TECHNOLOGY
INNOVATION

Papyrus

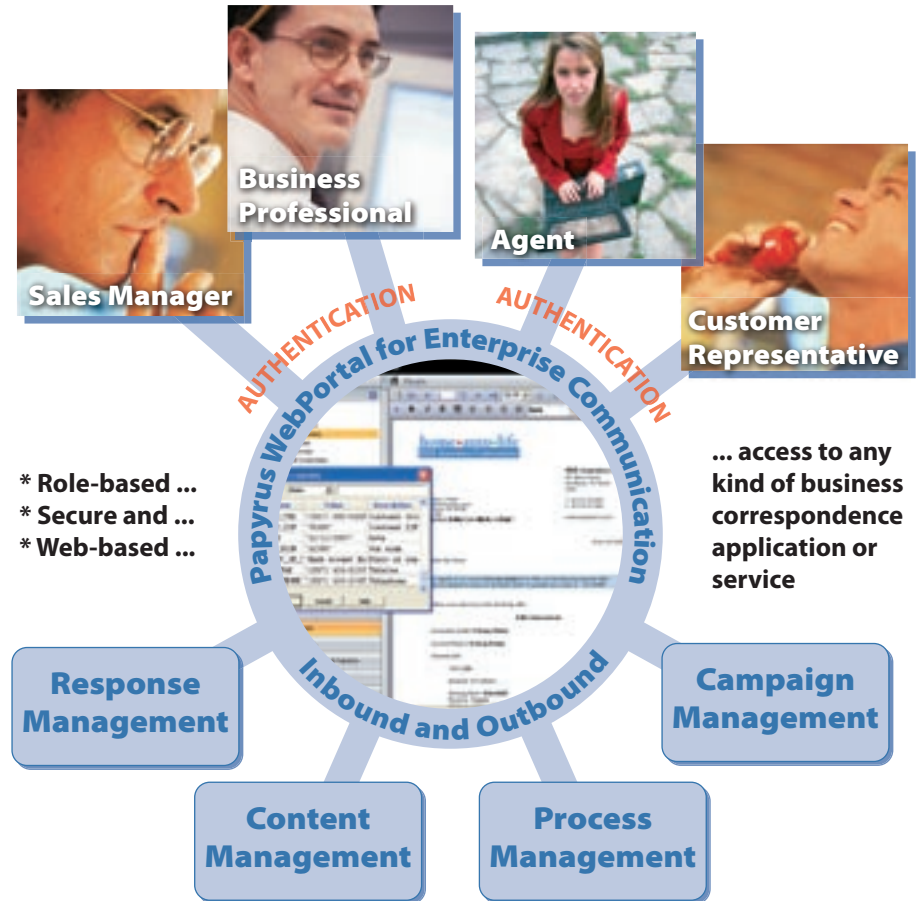## The Enterprise Business Communication and Process Management Platform

Papyrus WebPortal puts user interactive Ad Hoc and On Demand business document generation into the hands of the business user to ensure:

- ▶ Enterprise wide standardization (customer experience) of documents
- ▶ Personalized generation of documents enforcing consistency and re-use of text
- ▶ Cost savings by using the central output management for optimized mailings
- ▶ Uniform content access using a single consistent multi-purpose front end

Why Use Papyrus WebPortal Capabilities for Enterprise Business Communications?

Papyrus WebPortal

provides Web-based, intuitive, fast and consistent access to business communication and related processes. The Web browser presents a multi-purpose GUI that enables the customer or end user to view and interact with business communication of virtually any type or format. This can be a document, a dialog, a sticker on the document, a data record, an e-mail or a voice mail and all of it is business process driven.

Business Professional

Agent

Sales Manager

Customer Representative

AUTHENTICATION

AUTHENTICATION

Papyrus WebPortal for Enterprise Communication

* Role-based ...
* Secure and ...
* Web-based ...

... access to any kind of business correspondence application or service

Inbound and Outbound

Response Management

Campaign Management

Content Management

Process Management
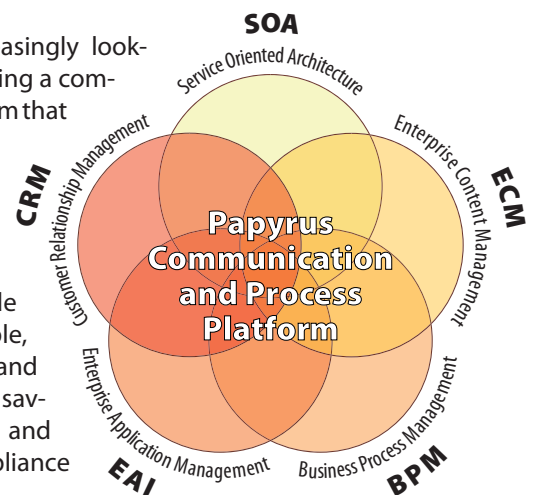

■ Substantial WebPortal benefits

- A unified document interface and a single point of entry
- Seamlessly integrated Web-based e-document solution where data, documents and applications interact within the portal process definition
- Central access, integrated system, increased user productivity, with the minimum of custom definition required
- Full integration with document production workflow:
  - □ Same document layout and building blocks for batch and user interactive documents
  - □ Integrated print and output management
  - □ Integrated archiving
  - □ Access all correspondence resources in the central Repository from the Web
  - □ Proxy resources for creating off-line correspondence

