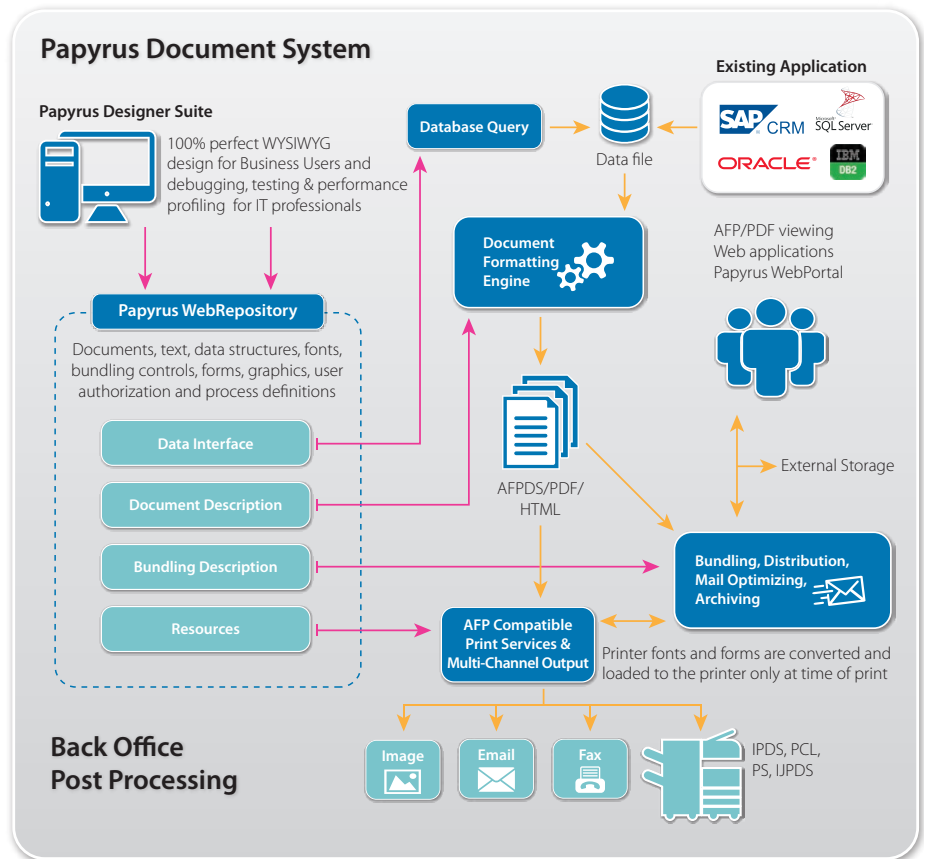# Papyrus Document System 7

## Concept Outline

Based on the Papyrus Platform Concept, ISIS Papyrus has developed the most powerful application development tools and infrastructure enabling central installation, administration and maintenance for all corporate document applications.

*Papyrus Software* provides significant benefits to your organization's customer service, marketing, and operations departments, without limiting your document creativity and flexibility. From the designer workstation, to the PC client, to the powerful processing, workflow and output management features, Papyrus delivers an integrated software solution and manages the complete document lifecycle.

Papyrus is capable of producing millions of document pages per day on mainframe, Unix or Windows, as well as interactive editing of personalized business documents on the customer representative's workstation or through the Web. It supports all code page systems, including Unicode, Arabic and Hebrew right-to-left formatting and DBCS (double byte character set) Japanese, Chinese and Korean fonts. The developed resources and application codes are stored in the central version controlled **WebRepository**, which is accessible through TCP/IP from every Papyrus component in the network.

As the resources are printer independent, there is no additional effort required to use the same document on another system platform than to access the central WebRepository.



Papyrus Document System diagram showing Papyrus Designer Suite, Database Query, Existing Application (SAP, CRM, SQL Server, ORACLE, IBM DB2), Document Formatting Engine, Papyrus WebRepository (Data Interface, Document Description, Bundling Description, Resources), AFP Compatible Print Services & Multi-Channel Output, Bundling Distribution Mail Optimizing Archiving, Back Office Post Processing, Image, Email, Fax, IPDS PCL PS IJPDS.

## Cross Industry Solution

The *Papyrus Document System* is used in all market segments, such as banking, insurance, fund management, credit card, customer care, direct marketing, utilities, healthcare and telecoms. ISIS Papyrus can share its extensive experience in these market segments with new customers and has used it for developing the most flexible and powerful document and process management architecture available today and in the foreseeable future.

