ISIS Papyrus Software offers integrated enterprise software solutions for personalized customer communications and process optimization solutions in service-driven industries around the world, from banking/finance, insurance and healthcare, to utilities/energy, telecom and the public sector.

**Business Architecture**

Business architecture bridges the enterprise business model and enterprise strategy on one side to the enterprise business functionality on the other side. The Papyrus Platform enables definition of the Business Architecture to define a strong link between business strategy and execution, using business terms as a language of process to empower the business user to describe the process semantically.

**Customer Outcome**

The tightly integrated enterprise content management, portal and collaboration capabilities of Papyrus support rapid development, deployment, and maintenance of custom desktop, Web and mobile applications. This integration makes it easier to define business processes and improve employee productivity, simplify supply chain processes, strengthen regulatory compliance, and achieve rapid performance improvements throughout the enterprise.

**Interactive Business Correspondence in the Front Office**

The new user-friendly Papyrus EYE/Widget GUI empowers business users to improve customer service and support quality without additional coding. Papyrus EYE/Widget technology is avoiding the extra delays, resources and expense of programming a Web-enabled version of desktop user applications. Account teams working in a browser front end to respond to customers can select the same templates and text editing features, enable/disable text blocks and route the document for approval, just as if they were in their desktop application. Papyrus enables the business to create and manage content, templates and documents for batch and online document production, as well as for interactive in-document editing, ad-hoc reporting, contracts and correspondence used by the business front office.

**One Company – One Voice**

Without a common platform that seamlessly supports high-volume, on-demand and interactive document applications, organizations can become trapped in a manual, error-prone and inefficient environment that results in great expense and effort to maintain multiple island solutions. The Papyrus Platform enables corporations to centrally manage, administer and deploy document resources, data and definitions for all types of business documents and users, so that all outgoing correspondence strictly follows the corporate design and identity. Further, document building blocks are defined once for reuse across multiple document types. By unifying inbound and outbound communications and processes linked to enterprise systems, ISIS Papyrus enables your organization to interact with customers as one company with one voice.

**Mobile, Handheld and Social Support**

Fast decision-making is required for higher productivity. A common challenge has emerged from mobile and social technology: Business documents are delivered to iPhone or Android mobile devices; business forms are completed on iPad and other handhelds; data capture via mobile e-forms and photo data extraction are common requests by field personnel in claims and sales processes. With Papyrus, all electronic documents and forms can be delivered in the same quality to the mobile device and the browser for cross-platform consistency and efficiency with no JavaScript coding requirement. Social network channels such as Twitter, Facebook or LinkedIn can be fully integrated into the business communication process by a social adapter.

**Cross-Channel e-delivery**

Secure, fast, confidential, traceable, legally binding: That’s e-delivery with Papyrus. In addition to delivering business documents in PDF and HTML via e-mail and Web browser to the customer, Papyrus can also send the same document in perfect quality to all mobile devices and ensure that printing is always an option.
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Extending Marketing Reach with Targeted Messaging

Campaign management capabilities enhance revenue opportunities for multichannel statement delivery

The Business

Union Investment (Union Asset Management Holding AG) is the investment arm of the DZ Bank Group and part of the cooperative financial services network. Headquartered in Frankfurt, Germany, and founded in 1956 by 14 credit unions, Union Investment is today one of Europe’s leading asset managers for private and institutional clients. Union Investment offers a wide range of investment solutions: equity, fixed-income, money market, alternative investments and quantitative structured funds. With more than 2,400 employees and 1,100 Volksbanken branch offices, the company has grown into a leading international asset manager with retail funds licensed for sale in many European countries.

The Challenge

Starting with a goal to provide easy, readable and understandable investment statements, the Marketing department at Union Investment wanted a Campaign Management solution allowing them to directly influence the content and conditions for variable marketing messages to be placed within regularly scheduled customer statements already produced with the Papyrus platform.

To support both multichannel customer preferences and regulatory compliance requirements, Marketing outlined three (3) types of messages to place in automatically generated transactional statements, based on variable conditions:

- Static attachments, such as Terms and Conditions
- Dynamic attachments with pre-filled forms
- Static, pre-printed inserts driven via OMR/barcode

With Papyrus WebRepository and Papyrus DocEXEC already in use at Union Investment, the company now needed a strong user interface to manage (IT) and generate (business) standard Papyrus Designer documents today – using Marketing-generated messages – and to later facilitate implementation of a full Business Correspondence solution.

Key requirements for Targeted Messaging included:

- Campaign management for variable message placement
- Flexible template design to accommodate conditional, variable messages
- Versioning, validation and review/approval of content (messages) in marketing
- Relative spacing for message selection “to fit”
- Message selection by inventory, weight, size of inserts (postal)
- Impact evaluation reporting - reach of message selection
- Campaign tracking – message hits, attachments sent, clicks (customer/document)

Business Goals

- Flexibility in targeted marketing message placement
- Streamlined multichannel output management/production
- Reduction of templates using conditional variables for message selection
- Business/Marketing controls message/campaign content
- Rapid development & easy maintenance of document applications
- Reduced redundancy in message/document delivery
- Expanded messaging features & natural language rules

Functional Requirements

- Targeted messages are created WYSIWYG by business units
- Conditional variables for content selection and placement
- Optimal creation & selection of attachments & printed inserts
- Relative spacing and optimized use of free white space for message selection “to fit”
- Electronic storage/archiving
- Planning a campaign, test, reviewing and sign-off processes by the business unit
- Synchronize with data warehouse for message conditions
The Solution

Union Investment selected ISIS Papyrus because of its transpromo, output management and multichannel delivery capabilities to maximize message flexibility, document control and reporting in the new solution:

- Proven experience in powerful document design, formatting and generation
- Breadth of Papyrus end-to-end document capabilities, including WYSIWYG Designer, change management, workflow automation and multichannel delivery
- Scalability to fully implement integrated, multichannel Business Correspondence when ready

The Marketing team now enjoys additional business benefits from the updated Papyrus technology:

- Direct and immediate influence on the customer’s document and visual representation
- Support for upselling for new and additional products, based on availability and relevance
- Full review & approval cycle for marketing building blocks, attachments and inserts
- Segmented targeting via conditions to separate customers sourced internally and via partners
- Efficiency in resource management for insert materials
- Cost reduction in reduced mailings of mandatory documents with the regular statements

Papyrus Products at Union Investment

- Papyrus Designer
- Papyrus DocEXEC with PostProcessing/PrintPool
- Papyrus WebRepository
- Papyrus Server/E-mail, PCL
- Papyrus Client/Desktop

Snapshot

- Organization: Union Investment (Finance)
- Business Challenge: Multichannel campaign messaging for customer statements
- Goals: Business control, Messaging flexibility, Multichannel delivery, Campaign management
- Integration: Data warehouse synchronization
- Solution: Targeted Messaging Framework, Campaign Management
Cyta is a semi-government organization considered the leading provider of integrated electronic communications services in Cyprus. Providing, maintaining and developing a comprehensive telecommunications service both nationally and internationally, via submarine fibre optic cable and satellite earth station infrastructure, Cyta provides a broad range of services and facilities to deliver voice and data applications in both fixed and mobile telephony. A full member of the EU, Cyta was first nationally to be assessed with the excellence model of the EFQM and receives the highest "Recognized for Excellence" ranking. It is also the largest state organization in Cyprus to receive ISO 9001:2000 Quality Certification.

The Challenge

The top provider of Total Electronic Communications in Cyprus and a Papyrus customer since 2006, Cyta strategically invests in cutting-edge technology, customer service enhancements and the provision of modern services inspired by the convergence of telecommunications, IT and multimedia.

An important part of this strategy was to fully implement electronic customer communications – to improve customer service and satisfaction, respond to customer preferences and leverage the cost advantages of reduced printing and mailing.

With approximately 800,000 invoices monthly, Cyta had not only a large volume of data-driven documents to produce and distribute but also more than 50M invoices archived for customer service access, Web site self-service and compliance with 12-year retention requirements.

The Solution

Extending Cyta’s use of the powerful Papyrus Platform was determined to be a very efficient and streamlined approach to leverage the company’s existing investment and knowledge by using the full document management and multichannel delivery capabilities of Papyrus technology.

The new Cyta Electronic Invoicing program offers customers:

- Immediate bill notification by e-mail every month
- Access, download and/or print your bills on a 24/7 basis
- Online storage of bills for 24 months

Today, Cyta is making use of the full print, e-delivery and archiving solution frameworks with Papyrus, which not only improves and optimizes the customer experience but brings numerous operational benefits for their team of more than 500 business users.

Business Goals

- Create digital customer experience
- Enhance user experience and interface
- Enable secure electronic document delivery
- Minimize user impact & training
- Reduce administration & support for large user base
- Improve reliability and scalability of system
- Improve performance in processing & production

Functional Requirements

- Reuse existing text blocks & templates
- Update document design for multichannel delivery
- AFP conversion & PDF generation
- Secure, Web-based access for users & customers
- Import 50 million invoices from existing archive
- Manage document retention to industry requirements
- Interface with mainframe for document generation/ output
Cyta extended their existing Papyrus print and archiving solution for invoices and notices to corporate and end clients, enabling e-delivery and e-communications with a few powerful components added:

- **WebRepository** for full-color, multichannel document design, production and delivery
- **Papyrus Typemanager** for a native interface capability to facilitate import of data and documents from a Microsoft SQL Server database
- **Papyrus Server (E-mail and IPDS)** to enable electronic delivery and efficient high-volume printing
- **Papyrus Adapters (LDAP and SOAP)** for user authentication and invoice retrieval, respectively

### Customer Experience Enhanced

High-quality documents are now delivered to the customer’s choice of channels for secure, convenient access – via e-mail, Web portal or paper – incorporating color, graphics and URLs for engaging, interactive communication with relevant, accurate and clear data and messages. Cyta even rewards customers for using electronic invoicing, creating a win-win partnership.

### Customer Operations Improved

Updated document design and delivery improve customer response and satisfaction, with new user-friendly bills arriving faster so payments are received sooner.

Documents with better content and quality are better understood and lead to fewer, faster customer service inquiries. Incorporating color for the new electronic documents costs nothing extra, but reduced printing has minimized production costs and waste. Extending the existing software and integrating with other operational tools has paved the way for continued advances and faster improvements that keep Cyta on the leading edge of the industry.

### Maximizing the Digital Customer Experience

For the future, Cyta plans to implement the Papyrus Targeted Messaging framework solution for seasonal campaigning and the Correspondence Framework solution for empowering the business departments to create their own mailings and templates with building blocks. These additional solutions will run on the Repository and use the Papyrus tools they already have, making them easy extensions to the current setup.

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**Papyrus Products at Cyta**

- Papyrus WebRepository
- Papyrus Designer Package
- Papyrus DocEXEC
- Papyrus Client/Desktop
- Papyrus WebArchive
- Papyrus Server E-mail/SMTP
- Papyrus Server/IPDS
- Papyrus Adapters: LDAP, SOAP

**Snapshot**

- **Organization:** Cyta (Telecommunications/Public Sector)
- **Business Challenge:** Enhancing customer communications via eDelivery
- **Goals:** Electronic document delivery, use of existing technologies, high-quality document design, high-volume archiving
- **Migration:** DFA extensions, InfoPrint Manager, Microsoft SQL, Papyrus 7.1, LDAP, SOAP, E-mail, IPDS
- **Solution Framework(s):** eDelivery, ADF
Managing Customer Statement Quality with Business Goals, Roles and Controls

Life division standardizes and streamlines processes to increase accuracy, efficiency, compliance and visibility

The Business

Founded in 1910, NFU Mutual is owned by its policyholders not shareholders. Managing over £14 billion in assets and £1.6 billion in premium income (2012), the range of products extends to investments, pensions, life assurance and risk management, and NFU Mutual operates more than 300 local branches nationwide to ensure local presence for more than 900,000 customers. A member of the Association of British Insurers, NFU Mutual is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority.