■ The Papyrus Communication and Process Platform

Papyrus WebPortal uses the Papyrus WebRepository to access the same document Framework with building blocks, user roles and processes as the central batch and online document production.

■ Why a business communication infrastructure makes sense

Organizations are increasingly looking to standardize by using a common middleware platform that will meet the needs of all enterprise inbound and outbound business communications and their processes. The main drivers, aside from introducing multiple, varied point solutions and fragmentation, are cost savings, a corporate look and feel, maintenance, compliance and collaboration.

SOA
Service Oriented Architecture

Enterprise Content Management

ECM

CRM
Customer Relationship Management

Papyrus Communication and Process Platform

Enterprise Application Management

Business Process Management

EAI

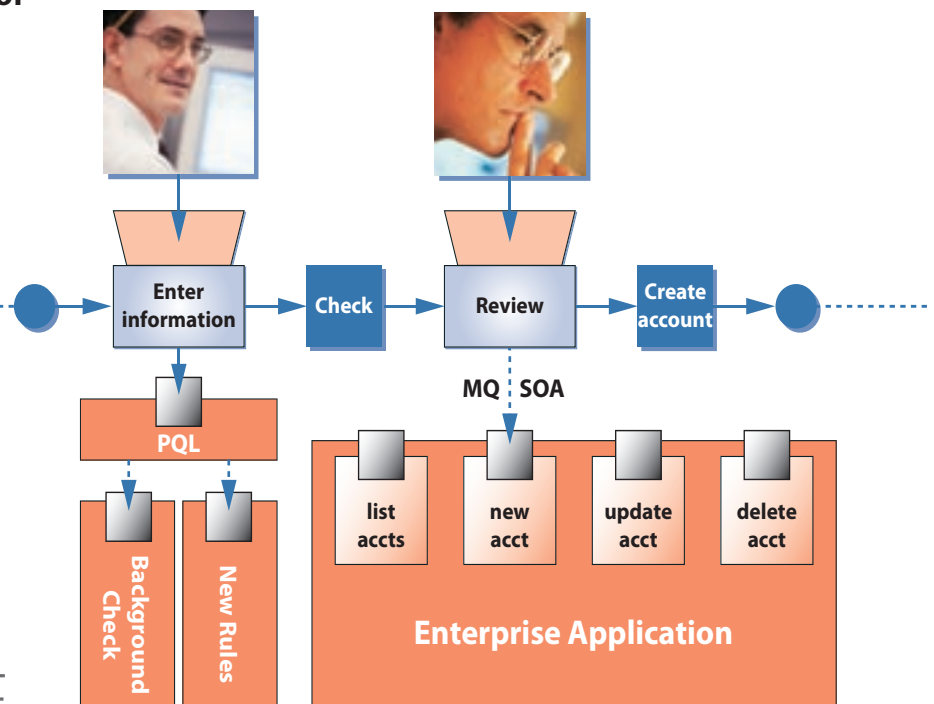**BPM**

Enabling the Business User

The key to success is enabling your customers, employees and partners.

Business retains control of

- Assigning responsibility
- Groups, roles, skills
- Deadlines
- Alerts, Reminders, Escalations
- Order of tasks
- Addition of manual tasks
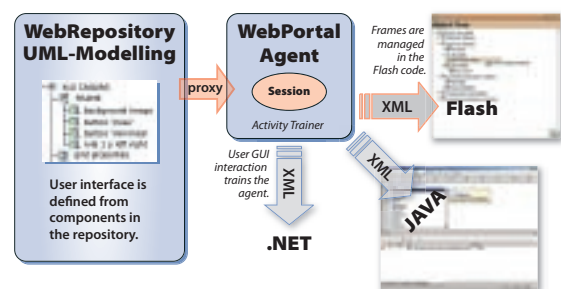- User Interface