*The Papyrus Lifecycle Concept provides an integrated corporate solution for the development, production and management of strategic business documents.*

## Contact

## The Papyrus Document System offers a wide range of applications:

- Consolidated bank, credit card, fund management and telecom statement applications with messaging
- Insurance policies with (US state variant) forms assembly or free formatting
- Client/server interactive correspondence applications with process management
- Forms management and Internet forms applications with data entry by user
- Campaign management and direct marketing
- Customer relationship management
- Portal applications and content management
- Central and remote print and output management
- Postal optimization with bundling of documents generated on various platforms (host, Unix, Windows)
- Full time-line version and variant control for all application elements
- Standard interfaces to messaging systems (MQ-Series), Web services (SOAP, REST) and SQL databases

## Integrated Lifecycle Management

and platform independence reduce the long-term system management effort substantially. *Papyrus Adapters and Type Managers* significantly reduce the time, cost and effort associated with building and maintaining application interfaces.

- Improves customer service by simplifying business data access
- Provides timely and concise data for document generation
- Provides a homogeneous look to the end user for several applications
- Opens the business data for e-commerce applications
- Integrates business processes with documents
- Delivers significant IT cost savings by empowering the business professional

## Enterprise wide IT benefits include:

- Develop a unified document architecture
- Deploy a broad range of applications
- Reduce application development time
- Enable seamless collaboration and integration
- Comply with government regulations
- Reduce IT administration effort and cost
- Consolidation to reduce system complexity
- Maximize return on IT investments
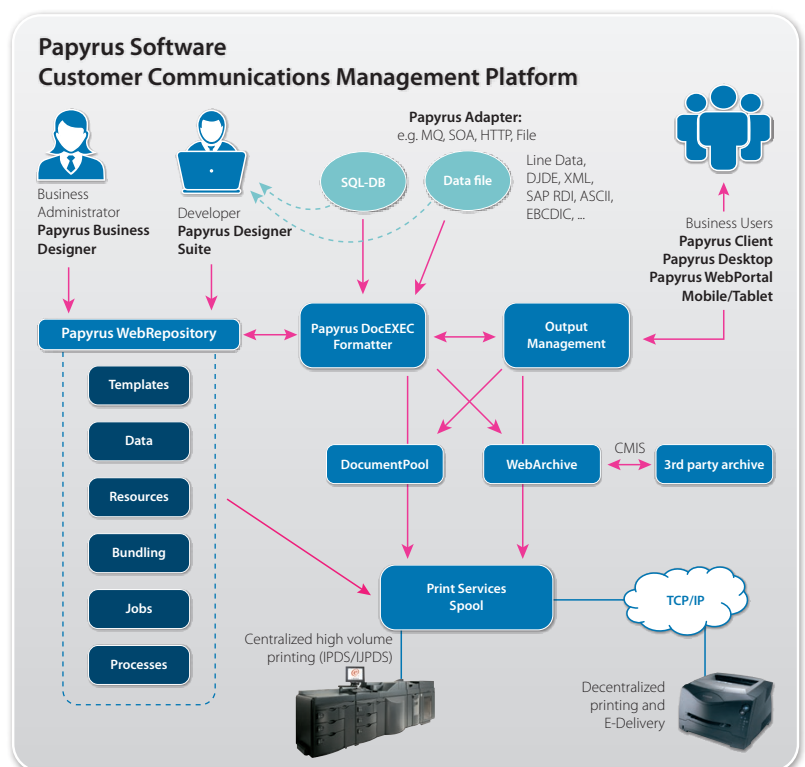
## Corporate business processes supported by Papyrus

The *Papyrus Document System* was designed to ease the integration with existing IT infrastructures and applications and enables the creation of reusable objects that map processes to existing applications, and facilitates rapid process development and immediate distributed deployment. These document and process templates are stored and deployed throughout the enterprise from the Papyrus WebRepository to mainframe, Unix, Windows