The Challenge

An active Papyrus customer for more than 20 years, NFU Mutual today uses Papyrus to deliver 100,000 customer statements annually, with daily production of 15,000 documents on 900 new multifunction printer devices from 2,000 print users in 300 branch offices and 13 Regional Service Centers (England, Wales, Northern Ireland, Scotland).

The Life product division decided to address data challenges threatening statement accuracy, limiting user productivity and hindering customer service - seeing an opportunity to update their statement processing system with the latest Papyrus technology for change management.

NFU Mutual learned that 15 percent of statements required manual intervention, with use of Word templates and manual retyping that led to inefficiency and low document quality. The manual processes from data issues and IT problems were creating lag time of up to 3 months between printing and delivery of statements. And every statement type had a different process flow that was largely manual, causing significant risk to the business.

End users needed a system that maintained the flexibility of the manual process while allowing editing of data from line-of-business systems with the ability to electronically preview the document before print and delivery.

Business Goals

- Improve throughput, turnaround and quality
- Reduce manpower requirements
- Consolidate infrastructure
- Remove manual processes and paper validation
- Timely, accurate production & tracking of statements
- Enable outsourced printing for efficiencies

Functional Requirements

- Integration with backend systems
- Task-based (ACM) workflow for Change Management
- Migration & reuse of existing text blocks & templates
- Consolidated view of template/document changes
- Document tracking and auditing
The Solution

Collaborating with ISIS Papyrus on scoping and POC, NFU Mutual decided to implement the Papyrus ACM Framework for its Proactive Controls and Statements initiative - to introduce and maintain integrated Change Management with goal-based process management and ensure both quality and flexibility.

Once the IT cleanup was complete, the ACM Framework speeded implementation so that NFU Mutual needed only 20 days of ISIS consultancy and 80 man-days of print team effort to address four key areas:

- **Workflow** to define job processing and steps from trigger through completion
- **ACM** to define job goals, task owners, roles and duty assignments with flexibility to improve/adjust the process as needed
- **Security** with LDAP transparent to the end user
- **Audit** to allow Business to control and report changes to templates, documents and process

Ultimately, six different processes were replaced with one, because ACM allowed the most appropriate action to be taken by the users to achieve the goal of printing an approved document. Moving from manual to electronic processes allowed business users to focus on the quality of the documents instead of risky, time-consuming workarounds to fix documents:

- Data files are split automatically
- Users can approve sample of clean documents
- Users can edit, check and fix dirty documents and submit for review prior to becoming clean
- Supervisors can monitor with a dashboard

Today’s solution for Proactive Controls and Statements allows the business team at NFU Mutual to not only trust the data in each document but also spend less time “fixing” documents – and more time meeting quality and production goals and improving processes and performance, with the added capability to track and audit individual statements for management.

In addition to the immediate savings in productivity of a ½-day previously used to produce each updated statement, Papyrus helped NFU Mutual achieve numerous tangible and strategic benefits in the areas of Controls, Operations, Regulatory Compliance, Management Information and Process Efficiencies, including:

- Simplified workflow for “dirty” statement processing
- Templates to aid problem resolution
- Centralized load balancing
- Reduced employee costs
- Minimized risk for non-compliance
- Improved customer service
- Visibility for KPIs and performance monitoring

Papyrus Products at NFU Mutual

- Papyrus Designer Package
- Papyrus Client/ext
- Papyrus WebRepository
- Papyrus Adapters: LDAP, File
- Papyrus Server

Snapshot

- **Organization**: NFU Mutual (Insurance)
- **Business Challenge**: Streamlining Customer Statement Management
- **Goals**: Improve accuracy, turnaround & quality; Optimize resources; Reduce manual processes
- **Migration/Integration**: Win2008 Server, Win7 desktop, Internet Explorer 8, Google Chrome
- **Solution Framework(s)**: ACM, Correspondence
Creating Cross-Department Collaboration for Global Customer Communications

New workflow and integration unifies financial mass mailings across channels and languages

The Business

BNP Paribas (Suisse) S.A. is among the largest foreign banks in Switzerland. With presence in 75 countries and more than 180,000 employees, including 140,000 in Europe, BNP Paribas ranks highly in its two core activities: Retail Banking & Services (Domestic and International) and Corporate & Institutional Banking. In Europe, BNP Paribas Personal Finance is the leader in consumer lending. BNP Paribas is rolling out its integrated retail banking model across the Mediterranean, Eastern Europe and the western United States.

The Challenge

For BNP Paribas, creating a mass mail had become inefficient and heavily dependent upon limited IT resources - sometimes taking months to be completed while all mass mailing design converged in a bottleneck for one or two individuals. Traditional e-mail communication between business and IT also resulted in several time-consuming loops.

Furthermore, since each mass mail was designed as new, corporate identity could not be enforced. Occasionally, design of the same mass mail varied among language versions. Various languages were treated as separate spools and attachments coming from internal PDFs were very rarely used, as those features were not integrated in one solution.

The business team needed to manage the creation and design of their mass mails, as well as to communicate and divide appropriate tasks more effectively with IT. Improvements in language variants and multichannel delivery were also a priority to ensure relevancy and timeliness of messages to customers.

The Solution

Since 2006 BNP Paribas has used Papyrus for private wealth management, specifically implementing the Papyrus CCM platform in France, Switzerland, Luxembourg and Singapore.

To enable 5-10 new mailings monthly in volumes of 1,000 to 36,000 each - with more than one requested concurrently - the new mass mailing solution supports design, deployment and generation of all mass mails for BNP Swiss Wealth Management, BNP Paribas CIB and BNP Paribas Monaco Wealth Management - seamlessly integrated with the current output management environment.

Today, the business teams are satisfied that they can design mass mails more quickly and independently, and IT is satisfied with enforcing corporate identity consistently through predefined layouts:
- BNP Monaco Wealth Management business user created a mass mail and deployed to production without relying on IT in Geneva
- BNP Swiss Wealth Management produces mass mails within requested time frame
- BNP CIB now designs their own their mass mailing

Now Papyrus provides document design and generation for all business communications of the bank in Geneva and all business units and their languages (Geneva, Monaco, London, Jersey, Madrid, Miami, Bahrein) and for the investment bank CIB.