IT retains control of

- Computational logic
- Data representations
- Scalability/performance
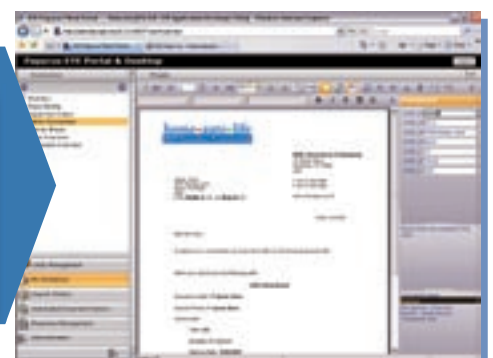- Interoperability
- Master data management

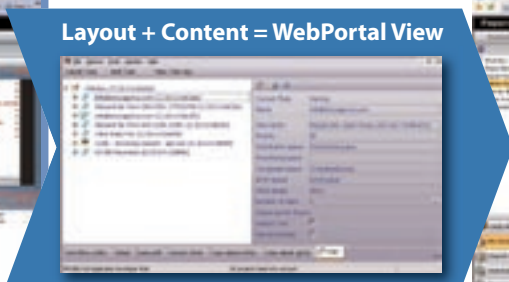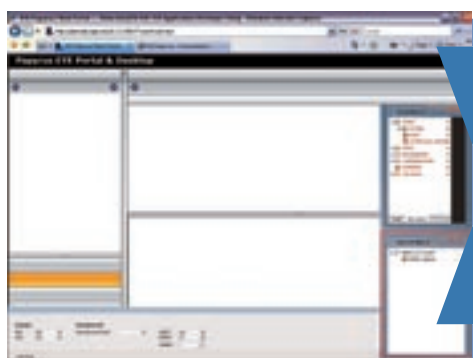## PAPYRUS EYE

■ Papyrus EYE User Interface

- Modern look
- Operating system independent
- Extremely flexible and fully user definable
- Managed through Papyrus WebRepository with all related advantages:
  - □ Version control
  - □ Change management
  - □ Role/policies
  - □ Variants
  - □ Translation collection
  - □ Distributed environment
- GUI definition without Programming:
  - □ No extra GUI designer tools required
  - □ No HTML or Papyrus Portal Language PPL knowledge required
  - □ No process code in the layout
  - □ No XML/XSL/XSLT description required

Each end user's experience is tailored to his or her role, enabling extensive flexibility either through the viewing of documents or interacting with them by filling in text and data. Document security, versioning and reconciling different taxonomies is taken care of by Papyrus WebRepository.

Papyrus EYE User Interface

Anyone can write or edit a business document within constraints set by the corporate business administrator. The solution allows and even requires user participation in the form of content creation and metadata creation for example a sticker note on the page.
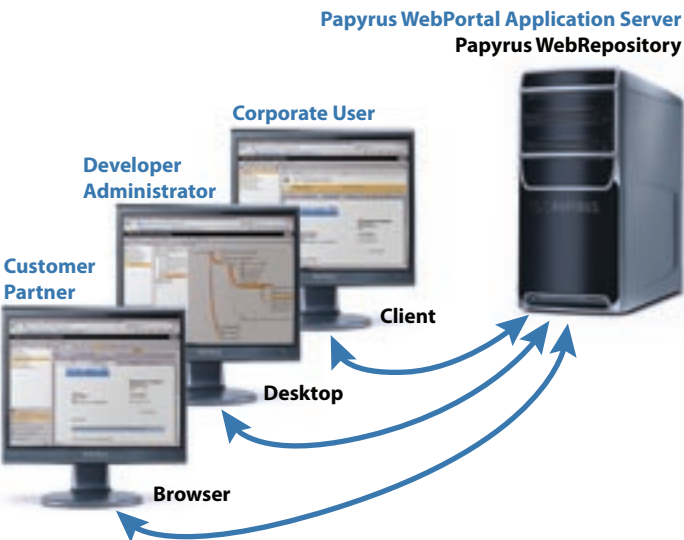

Layout + Content = WebPortal View

Clear distinctions between layout and content

Papyrus WebPortal

More than just a pretty user interface

Setting up a Papyrus WebPortal is easier than you think. The portal roles you create for one user can be applied to other users across the company, cutting down on implementation time and costs. Papyrus also delivers HTTPs server functions and integrates with third party HTTP servers. Full Papyrus Client text editing functions are available as a plug-in in the browser. All document formatting is performed centrally and on the fly documents are shown in PDF format in the browser.