and web environments without conversion, reprogramming or even recompilation. ISIS Papyrus' peer-to-peer technology is scalable and uses system resources efficiently, enabling infinite growth to support our customers increasing demands. It provides full data and transaction integrity across many operating systems.
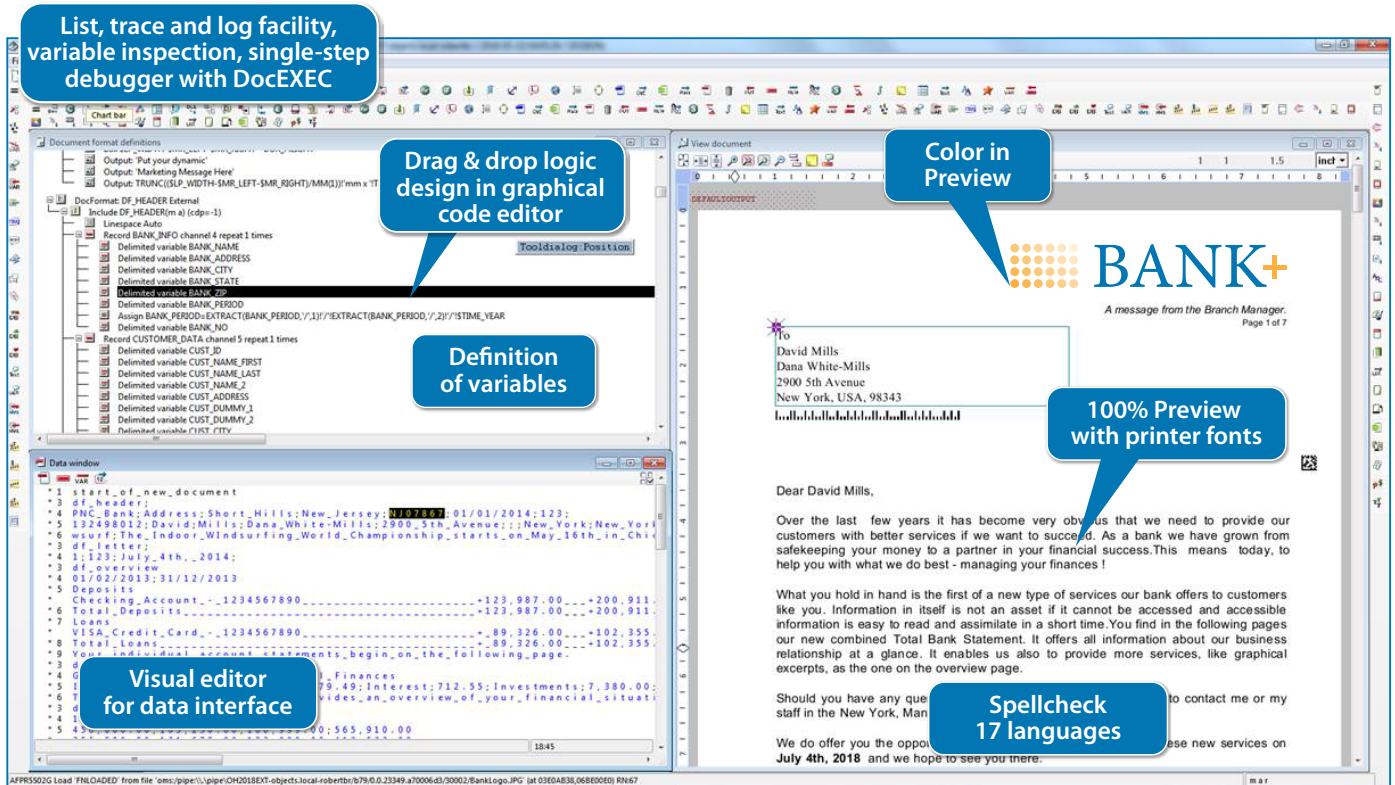
- Shorten time to market for new products
- Ensure brand consistency across all channels
- Eliminate re-creation of existing documents
- Perform integrated product launches
- Publish documents in multiple languages
- Provide customers with portal access to documents
- Funnel website leads to sales
- Collaborate effectively with partners and vendors

## ISIS Papyrus Project and Consulting Services

ISIS Papyrus understands the challenges large corporations face to produce, manage and distribute personalized, data-driven customer documents to remain competitive in today's market. ISIS Papyrus consultants analyze the corporation's unique communication goals and then provide the tools and expertise necessary to produce high volume, personalized paper and electronic communication that significantly improve customer and prospect responses as well as client satisfaction. This dramatically increases return on investment and sharpens the competitive edge. Even though a Papyrus System installation and document design does not require custom programming, customers do expect and receive a complete analysis, implementation and training service package around the world. ISIS Papyrus has extensively trained consultants in every major country.



**Papyrus Software**
**Customer Communications Management Platform**

# Papyrus Designer 7

List, trace and log facility, variable inspection, single-step debugger with DocEXEC

Drag & drop logic design in graphical code editor

Color in Preview

Definition of variables

100% Preview with printer fonts

Visual editor for data interface

Spellcheck 17 languages

## Product Description

The **Papyrus Designer** is a WYSIWYG desktop design toolkit to develop dynamical-ly formatted documents and forms/data applications. A revolutionary technique is used for the graphical and visual design of dynamic statements, invoices, insurance documents, contracts, marketing letters, etc. **Development time is up to ten times shorter than with any other product!** Papyrus Designer enables on-screen verifica-tion of the actual document in PEL accuracy for 240, 300 and 600 dpi resolutions with support for raster and outline fonts, spot and full color.

Unlike all other products, **Papyrus Designer** shows already in the design process the data interface, the logic, the layout and the printer resources such as fonts, forms and logos, each on its fully formatted page. The Papyrus DOCDEF language is a fully featured and published script language enabling the most complex data and docu-ment logic functions.