Business Goals

- Empower business to create & maintain mass mails design
- Facilitate seamless communication between IT & business
- Enable multichannel output based on clients' preferences
- Increase efficiency & timeliness of mass mail process
- Content flexibility with corporate consistency & compliance

Functional Requirements

- Generate mass mails in various languages
- Reduce templates to optimize corporate consistency
- Update document design for multichannel delivery
- Include attachment facilities
- Seamless integration with existing output management
- Interfacing mainframe data with document generation/output
Removing the Bottleneck

Mass mail content for BNP Paribas is now split into two parts managed by the cooperating teams:

- **Layout**, containing corporate header/footer, standard address data and content, plus more sophisticated business logic, is maintained by IT.
- **Body**, which contains the content specific to the mass mail, is designed and maintained by the business team(s).

A library of layouts is prepared by IT to be used by business when designing a mass mail. Mass mails are designed only once for multiple languages and output channels because variables allow placement of appropriate content (objects) created by the business.

During generation of mass mails, the specific language and output channel for each mail is automatically selected based on the client’s preferences.

Global Benefits with Workflow

Using Papyrus WebRepository and its workflow capabilities, BNP Paribas manages the production of thousands of customer communication documents to meet various corporate, regulatory and industry standards for this global financial organization.

Based on content from the business and layouts from IT, Papyrus formats letters and other customer documents, including advices, account statements and notices. These documents are temporarily stored (via Oracle database check-in) in the Papyrus Postprocessing Printpool for a later run in a night batch, where 10,000 - 20,000 additional input files are checked in (on the fly) to the Printpool - on top of the daily letters.

All are immediately treated in a checkout which bundle and sort the letters/documents and add barcodes and OMR marks for automatic folding and enveloping, also performed internally in the BNP office every night for Geneva, Monaco and CIB. In parallel, the workflows produce PDFs for the archive system, e-banking and e-mails or faxes directly to customers.

Alternatively, for the other Business units, local output goes to PCL printers after an AFP-to-PCL conversion is done in a specific workflow step in Papyrus WebRepository. In 2013 the system was extended for PDF attachment via the PDF-In capability of the Papyrus Document/Printpool.

Papyrus Products at BNP Paribas (Suisse)

- Papyrus WebRepository
- Papyrus Designer Package
- Papyrus DocEXEC/PDF
- Papyrus Client/Desktop
- Papyrus WebArchive
- Papyrus Server E-mail/SMTIP, IPDS, PDF-In, PCL
- Papyrus Adapters: LDAP, SOAP

Snapshot

- **Organization:** BNP Paribas (Suisse) SA (Banking/Finance)
- **Business Challenge:** Collaboration for Mass Mailing
- **Goals:** Creating workflow, Enabling multichannel output, Improving content flexibility and consistency
- **Integration:** Papyrus 7.1, Oracle database, LDAP, SOAP
- **Solution Framework(s):** Papyrus Correspondence Framework & Output Management Framework
Capturing Uniquely Intelligent iPhone Payments

Leading mobile banking into the future with speed, accuracy and security

The Business

The Raiffeisen Banking Group is the largest banking group in Austria, with 513 independent local cooperative banks, 1682 branches and 8 regional headquarters. The Raiffeisen Zentralbank Österreich AG (RZB) is the central institution of the country’s densest banking network and the parent company of Raiffeisen Bank International (RBI). Approximately 1.7 million Austrians are members of a local cooperative Raiffeisen bank, and more than 40% of all Austrians are Raiffeisen customers.

The Challenge

To process payment orders in central Europe, bank customers must visit a bank branch office to physically submit the slip for the bank transfer, or enter all the transaction data into their online banking application - now even more difficult with the introduction of the International Bank Account Number (IBAN) with 20 digits or more.

To make life easier for their customers, Raiffeisen decided to implement leading-edge technology to support an advanced mobile scan application to conveniently capture and process payments via the iPhone.

The Solution

Using Papyrus Capture, Raiffeisen and ISIS Papyrus developed an application and iPhone app with a unique payment slip scan function that simplifies the correct capture of the complete payment slip data.

Users select ‘payment scanning’ and take a photo of the whole payment slip with the iPhone. After verification and possible correction of the captured data, these items can be processed immediately or later. The subsequent payment transfer is handled either by Raiffeisen “ELBA-mobil” or “ELBA-internet” banking.

The app went live in August 2011 and downloads reached 10,000 within the first month.

Business Goals

- Enable mobile payment via payslip scanning
- Simplify deposit and payment processing for customers
- Improve accuracy of payment processing

Functional Requirements

- iPhone app with capture capabilities
- Integration with existing back-end processing systems
- Advanced recognition and verification
- Support for secure banking policies
The Future

This innovative app created for Raiffeisen fills the void between the convenience of mobile banking and the traditional processing of physical payslips, invoices and remittance papers.

Intelligent Mobile Payments

Implementation of Raiffeisen’s iPhone payment application benefitted from the experience of a decade of processing hundreds of millions of payment slips via back office scanners with Papyrus Recognition Software. However, the variation in image quality of photographs via mobile device cameras includes distortion, varying brightness, and colors that need to be red-filtered and intelligently binarized.

Experienced ISIS Papyrus Capture developers helped Raiffeisen overcome these hurdles with increased recognition rates of printed (mainly numeric) and handwritten fields to fulfill the customer’s requirements.

With Papyrus Capture, Raiffeisen offers a uniquely advanced solution that goes beyond reading two or three numeric fields on the photographic image to recognize and verify:

• The whole document (type of document and location of data)
• Alphanumeric characters
• Handwritten amounts

Pre-entered data captured with Papyrus are securely transferred with the flexible Papyrus WebServer/HTTPs to Raiffeisen’s online banking system ELBA.

Papyrus Products at Raiffeisen

• Papyrus WebRepository
• Papyrus Designer/FixForm
• Papyrus Server FixForm
• Papyrus Client
• Papyrus WebServer/HTTPs

Internal and Customer Benefits

Instead of tedious manual data entry for payslip and invoice payments - and potential errors - Raiffeisen banking customers may simply use the iPhone camera to photograph the payslip and let the state-of-the-art capture and OCR technology from ISIS Papyrus do the rest.