Papyrus WebPortal Application Server
Papyrus WebRepository

Corporate User

Developer Administrator

Customer Partner

Client

Desktop

Browser

■ Papyrus Portal Scalability

- Cross platform distributed system & storage
- No application database administrator required!
- Unlimited scalability of production nodes (> 4 Billion!)
- Hot backup
- Load balancing
- Free storage media choice
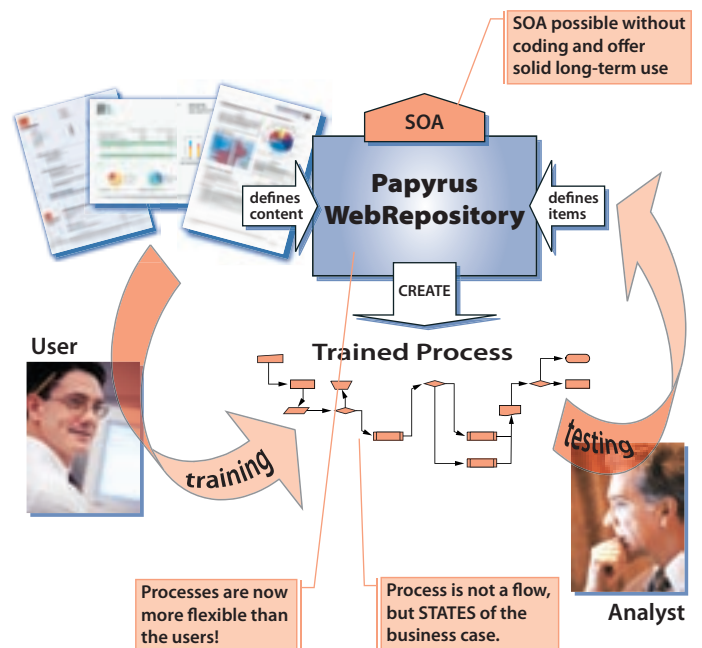- Fuzzy search helps to find your documents

■ Portal WebServer – HTTPs

Papyrus provides its own HTTPs Adapter technology but offers to fully integrate with standard Webservers on the market such as IBM Websphere or Webseal
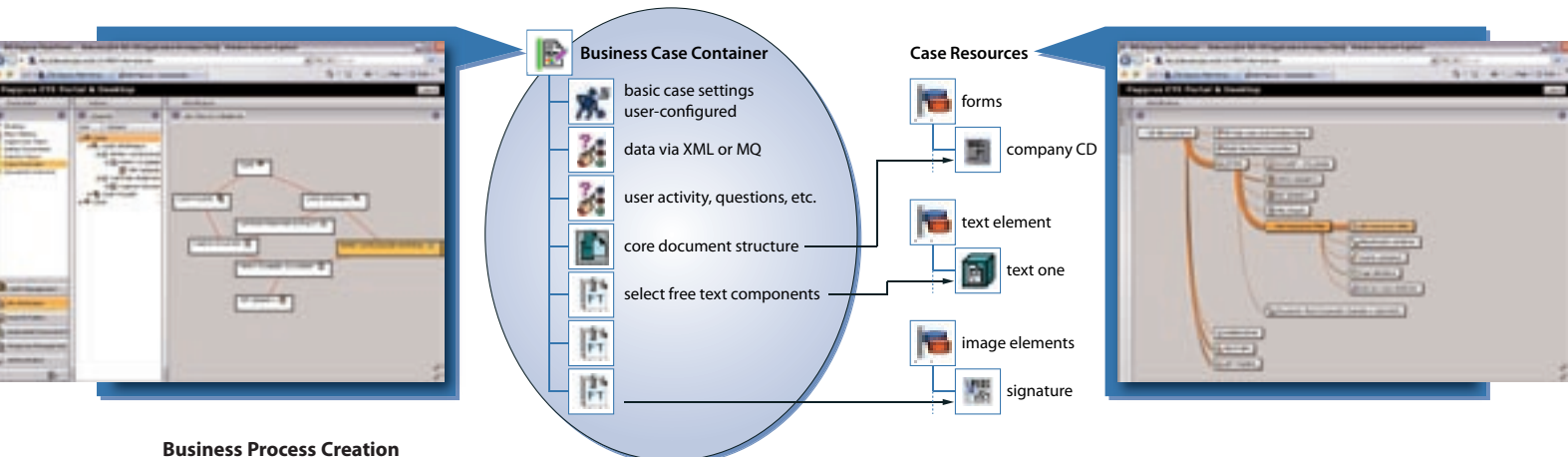
■ Portal Process Management

Papyrus defined process management requests documents from the server and then manages the completely independent document process. Upon completion, a status is returned. Papyrus uses its own build-in process engine because common workflow systems ignore the requirement to include human interaction management. Papyrus process management is flexible and understands the needs of users and supports knowledge intensive business processes in combination with business communication.
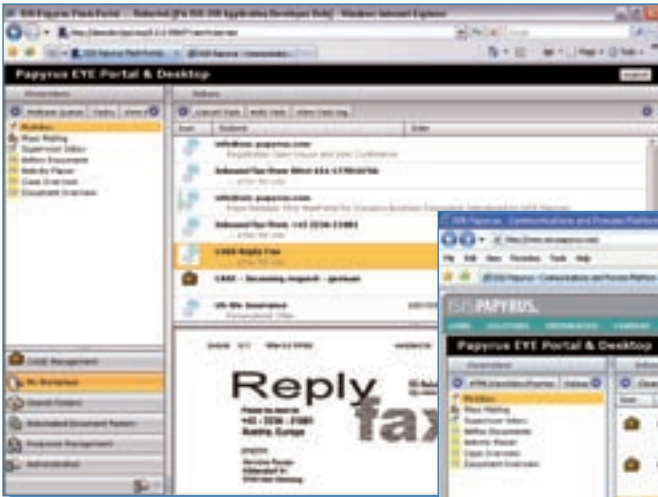
■ User Trains Computer