*From the idea to the production of a document on 10 platforms and any printer in just days, not months.*

## Toolkit Functions

- Design forms and form elements in IBM OGL/370 source code
- IBM compatible PAGEDEF line data formatting
- Development of dynamic statements
- Visual design of document logic
- Font and image editing
- Font conversion
- *Papyrus AFP PrinterDriver* for Windows applications
- *Papyrus Client* for AFP and PDF viewing, filling out forms and document generation

## Benefits

- Development and testing many times faster compared to any other product
- Reduces development effort:
  - 100% display accuracy
  - integrated development and debugging
  - graphical development
  - visual logic design and editing
- All applications are fully IBM AFP datastream compatible.
- Document definitions can be used on all platforms and for any printer

## Forms and Overlays

- Load, edit and generate AFP forms in IBM OGL/370
- All AFP fonts are directly loaded
- Draw lines, boxes and boxes with rounded corners, circles and irregular shapes with various shading patterns and line styles
- Forms can be dynamically placed elements in the flow of a document

## Data Placement

- IBM PSF compatible PAGEDEFS are already shown in a preview during form design
- Edit forms with data being displayed in the background
- IBM PPFA/370 source code can be loaded, edited and generated
- Use the visual display for editing the PAGEDEF logic structure

## FormsFill

- PAGEDEF extension to support FormsFill functions in Papyrus Client
- Papyrus Client FormsFill uses the standard AFP forms on the screen
- Forms can be interactively filled by business users

## Document Formatting

- Design and edit DOCDEF source code for *Papyrus DocEXEC*
- Visual editor for the data interface enables fast input definition.
- Easy drag & drop design of complex formatting logic
- Real-time document formatting and preview with real data and all printer resources
- Links between document preview and self-documenting visual logic editor
- Test printing to any desktop printer
- Variable inspection window
- Single-step debugger
- Performance profiler
- List, trace and log facility
- Error messages with direct links to the source code causing the error
- Dynamic 2D/3D diagrams in B/W, spot and full color (pie, bar, radar, line, area and many other chart types)
- HPGL/HPGL2 graphic import
- TIFF import
- Database interfaces to DB/2, Oracle, and MS SQL Server via ODBC
- Bar codes, 2D Datamatrix, PDF417, QR
- Creation of tables
- Generation of AFP and PDF output
- Take over content of HTML files
- Use XML files as input data
- Supports ICC profiles for color management

## Data/Text Prompt

- Input prompt for data and text in *Papyrus DocEXEC* enables interactive document processing with *Papyrus Client*
- *Papyrus Client* as WYSIWYG text editor for business users
- Text modules are stored as DOCDEF and can be reused for different applications
- Online interactive document creation
- Dynamic image creation during prompting (e.g. for signature)

## Font and Image Editor

- Edit all AFP raster fonts
- Edit coded font files
- Edit code page files
- Edit character set properties
- Edit single character bitmaps
- Rescale complete fontsets
- Load, edit and convert AFP, BMP, GIF, JPG, PNG, TIFF and other image formats
- Batch image conversion
- Papyrus color to B/W conversion

## FontConverter

- Converts any TrueType or Adobe font to AFP raster and outline fonts in 240, 300 or 600 dpi
- Adobe conversion requires Adobe Type Manager
- Uses the Windows or Adobe font engine for best quality

## AFP PrinterDriver

- Allows the integration of documents generated from Windows applications into the AFP printing world
- Indexing of document for archiving and postprocessing

## Prerequisites

- Windows Vista/7/8/10/Server 2008/ Server 2012/Server 2016
- Standard office PC
- Min. display resolution of 1280x1024

- The FormsFill function requires the *Papyrus Client* on the user workstation
- The document functions require *Papyrus DocEXEC* for formatting
- Printing of document applications requires either *Papyrus Client* or *Papyrus Server*

## Order Information
*Papyrus Designer* for Windows

## Training
ISIS Papyrus offers in-house workshops and standard courses for user training.

## Maintenance
The Terms and Conditions for ISIS Papyrus Software Products apply. Free service period is 6 months after installation. A maintenance agreement is offered optionally for updates and hotline.