End users of the iPhone app confirmed saving time doing the ‘paperwork’, including avoiding mistyping data during manual entry and repetitive activity with forms. It also simplifies entering the new IBAN and BIC codes by checking the scanned photo of the payslip or remittance paper for errors and foregoing manual entry and verification.

Snapshot

• Organization: Raiffeisen Group Austria (Banking)
• Business Challenge: Reducing complexity and errors in payment processing
• Goals: Enable full-featured iPhone payment capture and processing; Improve accuracy and flexibility of input; Ensure secure transfer of payment information
• Integration: Online and mobile banking System “ELBA”, smartphones
• Solution: Papyrus Capture Framework
The Business

Established in 1880, RheinLand Insurance is one of the very few insurance groups today with a majority of shares privately owned. With roughly 880 employees and 350 sales representatives on a full-time basis, RheinLand, its subsidiaries and a brokerage and banking division together offer a wide range of private and business insurance offerings. Cooperation partners offer insurance products for healthcare and legal costs. RheinLand Insurance services approximately 2.5 million customers with premiums of €723 million. Subsidiary Credit Life in Venlo/NL provides customers in different EU countries with life and residual debt services.

The Challenge

Central production of all letter correspondence for RheinLand Insurance was on the mainframe using IBM ASF and DCF. ASF applications were used either standalone or integrated into the company’s damage dialog system. On average, 300 users produced 1,300 documents per day with peaks of 2,500 - and printing was available centrally or on department printers. There was a COLD interface connected with the document management system.

A preliminary study and selection for a follow-up product was initiated in 2006 for the migration of existing letters (1,000 letters with 7,500 text blocks) with some automation. The strategic decision was to retain AFP, particularly because documents in mass printing (bills, policies) were also using the AFP architecture.

The Solution

In addition to the existing Papyrus products used for batch mass production, RheinLand installed Papyrus WebRepository and Papyrus Clients and then completed both proof of concept for the new Business Correspondence system and a first pilot GUI in 2007, with the help of ISIS Papyrus consultants. Conversion modules were established for letter definitions and the elements saved in ASF, and the converted DCF-to-DFA code was closely reviewed to ensure the structure of the existing documents was maintained in the migration.

Business Goals

- Elimination of the ASF/DCF software
- Migration from mainframe to a client-server environment
- Increased user-friendliness
- Simplified document formatting and production
- Retaining AFP document integrity and architecture

Functional Requirements

- Migration of 1,000 documents and their 7,500 elements
- Interfacing for data acquisition with different RheinLand backend systems
- Usage of the XML adapter for letter production by pre-existing systems
- Integration of document production into the damage dialog system (3270-emulation/Web surface)
Migrating ASF/DCF to Papyrus

The letter migration, as well as enhancement of the portal GUI and integration into other applications, took place in three phases:
- Letters concerning life insurance and financial accounting
- Letters concerning combined insurances
- Letters concerning damage dialog system

Through this gradual introduction, RheinLand Insurance gained relevant experience with the capacity and functionality of Papyrus WebRepository that enabled them to optimize on every level for key advantages:
- Achieving corporate identity - proportional fonts conform now with the mass print
- WYSIWYG display including overlays (up to now not possible in 3270-emulation)
- Spell-checker within letter development and the entry of free text
- Options for formatting within free text
- "Four-eyes" principle on Web GUI without paper output

The data acquisition interface for ASF was connected and optimized with the RheinLand systems through the Papyrus interface. Furthermore, the trigger for letters, which are partly also produced in 'batch', was enabled through the Papyrus XML Adapter with the pre-existing systems.

The strong integration into the RheinLand damage dialog system (i.e., with response of the print status) made it essential to have different mechanisms to communicate via Windows between the mainframe surroundings and the ISIS Papyrus products.

Migrating ASF/DCF to Papyrus

RheinLand Portal and Desktop GUIs

With the Papyrus products RheinLand was able to define GUIs for business users not using a Designer workplace.

Portal applications
- Letter Portal
- Change Management
- Print Management (View on the PrintPool)

Desktop applications
- System Operator - Management of Queues and Tools
- Web Operator - Management of the Web Server

Migrating Word Templates to Papyrus

Besides switching from ASF/DCF products in 2011, the project included moving roughly 120 Word templates into the new document system called RheiKos (RheinLand System of Correspondence).

These templates were established in the business departments apart from the mainframe solution. In the future, more letter templates will be developed and used through WebRepository.

The Future

Further expansion will also occur in the linkage of distribution via e-mail, fax or postal letter, as well as in meeting a request for a decentralized building block management in the business departments.

Papyrus Products at RheinLand

- Papyrus Designer
- Papyrus Designer/FixForm
- Papyrus DocEXEC
- Papyrus Client/WebPortal
- Papyrus WebRepository
- Papyrus Postprocessing/PrintPool with PostCalc
- Papyrus Server/E-mail

Snapshot

- **Organization:** RheinLand (Insurance)
- **Business Challenge:** Updating and integrating centralized business correspondence system
- **Goals:** Improved quality standard for letter production; Elimination of ASF/DCF; Migration of Word templates
- **Migration/Integration:** z/VSE to Windows, AFP architecture, damage dialog system
- **Solution:** Papyrus Correspondence Framework
The Business

Chinatrust Commercial Bank (CTCB), founded as China Securities Investment Corp. in 1966, has evolved along with the growth and metamorphosis of Taiwan’s financial market and local economy. CTCB also leads Taiwan in retail banking and has strongly influenced China’s credit card business with its flexible marketing strategy and experiences. Now CTCB has 145 domestic and 75 overseas outlets across Asia, America and Canada, and its revenue exceeded $1.8B (USD) in 2010.

The Challenge

With more than 5 million credit card holders in the Taiwan market, CTCB’s central managed services department handles extremely large volumes of credit card bills and bank statements monthly via physical printing.

CTCB faced huge pressure to reduce postal costs while maintaining transpromo marketing campaigns on bills and statements. Previous e-billing solutions could only deliver simple HTML-formatted bills, without personalized marketing campaign capabilities.