SOA possible without coding and offer solid long-term use

SOA

Papyrus WebRepository

defines content

defines items

CREATE

User

Trained Process

training

testing

Analyst

Processes are now more flexible than the users!

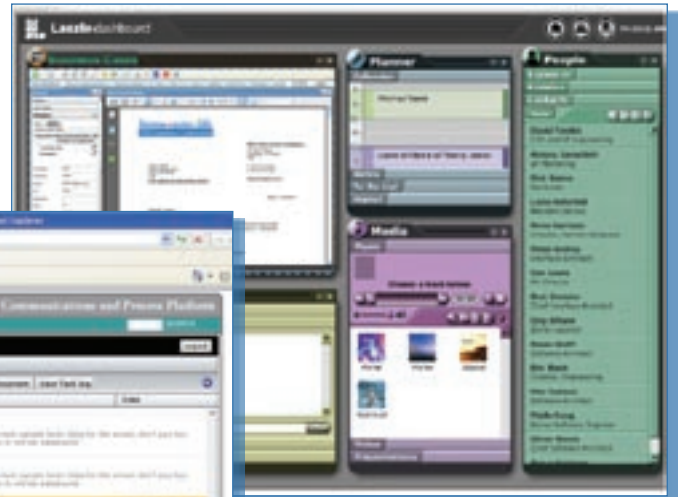**Process is not a flow, but STATES of the business case.**

The user can assemble the business cases dynamically and the assembly process will be trained. The UTA (User Trained Agent) uses the trained decision patterns to either suggest next steps or perform them automatically, as long as they do not require free text or data entry as these would have to be performed by the user as part of an activity.

Business Case Container

- basic case settings user-configured
- data via XML or MQ
- user activity, questions, etc.
- core document structure
- select free text components

Case Resources

- forms
- company CD
- text element
- text one
- image elements
- signature

Business Process Creation

Papyrus WebPortal Configurations

FULL ISIS WebPortal based

Website integration via iFrame
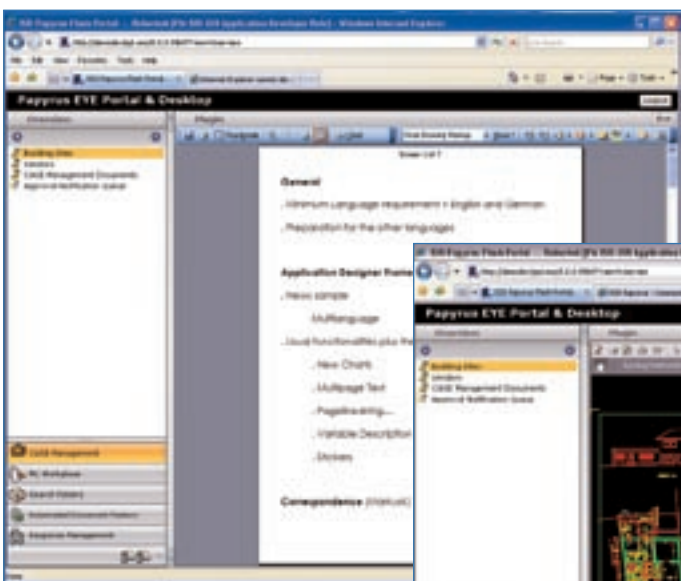
3rd party portal integration

■ **Papyrus WebPortal integrates with SOA**

Papyrus is an infrastructure for all business correspondence covering the complete document lifecycle. The integration with corporate business applications is through open and standardized Adapters and Typemanagers.
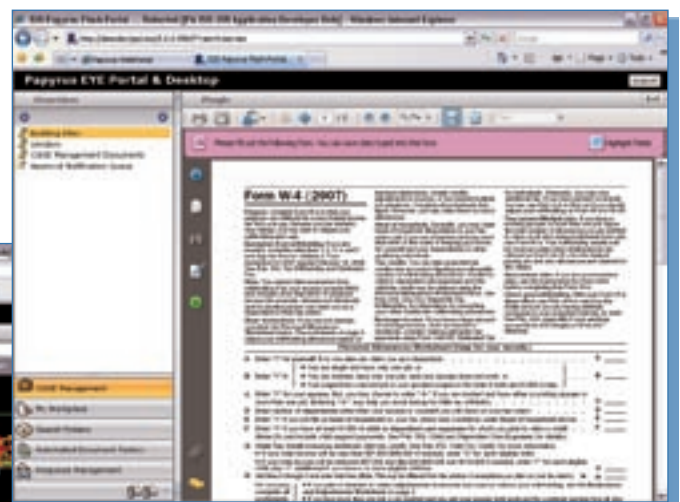
■ **Business Application Data Integration**