# PAPYRUS SOFTWARE

# Papyrus Business Designer 7

## Business Correspondence Administration
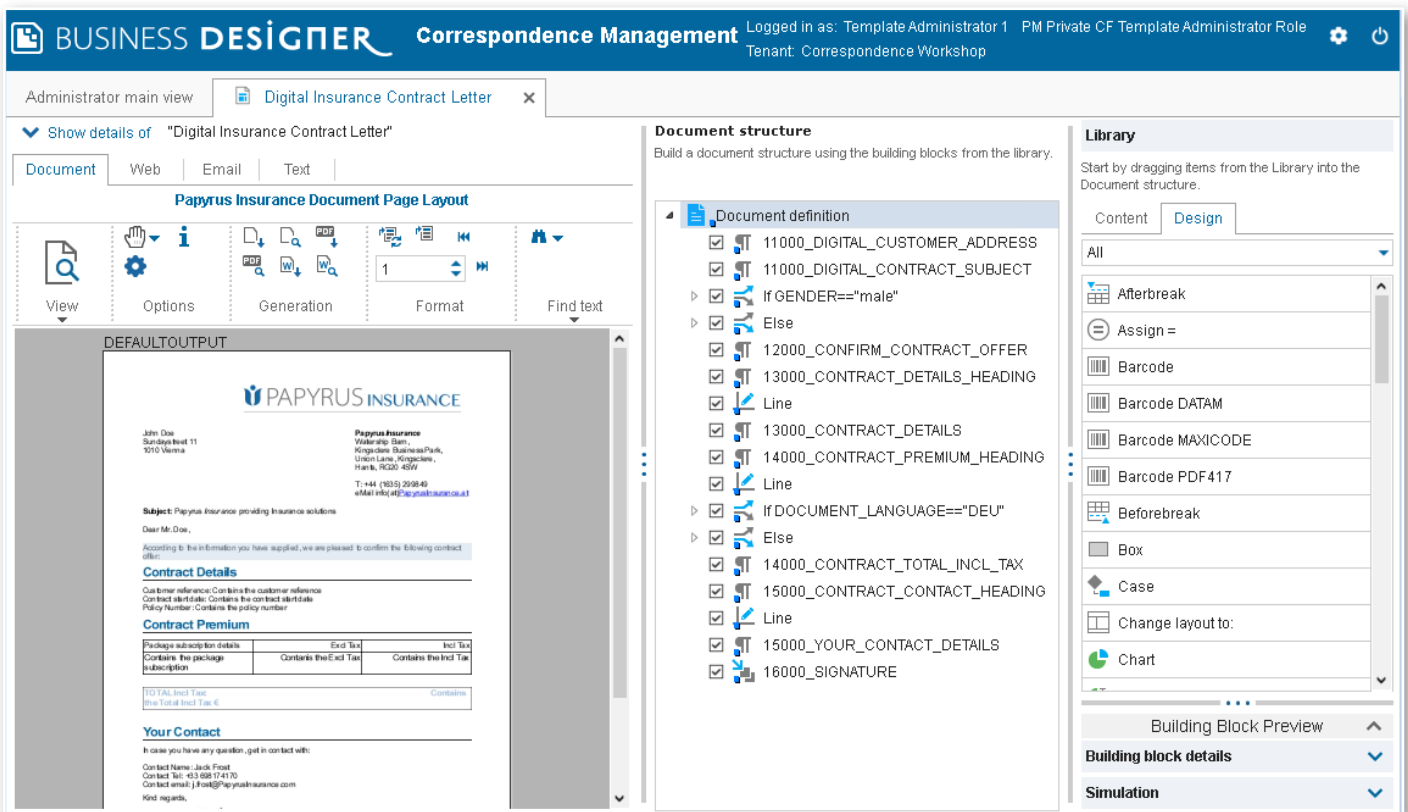


## Product Description

*Papyrus Business Designer* enables business administrator teams to work and collaborate in a WYSIWYG drag & drop fashion, using intuitive GUIs, to **design business documents** from **reusable document elements**. This guarantees a **substantial time reduction throughout the whole document design phase**. Users handle change requests directly in a fast and managed way.

The smart design approach enables consolidation with a modular, cross-channel document design (AFP/PDF/HTML) for all personalized output an organization has. Document templates and resources are defined only once, irrespective of document type, batch, online, ad hoc or interactive for any needed output channel.

*Business Designer* leverages the Business Correspondence Framework Solution delivered as standard framework with the Papyrus WebRepository.

*Business takes ownership for mission critical digital and traditional documents*

## Contact

## Functions

- Document design
- Change and Release Management
- Natural Language Rules
- Wizard HTML forms and process design
- Reports



## Document Design

- Single template for all output formats (print/web/email/PDF)
- All building blocks re-usable across batch/online/interactive and ad-hoc document generation
- Building blocks include layouts, personalized text with prompt requests for user interactivity, targeted messages, QR codes and editable/fillable forms with relevant one-to-one content and hyperlinks
- Animated promotions with video sequences and audio files, adjustable charts, dynamic tables and whitespace management
- Sharing of building blocks between Papyrus Designer and Business Designer

## Variable Content

- Any type and structure of business data (XML, CSV, line mode, etc.)
- Data can be used 'as is' without initial data manipulation or tagging
- Many data sources supported by Papyrus Adapters (from file system or via messaging interfaces in real time)

## Interactivity

- Defined by business administrator allowing end users to:
  - Enter variable data
  - Select/deselect document building blocks
  - Perform in-document editing depending on permissions and document settings
  - Respond in real time (click on a link or send a message)