In addition, the existing statement solution did not allow changes in e-bill amounts and prevented a “targeted marketing” strategy via eDelivery.

The Solution

The Papyrus eDelivery framework was selected to address the eStatement challenge for CTCB, including conversion for PDF storage and electronic distribution, as well as billing campaign statistics for marketing insight.

ISIS Business Partner FUCO Technology was also chosen as the solution designer and service provider for the project.

- All physical statements transformed to an electronic version (Papyrus Designer)
- E-statement designed for personalization and mass-produced (DocEXEC)
- AFPs perfectly converted to individual PDFs and immediately delivered (Papyrus WebArchive, Papyrus Server/E-mail)
- Reporting system provides real-time or periodic reports to different levels of delegates to review and perform authorized actions

Business Goals

- Reduce postal and printing costs
- Increase operational efficiency of document handling
- Maintain transpromo & targeted marketing campaigns
- Enhance appearance and quality of customer statements
- Ensure simplified document review and updates

Functional Requirements

- Document formatting for batch/on-demand + AFP/PDF formats
- AFP file conversion to PDF
- Archiving and retrieval of documents on demand
- On-demand generation of personalized e-statements
- E-mail delivery of e-statements
- Reporting and analysis for transpromo campaigns

Personalized e-statements and campaign reporting optimize resources, response and results
The Future

CTCB is enjoying business, customer service and technical benefits from the new e-statement system that have both immediate and long-term impact:

- Confidentiality, integrity and traceability
- Identification of sender and receiver
- Encryption of content
- New attractive and personalized PDF e-statements
- Consistency in look and feel with printed document
- Delivery by customer preference
- Performance with average bounce rate of 0.45%
- Sampling, monitoring, and approval mechanisms

Secure, High-quality Electronic Statements

The Papyrus eDelivery solution provides CTCB customers with a complete, secure PDF statement.

The PDF statements generated from Papyrus WebArchive are fully encrypted and password-protected, with the option to encrypt the passwords via hardware security module.

All formatting and delivery records are completely stored as part of the audit trail. And statements can be archived in the WebArchive through configurable time and format parameters, as well as in either PDF or AFP format.

CTCB e-mail delivery is fully compatible with standard SMTP protocol, which ISPs can recognize easily so that customers are not denied receipt by mail server rejection and junk policies. The standard “Domain Key” settings offered by the Papyrus eDelivery solution ensures the server can be recognized and acknowledged by most ISPs.

For each opened document, a record is returned to the server with back-end hyperlink settings to capture click-through rates for the transpromo material.

The delivery report in Papyrus records every successful send with the receiving note from the ISP after technical hand-shaking, as well as recording every send failure with the proper reason in standard SMTP protocol. Of course, CTCB can configure the re-send mechanism in times and also in intervals.

The look and feel of the CTCB e-statement can be designed to be identical to printed documents – all from a single design and formatting source. In fact, the electronic format enables interactive transpromo and embedded video to enhance the PDF based on rules and policies for customer preferences and demographics.

Through transpromo analysis, CTCB uses Papyrus to generate regular measurement and reporting for a number of key metrics:
- E-Opening Rate
- Bounce Analysis
- E-Growth Rate
- Cycle Monitoring
- Campaign Click Analysis
- Report Configuration

Papyrus Products at CTCB

- Papyrus Designer Package
- Papyrus DocEXEC with PDF
- Papyrus WebArchive
- Papyrus WebRepository
- Papyrus Adapter/HTTPs
- Papyrus Server/E-mail
- Papyrus Client/ext

Snapshot

- **Organization:** Chinatrust Commercial Bank (Banking/Finance)
- **Business Challenge:** e-Statement Production and Delivery
- **Migration & Integration:** AFP conversion, billing system
- **Solution:** Papyrus eDelivery Framework
The Business

Since 1998, Gebühren Info Services GmbH (GIS) has managed all broadcast licensing fees in Austria, where residents are required by law to register and purchase a licence for all television and radio equipment. GIS services more than 3.5 million customers with its 300 employees and handles all the accounting, payment processing, customer service and communication. The company represents a financial transaction volume of about € 750 million annually.

The Challenge

GIS customers can submit information on a variety of forms through their preferred communication channel. A sharp increase in customer e-mails to the general corporate address revealed problems with manual routing that led to frequently misdirected messages. Because e-mails were handled in a separate manual workflow, GIS risked re-entering data without sufficient quality control and auditing.

The company already utilized Papyrus to extract data from traditional forms of communication, such as paper and fax, and wanted to integrate e-mail extraction capabilities with this existing capture workflow.

The Solution

GIS and ISIS Papyrus implemented an advanced capture solution to classify documents and extract data from all inbound communication channels – e-mail, online, paper, fax and mobile. The Papyrus Capture system is able to recognize 12 different types of forms in multiple languages – including handwriting – and extract data based on well structured definitions while validating results against existing GIS business applications. The system integrates with the existing Microsoft Exchange e-mail server via the Papyrus MAPI (Messaging Application Programming Interface) Adapter for automated processing and routing of e-mails and faxes.

Business Goals

- Improve customer service with faster, accurate responses
- Enhanced data handling for incoming customer communications
- Integrate e-mail extraction with Capture System
- Reduce errors and manual effort in customer data processing
- Handle all incoming correspondence centrally

Functional Requirements

- Automate Omni Channel Capture (fax, e-mail, paper)
- Validation against existing database (lookup)
- Data export in multiple formats
- High recognition rate for handwriting
- Human workflow management based on rules

Specifically designed forms for handwriting recognition
Simple Shift from Paper to E-mails

As a totally scalable system, the same Papyrus Capture functions GIS used for traditional channels – paper mail and fax – are also applied to e-mail. The classification step to determine document type employs a variety of cascading methods, which are applied to the e-mail subject, sender, body text and attachments. Papyrus handles a wide variety of attached file formats, including PDF and home-scanned TIFF, JPG and PNG images.

Today, GIS can handle hundreds of incoming e-mails per day with less personnel effort and higher accuracy. After passing a unified workflow, the automatically indexed e-mails are archived in the same way as incoming paper documents.