The business application data can be directly read by Papyrus in any format, such as XML, ASCII and EBCDIC. Papyrus offers several standard data interfaces: Flat files, SQL queries, Adapters (i.e. MQ Series), HTTP and Typemanagers for DB/2 and Oracle. The Papyrus Typemanager (XDO interface) is a database and operating system independent interface. Data preparation or data tagging is not required.

Papyrus WebPortal Integration

Word .doc integration

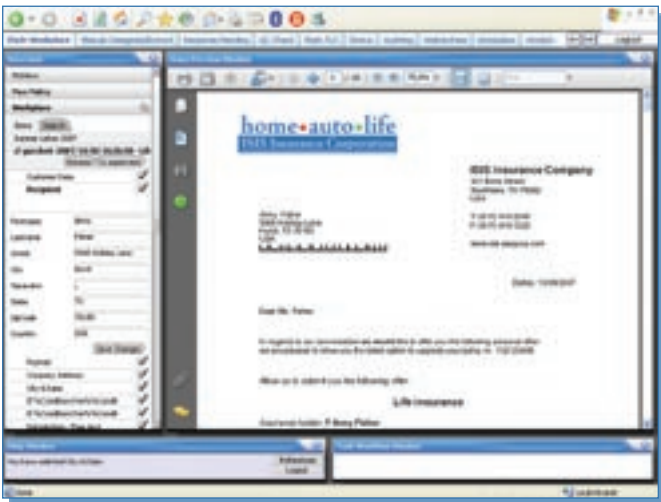**Auto CAD integration**

PDF integration

Correspondence in the WebPortal

Web–based, intuitive, fast access to all business communication.

Users can access the portal through single sign-on and do not have to know where the information they are looking for is located. The content management facilities enable users to administer and manage their documents centrally and to work with them in a Web browser or fat client.

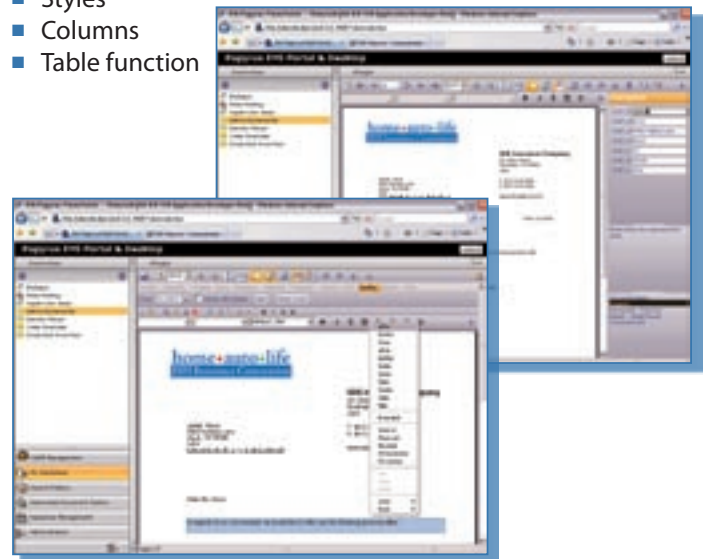## ■ User interactive correspondence in the WebPortal

Data and text entry can be performed by the Web user using HTML forms in the Browser. Formatting of PDF document with user entry information, business data, text, rules and resources is performed on the central Server.