## Wizard-Driven HTML Forms Design

- Creation of HTML forms for wizard-driven document composition
- Wizards guide end users through choices and decisions to build custom documents step-by-step from building blocks
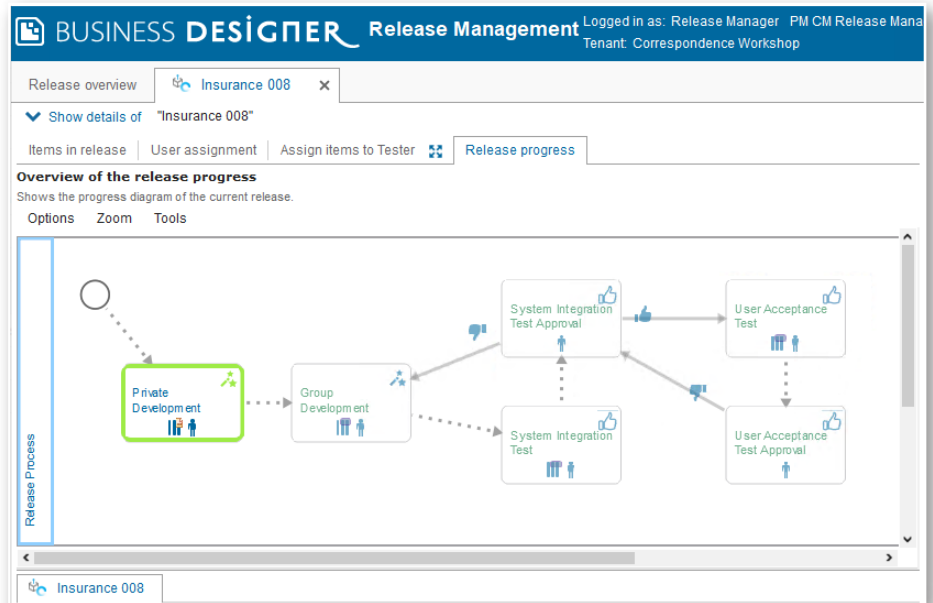
## Change and Release Management

- Process definition, sign-off, and deployment of document changes by business teams
- Elements available to production after passing release cycle
- Full control of changes at any point in time during production including hotfix deliveries
- Elements available in different communication scenarios (e.g. in dark processing, for on demand document generation, for interactive letter writing)

## Rules

- Multi-language business rule entry for non-technical business users
- Guided natural language rule authoring and syntax-free entry
- Automatic check of syntax and consistency

## Process Design – Job Management

- Single-pass formatting (AFP, PDF, PDF/A, PDF/UA, HTML5, Word) with index
- Delivery based on customer preference (digital, print)
- Handle all in one go: mobile, SMS, email with HTML or PDF attachments, HTML webpage and to print data stream

## Reports

- Logging of all actions in the system and processes
- Reports freely definable
- Reports as AFP, PDF or responsive HTML documents and/or as real-time reporting

## Prerequisites

- Windows Vista/7/8/10/Server 2008/ Server 2012/Server 2016
- Standard office PC
- Min. display resolution of 1280x1024
- Papyrus WebRepository

## Order Information

*Papyrus Business Designer*
for Windows

## Training

ISIS Papyrus offers in-house workshops and standard courses for user training.

## Maintenance

The Terms and Conditions for ISIS Papyrus Software Products apply. Free service period is 6 months after installation. A maintenance agreement is offered optionally for updates and product support.

# Papyrus DocEXEC 7

*High-speed dynamic text and data formatting across all platforms*

Forms as document building blocks

You Saved **23%** of your total amount

Data field placement

Text alignments: left, right, center, justify, decimal

Merge variables into text elements

Relative positioning

Color support

Rules, boxes, shaded areas, logos, signatures

**23% SAVINGS**

Pie, bar and line chart types from variables

Fully automatic pagination with all page break controls

## Product Description

**Papyrus DocEXEC** is the document formatting component of the **Papyrus Document System** for z/OS native, z/OS Unix, z/Linux, AIX, HP-UX Itanium, Solaris, Linux and Windows.

- High volume production of conditionally customized and formatted statements and documents
- Design dynamic documents with graphical elements such as shadings, tables, diagrams and angled text.
- Format text and data based on conditions
- Import and enhance existing IBM standard PAGEDEFs
- Create AFP and PDF output with indexing and full color support

- Automatic page and text formatting with full pagination control and page numbering options
- Powerful 2D and 3D chart creation
- Documented source code enables subroutines, macros and modularization
- Throughput up to several million pages/hour, depending on hardware and number of objects/page
- Print and E-Delivery for multi-channel output (e.g. IPDS, Postscript, PCL, fax and e-mail)
- Support for any type of data record, format and sequence: ASCII, EBCDIC, XML, HTML, COBOL, SAP formats

## Contact

## Benefits

- Development is totally independent of printers and platforms in use
- Dynamic, high-speed text and data formatting across all platforms
- A central resource library for AFP and document definitions
- Generate up to several million A4 pages/hour
- Single step execution from data to document
- Pre-compiler technology for high-performance formatting
- Print and E-Delivery for multi-channel output (e.g. IPDS, Postscript, PCL, fax and e-mail) using Papyrus Server
- Guaranteed compatibility between product versions
- Upward compatible PPFA syntax
- Absolute code page control from design to print, fully independent of operating system and printer
- Multiple languages per page
- Share document elements such as fonts, text blocks, logos, and forms between host, Unix and Windows environments
- Direct PDF output