Easy Integration to Accurately Validate, Verify

Extraction definitions for form elements and validation rules for database lookup are created once and can be re-used for multiple forms.

In the case when a document cannot be recognized automatically, it is passed on to a capture user for verification, manual validation and data completion. The Papyrus Client/Capture provides a user-friendly GUI with color highlighting that shows which fields need completion. Manual database lookup against 3.6 million records provides the necessary results quickly and reliably.

Papyrus Capture integrates with existing GIS systems via loose-coupling. Data extraction for Gismo (GIS' core business application), the marketing database, archive and statistics systems is done in their native data formats.

Quickly React to Business Changes

In response to new marketing messages, GIS can quickly add keywords to the capture definitions to track campaign performance and keep responses relevant. When internal organization changes occur, the system allows non-technical business administrators to easily change routing rules for incoming e-mails without programming.

The robust versioning architecture of Papyrus with its Change Management enables GIS to define modifications in the system in ‘Development/Test’ status and set them to ‘Production’ as soon as they are positively tested, along with the most simple rollback, if necessary.

Papyrus Products at GIS

- Papyrus Designer Package/Capture
- Papyrus WebRepository
- Papyrus Recognition Server Package
- Papyrus Client/Capture
- Papyrus E-mail Adapter/POP3-MAPI
- Papyrus Typemanager
- Papyrus Scan

Snapshot

- **Organization**: Gebühren Info Service GmbH (GIS)
- **Business Challenge**: Omni Channel Capture Solution with human workflow
- **Goals**: Improved Customer Relationship Management
- **Integration**: Enterprise application integration for all incoming business communication
- **Solution**: Papyrus Capture Framework Solution
The Business

NS&I (National Savings and Investments) is one of the largest savings organizations in the UK, with more than 26 million customers and over £100 billion invested. Best known for Premium Bonds, NS&I also offers a range of other savings and investments to suit different people’s needs, including Direct Saver and Children’s Bonus Bonds - all offering 100% security because NS&I is backed by HM Treasury. NS&I is an Executive Agency of the Chancellor of the Exchequer.

The Challenge

To optimize and support its £1 million premium bond draw (lottery) program, NS&I wanted to reduce mail output by 50% in the medium term (3-7 years) by adopting a paperless online customer document offering with operational and customer service benefits, including:

• Offering customers the option to specify their media preferences for product documents and communications from NS&I
• Separating the generation of core content for a communication/output from its formatting and delivery by a specific media/channel
• Providing a flexible workflow that incorporates individual customer preferences and rules relating to specific products or general communication via desired media/channel(s)

The Solution

To achieve increased efficiency and customer service for the premium bond draw/lottery, NS&I decided to create a new output communication platform to centrally manage customer-related communications for the ERNIE program.

Papyrus is used for two batch applications at NS&I – one for prize draws and check distribution to lottery winners and one for account holder statements and letters - integrating document development with output management and ensuring accurate and timely notifications based on KPIs for financial notifications.

Documents generated in batch are sent simultaneously to IPDS printers for high-volume production and to the WebArchive for PDF creation and third-party archiving. These documents are completely traceable to enable on-demand location and regeneration for authorized users.

Business Goals

• Reduce printed mail output by 50% within 7 years
• Improve customer communication via multichannel delivery & personalization
• Centralize document creation & production on a single platform
• Ensure compliance with KPIs for notification delivery

Functional Requirements

• Separate the generation of core content from formatting & delivery by specific media/channel
• Enable customer preferences for documents/communications
• Flexible workflow incorporating customer communication preferences & rules
High-volume Prize Draw Production

The batch production application used to generate Prize Draw documents for NS&I’s Premium Bond program handles 5-6 different letters, as well as warranties (payments), notifications and statements.

With 1.5 million documents produced in one batch run and daily work production, monthly production for NS&I via Papyrus exceeds 2 million processed documents, and monthly volumes in two peak production periods (April and November) must increase by at least 50% to meet notification regulations and requirements.

The workflow for the Premium Bond application, also used in production for additional programs at NS&I, manages formatting, generation and splitting of AFP documents for e-mail, centralized print or decentralized print, depending on the output channel specified in the XML used to trigger the job.

For centralized print, the AFP is split and checked into the PrintPool and simultaneously converted to PDF documents with an accompanying XML file, then checked into an external third-party archive and recorded for later reconciliation. The operator GUI allows selection of documents to print, by which printer and in what form (continuous or sheet).

During printing, a file is sent to the enveloper machine - any documents not physically detected during enveloping are flagged for automatic reprinting of the missing documents. Documents are reconciled with the list of documents sent to the third-party archive.

For e-mail, the AFP is again split and PDF (and XML) documents generated are checked into an external archive and recorded for reconciliation. A prize notification to a secure message system also triggers an e-mail to the customer to request logging in to view the secure notification. An acknowledgement is then reconciled to the record of messages sent to the secure e-mail system, while the archiving system acknowledgement is also reconciled, and a final acknowledgement sends the initial document request to the completed queue.

Interactive and Batch Letters

ISIS Papyrus is used to create customer outputs for the Court Funds Office, managing all funds for government agencies to provide a centralized finance system. Picking up the banking data from the Thaler Banking System (Letter Tables), including some letter print requests from TIBCO i-Process, Papyrus generates both batch and online (interactive) outputs in the appropriate format using different delivery channels.

Based on the Papyrus Correspondence Framework, NS&I’s CFO application allows 10-20 concurrent users to produce a few hundred interactive letters each day, triggered by a Staffware/TIBCO Web application integrated with the Papyrus Client plug-in to show the document instances. All other letters are non-interactive, produced in batch with a direct database interface. For the Typemanager database implementation, ISIS helped develop a ‘Line Data Extraction Module’ on Oracle.

The Papyrus CFO solution also integrates with OpenText Vignette (VRD) to support total volumes of approximately 1,300 letters daily, with semi-annual peaks (February and April) of up to 120,000 letters daily for Statements and Tax Vouchers.

