Availability of Additional End-to-End Components

Component	Availability
Update service for industry standard rates, rules, and forms	Can be licensed as stand-alone component (without PAS solution)
Rating	Can be licensed as stand-alone component (without PAS solution)

Source: Vendor RFI

Table 2: Availability of Additional End-to-End Components

Component	Availability
Underwriting	Can be licensed as stand-alone component (without PAS solution)
Billing	Available only bundled with PAS solution
Commission Management	Available only bundled with PAS solution
Reinsurance Management	Available only bundled with PAS solution
Business Intelligence / Analytics	Available only bundled with PAS solution
Claims Management	Available only bundled with PAS solution
Other: Document Management	Available through ISV partner (Invu/Infonics)
Other: Document Production	Available through ISV partner (Thunderhead/ Streamserve)

Source: Vendor RFI

All the policy administration functions are configurable by nontechnical business users, as shown in the Table.

Table 3: Advanced Policy Administration Functions

Function	Availability
Product Configuration	Available through configuration by a nontechnical business user
Product repository	Available through configuration by a nontechnical business user
Ability to design product-specific rules	Available through configuration by a nontechnical business user
Ability to design product-specific forms	Available through configuration by a nontechnical business user
Policy Print and Issue	Available through configuration by a nontechnical business user
Out of sequence endorsements (MTAs)	Available through configuration by a nontechnical business user
View of what's changed in policy details over time	Available through configuration by a nontechnical business user
Automated underwriting	Available through configuration by a nontechnical business user
Pre-configured ordering and receiving third party data	Available through configuration by a nontechnical business user
Automated renewals	Available through configuration by a nontechnical business user
Premium Accounting	Available through configuration by a nontechnical business user
Specification of billing parameters (to be transmitted to separate billing component)	Available through configuration by a nontechnical business user
Specification of commission parameters (to be transmitted to separate compensation and billing components)	Available through configuration by a nontechnical business user
Statistical reporting	Available through configuration by a nontechnical business user

Source: Vendor RFI

Landscape offers a comprehensive set of workflow management and business rules management functions. The solution also provides a graphic design environment for workflow management. All these functions are easily configured by a nontechnical user. Dynamic interviewing, a functionality where the system intelligently poses questions based on prior responses, is not available in the current offering. This functionality is in development and will be available by late 2011.

The solution comes with manager audit/review capability. Landscape has a comprehensive audit trail for all functional sections. Additionally, Landscape Workflow provides manager views of work by workgroup. Rules, workflow, content versions, transactions and correspondence are all entirely auditable.

The solution has a broad range of personal and commercial products in production today:

Table 4: Lines of Business

Line of Business	Availability	European Insurers Using the System for This LOB
Personal Motor	In production today	7
Homeowners / Renters	In production today	8
Commercial Motor	In production today	3
Commercial Property	In production today	1
Commercial Liability	In production today	1
Workers Compensation	In production today	1
Other Professional Liability	In production today	1
Commercial Packages	In production today	2
Travel	In production today	2
Pet	In production today	1
ASU/Creditor	In production today	1

Source: Vendor RFI

Usability, Reporting, and Analytics

Producer portal, prospective customer portal and policyholder portals are available though programmatic modification to the solution's code base. RDT demonstrated both a highly functional client and a broker portal to Celent.

The primary business user interface is through Windows-based thick client. Some clients distribute this using thin client technologies such as Windows Terminal services or Citrix. This interface is well suited to complex adjustments to policies, accounting functions and claims handling. The main thick client looks is a modern Windows application with navigation through the system on the left of the main window and a menu bar at the top. Drilling down into detailed screens for items in the system usually brings up a new window, with the context in the top left, further detail and linked records along the bottom and history in the top right. A user can accumulate a number of open windows at any one time which may be a useful feature to expert users. A secondary browser based interface is available with new business, mid-term adjustment and claims notification. RDT is planning to port the user interface to Microsoft Silverlight in the next 12 to 24 months.

Graphical tools for workflow management are available for nontechnical business users. This component is based on Microsoft Workflow foundation and allows authorised users to modify the manner in which business functions operate within the package. Simple workflows can be defined using a more basic non-graphical interface.

Configuration of products and rules is handled in a separate thick client tool which is necessarily more complex than the operators interface, but is still usable by nontechnical users.

Management reporting dashboard and financial reporting data store are also provided which are easily configurable. The dashboard makes use of Microsoft reporting components.

The data model is proprietary, although the solution offers many industry standard interfaces. RDT releases the data model to insurers when required. The internal data model of Landscape is easily published to an insurer's data model and can be mapped to an intermediate format. RDT does not provide a set of tools that allows extension of the data model and the SQL database schema although snorers have significant control over section data, code lists, etc. In recent implementations core code modification has formed 20% of the overall implementation cost with changes such as integration to third party systems, additions to direct debit and direct credit functions.

The solution supports multicurrency, however with separate charts of accounts for each currency. A policy can only be in a single currency. The solution does not support multiple languages. However, this functionality is under development plans and is likely to be supported over the next 1-2 years.

Technology

Landscape is 100% VB .NET code base. Configuration and development is also entirely done in VB .NET. The solution only supports Windows operating system and Microsoft SQL Server database. Among application servers, only Windows Server/.NET is supported.

The integration options are broad and preferred options include SOA/ Web Services, ACORD Standard XML. Other integration options include SQL calls, flat files, custom APIs and EDI. Landscape can call external systems using SOAP over HTTP and can be called by external systems in the same way.

Regarding scalability RDT note that the system has demonstrated 0% down-time due to software errors over the past five years across all customers. The largest deployment supports over 400 concurrent users, of which 250 use Landscape thick client. Landsscape.NET runs in an environment with 10 million policies, including historical data.

Implementation and Costs

The average time from project initiation to getting the first line of insurance live takes about four to six months. The average time for subsequent lines of insurance is one to three months. The typical size of an installation team is between six and ten people. The typical size of an installation team is between twelve to twenty people. The typical split among the employees is 50% from RDT and 50% from the Insurer. RDT does not work with external third party systems integrators, since RDT has expanded its implementation teams.

Most of the first year cost typically goes in software licensing (40%), followed by installation and customisation (35%), and annual maintenance (20%). The remaining 5% is spent on training. Perpetual license and term license are preferred revenue models, however, RDT is prepared to accommodate customer preferences. Currently, RDT does not actively offer a shared risk pricing model, however, it is open to the idea. The parameters that form a basis for the license fee are number of functional components, number of lines of business, number of concurrent users, policy volume, premium volume, number of total users and an enterprise license or flat fee.

For the national insurer in the RFI, the initial license plus maintenance fee could vary between €500,000 and €1 million. The total implementation costs excluding license would again be €500,000 to €1 million. This project would require eight to ten staff from the insurer. For the european insurer detailed in the RFI the initial license fee would be between €6 million and €10 million, with the total implementation costs coming to €3 million to €6 million. In this case the insurer would typically commit around 40 FTE. In both cases the continuing maintenance fee would be 20% of the initial fee.

Summary

Landscape is a mature system that is seeing continued investment from RDT. In addition RDT are leveraging Microsoft investment in their own technology stack to the benefit of the product. Celent welcomes the investment in further implementation resources and commends RDT on their strong customer feedback. RDT has proven capable of working with insurers of all sizes and would sit well on any English speaking insurers short list.

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