## Data-Interface Functions

- No special input data format required.
- Advanced XML support
- Variable extraction from input in fixed or delimited format
- Any type of record in any sequence
- Flexible data handling with ANSI channel functions and repeated input records and lines
- Powerful string manipulation
- Document logic can be dynamically controlled based on actual input data
- Variable arrays for large data volumes.
- Variable array sorting
- SQL interface for relational database read and write
- Support for COBOL format conversion (picture/binary/packed)
- PQL (Papyrus Query Language) interface to Papyrus WebRepository

## Logic Functions

- Comprehensive scripting language
- Mathematical formulas
- Call DOCFORMAT subroutines depending on variable content
- Call externally stored macros
- Variable array sorting functions
- If-then-else and for-loop logic
- Select/Case statements
- String manipulation functions
- System date & time functions

## Layout Functions

- Combined page layout and text style formatting
- Total control of vertical and horizontal element positioning
- Absolute control over sheet, front and back of page, logical pages and orientation
- Automatic pagination and margins, with break and keep controls
- Dynamically embedded forms, graphics, and images
- Comprehensive formatting options for number, date, time and currency values
- Dynamic generation of full-color 2D and 3D diagrams
- Draw rules, boxes and shapes with many line styles and shadings
- Tables with optional repetition of headers and footers after page breaks
- Spot and full color support for texts, boxes, shadings, diagrams, logos, etc.
- Scalable images and logos
- Print variable text at any angle
- Text can be inverted, rasterized or printed with a shaded background
- Format your documents to 240, 300 or 600 dpi
- Re-ordering of pages after formatting, creation of tables of contents and output to multiple/different files
- Print all OMR and bar codes, 2D Data-matrix, PDF417, QR
- AFP pages can be sorted and merged in page buffer
- Import and scale TIFF, HPGL2
- Import true color TIFF

## Resource Functions

- Utilize standard AFP resources in 240, 300 and 600 dpi
- Resource information is read directly from AFP
- Resources can be retrieved based on variable values, allowing for resource selection by language, gender, etc.
- Windows or Adobe font styles can be used on all platforms and printers
- The use of raster fonts makes high-performance printing possible
- AFP outline fonts are fully supported.
- Scalable images and graphics
- Direct access to versioned resources in the WebRepository

## Print Control Functions

- *Papyrus DocEXEC* enables the developer to switch input paper bins at any point in time during document printing
- When outputting to different print files, each can use its own forms and OMR technology for postprocessing
- Support for application controlled duplex and N-up printing
- Print-time operator controlled N-up printing with FORMDEF
- IBM ACIF-compliant output enables easy archiving, bundling and reprinting of documents based on index values
- IBM ACIF compatible resource groups in document file

## Prerequisites

- z/OS 2.1/2.2/2.3 or z/Linux or
- Windows Vista/7/8/10/Server 2008/Server 2012/Server 2016 or
- AIX 6.1/7.1 or
- HP-UX Itanium 11.31
- Solaris V10/V11
- Linux (SLES 11/12, RHEL 5/6/7)

- AFP compatible print services such as Papyrus Server or IBM PSF
- Access to AFP resources

## Order Information

*Papyrus DocEXEC 7*
for z/OS native, z/OS Unix, z/Linux, HP-UX Itanium, AIX, Solaris, Linux or Windows
**Standard version:** Single processor server or up to 20 mill pages/year
**Extended version:** unlimited processor server and unlimited number of pages

## Training

ISIS Papyrus offers customized in-house workshops as well as standard courses for user training.

## Maintenance

The General Terms and Conditions for Papyrus Software Products apply. The free service period is 6 months from installation. After this period an optional maintenance contract is offered.