Multistep HTML entries with PDF previews

■ Correspondence in WebPortal with Papyrus EYE

■ Full text editing functions using Papyrus Client as a plug-in in the Browser

- Text and data entry
- Spell check and hyphenation
- Text block formatting
- Dynamic charts and graphs
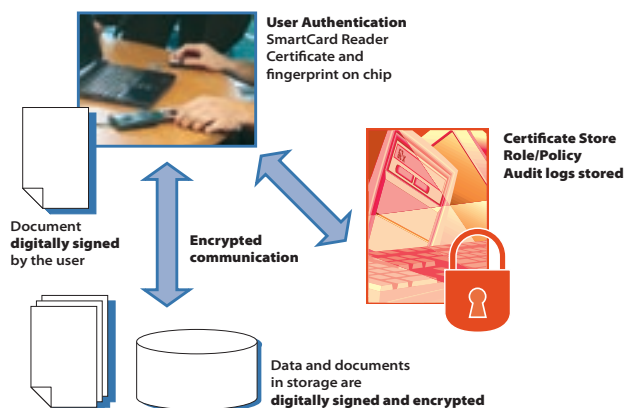- Attachments and copies
- Styles
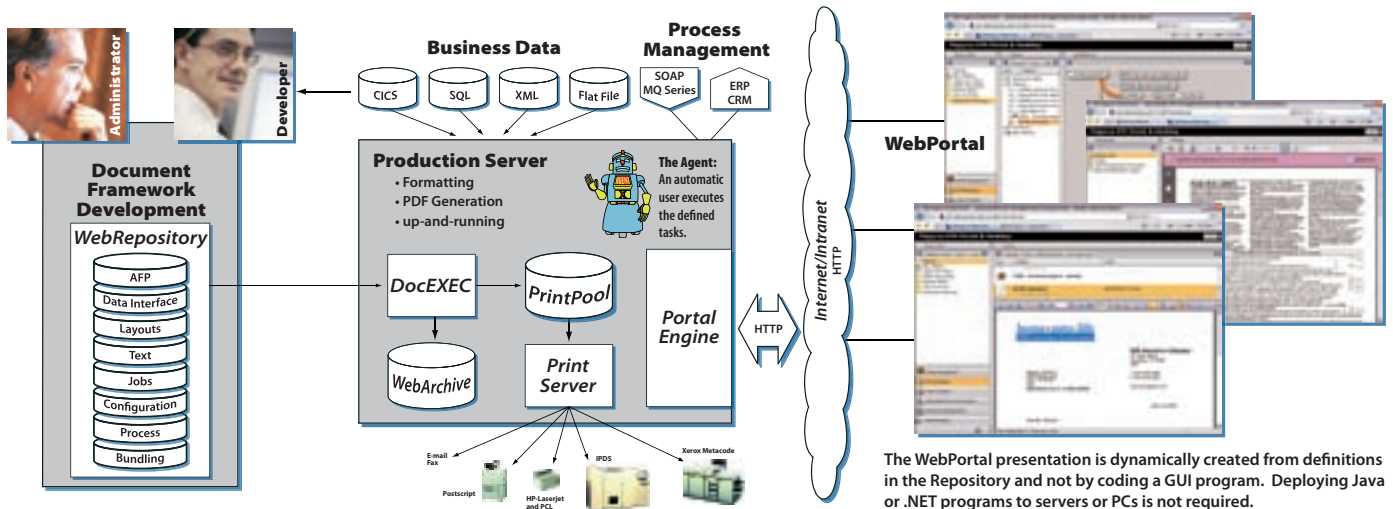- Columns
- Table function

■ Web Applications Security

Security today is often external and an afterthought. The security definition must be part of the application and therefore is an integral part of the WebRepository. Papyrus provides auditing and access control capabilities along with Papyrus WebRepository functions that include hierarchical delegated administration, monitoring, digital signatures, data encryption, user authorization and authentication.

User Authentication
SmartCard Reader
Certificate and
fingerprint on chip

Certificate Store
Role/Policy
Audit logs stored

Document
digitally signed
by the user

Encrypted
communication

Data and documents
in storage are
digitally signed and encrypted

Central Document Composition and Output Management

A central PC or UNIX server receives data from Web users via HTTP. It interfaces with data from the business application and collects document resources and layout definitions from the central Repository. The e-document is generated on the fly and sent to the user in PDF format for viewing and local printing.

The WebPortal presentation is dynamically created from definitions in the Repository and not by coding a GUI program. Deploying Java or .NET programs to servers or PCs is not required.

■ Application Life-Cycle Management

Papyrus change management executes defined user roles and policies based on the version of the document's resource and its validation (i.e. marketing text is valid from/to). Due to WebRepository's use of an advanced STATE engine the document is automatically moved by the system's electronic agent through certain states and change management processes (for example: develop/test/sign-off/production).

■ Central Server Printing, Document Pooling for optimized mailings and Archiving
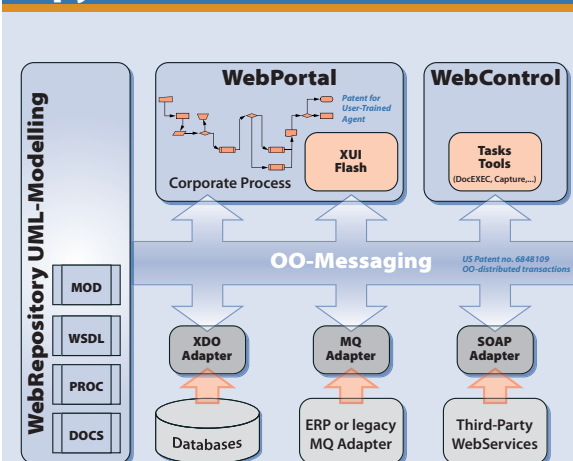
All Web-generated documents can be automatically archived, viewed, searched, and printed locally or centrally from virtually any platform and printer. Pages retain their original look and feel, complete with text, graphics, photos, and color and documents remain available for as long as they serve a useful purpose or legal requirement. These rules also govern the removal of documents when they have outlived their usefulness.