Papyrus Products at NS&I

- Papyrus Designer Package
- Papyrus Client/ext.
- Papyrus WebRepository
- Papyrus DocEXEC/PDF, Papyrus PDF/in
- Papyrus WebArchive
- Papyrus Server for PCL, IPDS and E-mail
- Papyrus Adapter/HTTPs & LDAP; Typemanager/DB
- Papyrus PostProcessing/PrintPool

Snapshot

- **Organization:** NS&I (Banking/Finance)
- **Business Challenge:** Centralized document creation & production
- **Goals:** Reduced mail output, multichannel delivery & personalization, compliance
- **Integration:** AIX, Thaler system, TIBCO, OpenText/Vignette, Staffware/Oracle
- **Solution:** Papyrus Correspondence Framework
Network Marketing Goes Social and Mobile

Selling sustainable products collaboratively with an adaptive platform for global diversity

The Business

Paneon is an emerging network marketing company in Austria that employs social and mobile technology empowerment using a multi-level selling and bonus principle. Focused on promoting natural and social balance, Paneon distributes ecologically sustainable nutrition, pet food and cosmetic products by connecting with a growing number of global partners and customers through social marketing.

The Challenge

Paneon needed an adaptive customer relationship and process management solution tightly integrated with e-commerce. To enable multiple roles and responsibilities for any given person in any location, Paneon required a sales platform with localization capabilities supporting multiple languages and settings for country-specific taxes.

With success dependent on geographically distributed individuals with differing experience and education, the system’s core business functionality must include an intuitive UI with Web and mobile access to easily perform complex and secure activities:

- Case creation and sharing for team activity and status
- Order management for partners
- Inventory management
- Multi-level sales and commissions management
- Community (partner) management
- Inbound capture for multichannel order submissions
- Communication via e-mail, SMS, Facebook and Twitter

The Solution

Paneon chose the Papyrus Platform for its entire Network Marketing solution to address core business processes, applications and integration with external systems. The goal-oriented ACM system addresses sales and partner management, customer care, warehousing and logistics, with task-oriented collaboration derived from business objectives linked to goals.

The central order process functionality provides the front-end for customers/partners and staff, as well as the back-end system for data processing, documentation, notifications and seamless, end-to-end order completion.

Papyrus supports all business operations and customer care:

- Sign-in, community hierarchy & roles, change management
- Content creation for customer on-boarding into ACM case
- Fax and e-mail inbound order document capture into ACM
- Webforms interface for direct customer orders into ACM
- Social media interaction and analysis for customer service
- Order, stock, payment and logistics management

Business Goals

- Manage members, customers and partners in one common model
- Seamless process for order to fulfillment
- Establish global processes with localization
- Empower users with multiple roles and responsibilities
- Goal-oriented process for customer satisfaction & quality
- Collaboration for account activity, status & delegation
- Accurate inventory, transaction & account management

Functional Requirements

- People & sales network structure representation
- Community structure of interested persons/participants
- Social network for users to engage around Paneon values
- Integration with popular social services, banks & logistics
- Multi-language for global staff, partners and customers
- Role, policy and task management for diverse workforce
- Purchase-to-pay stock/order management (JIT)
- Special views for task assignment & tracking

SERVICES

Task-driven approach (ACM with EYE Widgets)
The Future

With Papyrus, Paneon achieved monthly revenue growth of 12-35% in 2011, and the bold new system has created long-term advantages that benefit both the company and its customers:
• Fast response to market changes through ACM
• Innovation with simple creation of new case templates
• Operational excellence through people empowerment
• Customer intimacy through better communication
• Transparency to maintain partner trust and value
• Management dashboards to verify outcomes and results

Because the start-up expected user growth of 500% by 2014, planned updates would further increase efficiency and user access in the Network Marketing System:
• Customer satisfaction ratings
• Mobile (iOS) ACM tasks delegation
• Link to mobile contact management software
• Rolling budgeting and warehouse order planning cases

End-to-End Order Processing

The comprehensive order process manages interaction with both internal and external systems to complete an order:
• Processing order data
• Generating documents
• Exporting payment data to the bank and logistics data to the shipping provider
• Logistics clerk shipment interface

Streamlined and Integrated Operations

Calculation of commissions for Paneon sales people and customers providing referrals can be flexibly managed via adaptive processes, to estimate and approve commissions:
• Parametrized turnover and commission calculation
• Different types of commissions
• Bank interface: credit transfer
• Simulation of commission calculation

Inventory management and processing payments and deliveries is also provided for office and logistics staff:
• Bank: direct debit, credit transfer (SEPA XML)
• Logistics: exporting address data for labels, parcel tracking
• Use cases: Post, GLS
• Accounting: exporting invoice and commission data

Account Management Simplified

Customer Sales Resource Management is based on the classical CRM model, reflecting the sales structure of partner and customer relationships for each Network Marketing account (sales and customer accounts).

The Paneon CRM/SRM system is extended with special account types and relations, and tasks for creating or updating accounts include accepting terms and conditions via e-mail, as well as notifications and user interaction via the Inbox view.

Papyrus EYE/Widgets are used for account search and task management activity, including partner account management made possible via the Papyrus ACM framework.

Community Web-Shop

The Web-Shop application for Paneon customers, sales partners and office staff enables online order activity for authorized team members. After navigating and selecting products, Paneon partners and customers can enter personal or customer data for invoicing and shipping and then confirm the order.

Confirmed or corrected orders trigger the back-end system based on the ACM, which processes data, produces documentation, sends e-mail notifications, and interfaces with external systems such as logistics and banking. The task-driven approach in the adaptive order process delivers information to the logistic clerk about new orders ready for shipment.

The Paneon Web-Shop User Interface

Papyrus Products at Paneon

- Papyrus Designer
- Papyrus Client/Desktop
- Papyrus WebRepository
- Papyrus DocEXEC
- Papyrus WebArchive
- Papyrus Server/E-mail
- Papyrus Server/PCL
- Papyrus Adapter/HTTPs

Snapshot

- **Organization:** Paneon (Services)
- **Business Challenge:** Adaptive CRM/sales management with integrated, global e-commerce
- **Goals:** Single platform for sales, partner, customer activity; Worldwide collaboration; Seamless order-to-fulfillment
- **Integration:** Linux, accounting, banking, logistics
- **Solution:** Papyrus Adaptive Case Management Framework

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