■ A document strategy and infrastructure for Web, interactive and batch application

All document resources, classes, versions and variants are designed and stored in the central Repository. An integrated authorization system based on roles and policies eliminates unauthorized access and offers change management for document flow and sign-off. Features of Papyrus are version and variant control, along with audit trailing, that monitor changes in the document and keep track of letters produced by a variety of users.
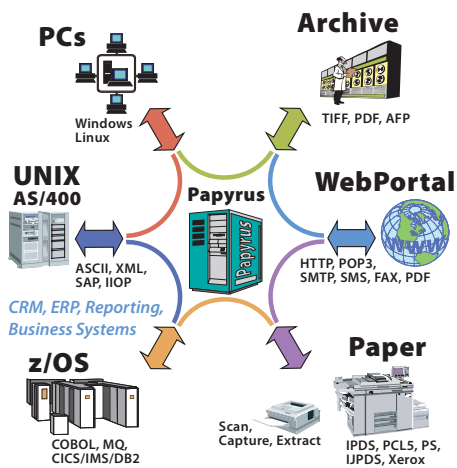
Papyrus Communication and Process Platform

Benefits/Gains to be achieved:

- Enable the business user
- Achieve full compliance for all business communication
- Identical Papyrus EYE user interface for Client/Server and Portal
- Optional centralized document pooling, printing and archiving
- Audit Trail, digital signature, SSL data encryption and role based access to all types of correspondence
- Identical definition and look-and-feel for Web GUI and fat client GUI
- Language translation collection enables one GUI definition for multiple languages
- All benefits the Papyrus Platform provides apply also to the WebPortal user
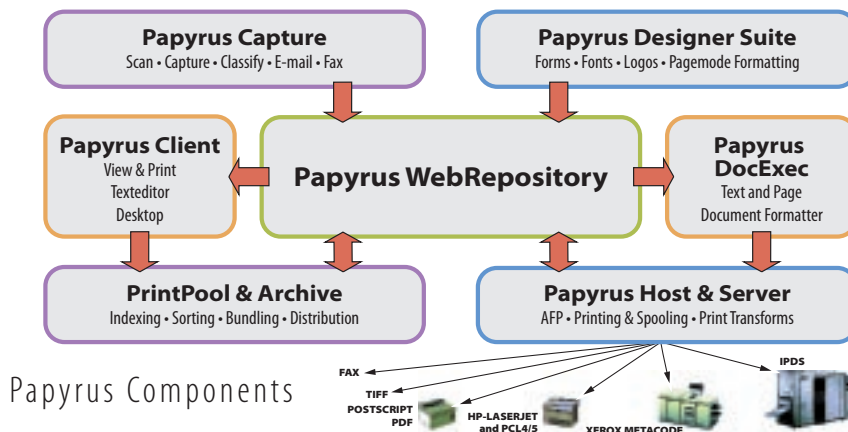- Excellent speed and performance

A **comprehensive and scalable solution** for centralized management of document applications, print and output operations that span web, client/server and host environments.

Papyrus Document Frameworks

- Automated Document Factory
- Enterprise Application Integration
- Enterprise Output Management
- Enterprise Content Management
- Business Process Management
- Portal and Web Applications
- Change Management
- Correspondence
- Campaign Management
- Print Management
- Capture/Classify/Extract
- E-mail, Fax

Organizations can **define, measure, and manage** output management across complex heterogeneous environments from centralized control points.

Papyrus Components

A selection from over 2000 ISIS Papyrus References:

Finance Sector uses Papyrus
Citibank, Deutsche Bank, HFC Bank, UBS, Credit Suisse, BNP, Capital One, Lloyds TSB

Insurance uses Papyrus
Allianz, Generali, Thrivent, RAS, Great West Life, Sun Life, HBOS, Zürich , Hibernian

Healthcare uses Papyrus
AXA, HUK, Empire Health Choice, Siemens Medical Systems, Sanitas, Hallesche

Telecommunication uses Papyrus
Bell South, SwissCom, T-Mobile, Debitel, Orange, Singapore Telecom, Belgacom

Public Sector uses Papyrus
EDS Department of Social Services, EDS Jobseeker, European Patent Office

Manufacturing uses Papyrus
Avon Cosmetics, Bally Shoes, BASF, Canon, IKEA, Miele & Cie, Renault, Volkswagen