# Papyrus Postprocessing DocumentPool PostCalc

*SQL/PQL access and AFP/PDF import make complex bundling easy.*
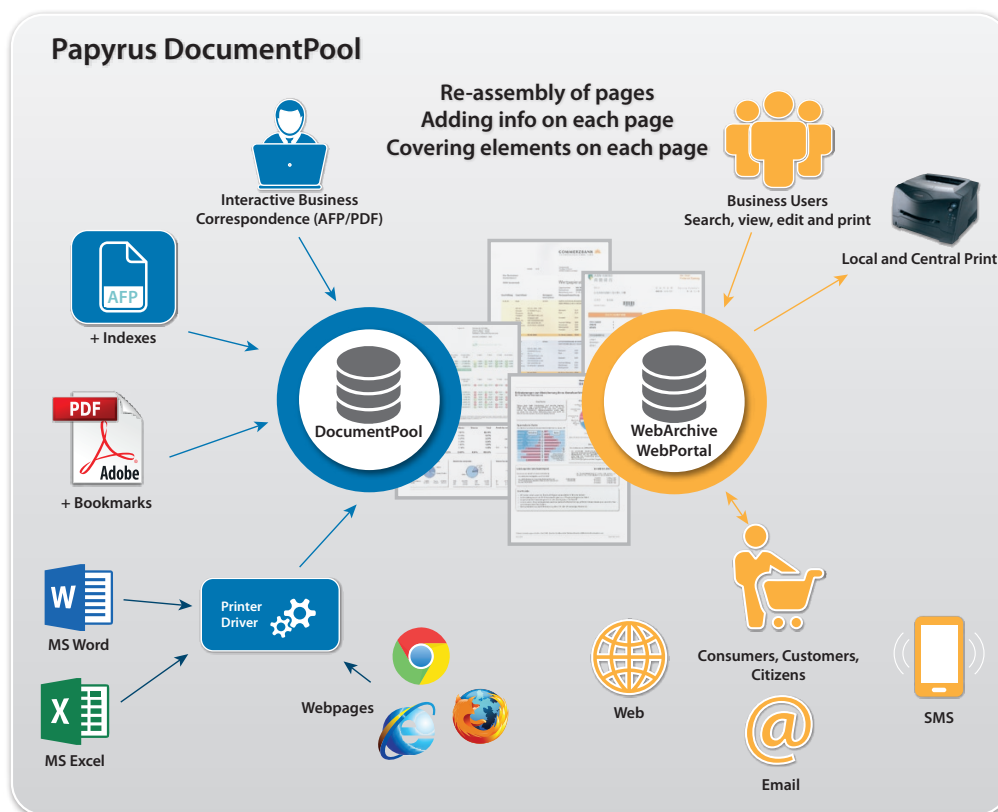


## Product Description

***Papyrus Postprocessing/DocumentPool*** and ***PostCalc*** add the capability for output management and postal optimization to the ***Papyrus Document System.*** This functionality is available for z/OS, UNIX, Linux and Windows. The unique concept of pooling the print based on single documents replaces the conventional file spooling.

The bundling, distribution and postal optimization features provide important opportunities for cost reduction. This is achieved by reducing both the number of printouts and the number of envelopes sent and by optimizing the postage per item based on available discount structures.

- Develop bundling with ***Papyrus Designer*** including index and control information.
- Convert and manage all output types as page-mode documents in 240/300/600 dpi.
- The ***Papyrus PostCalc*** product is postal authorities certified and can be used to calculate postage and optimize print volumes for discounts.
- Provides document distribution, re-printing, OMR and bar code printing, envelope merging and splitting.

## The DocumentPool

Bundling can be performed for various applications, running on any supported platform and at any time. A customer letter produced on a clerk's workstation could, for instance, be bundled with a bank statement or an insurance policy produced on the mainframe.

All documents to be processed are either sent via queue directories, FTP, SNA RJE or a z/OS JES submitted job and will be automatically stored, or formatted and stored in the DocumentPool together with their corresponding indexes.

Due to the free choice of database and the highly configurable applications, the bundling logic is completely flexible and easily expendable.

## Use any kind of input data

- Mainframe batch lists or online via CICS queues and MQ Series
- Unix print formats (ASCII)
- SAP print formats
- Client/Server data files (e.g. XML)
- Direct database access
- ACIF indexed AFP files
- Any text file format

## Collate and distribute

- Automatic, scheduled or manual start of bundling process
- Grouping of documents for a user, a complete department or into one envelope per customer
- Grouping can be based on the input type, the user, or on data contained in the document
- Allows to print OMR and bar code to the collated group of pages

## Group sequence

- Prioritize based on users, documents or combinations of both
- Prioritize based on total page numbers
- Users can define criteria themselves at the time of bundling

## Storage management

- Single AFP pages are typically less than 10 kB in size
- The DocumentPool database requires a high performance storage solution (HDD or preferably SSD), RAID and SAN architectures are of advantage
- Storage of documents in AFP, PDF, TIFF or GIF format

## Distribution of documents

- Central printing of documents on mainframe- or server-systems
- Decentralized printing on client workstations
- Distribution via fax servers
- Transfer to archive systems
- Distribution of documents via email or web portals

## Previewing and reprinting

- Business users decide whether to print or not to print documents
- Each document can also be reprinted individually
- Index can be used for quick search
- Documents can be viewed on client workstations
- View documents on Internet/Intranet
- Print to IPDS, IJPDS, Xerox, PCL, Postscript, and fax
- Distribution as email attachment

## General aspects of bundling

The DocumentPool can only be used in combination with a **Papyrus DocEXEC** installation and can be operated on z/OS or server platforms. For storing documents the DocumentPool requires a Papyrus Depot Node when running in a Papyrus WebRepository setup. Alternatively an external database such as DB2, Oracle or MS-SQL via ODBC can be used.

The complete bundling solution can be linked with **Papyrus WebArchive**, which allows online access to documents via TCP/IP. All applied bundling algorithms are written in DOCDEF using predefined SQL functions (for external databases) or PQL statements (for Papyrus Depot Nodes) and are therefore absolutely platform-independent.

## Automated print processing

Using a job control convention, every print-file transferred to the server can be automatically processed. Once the print layout has been created using **Papyrus DocEXEC**, all document pages and the corresponding index information are stored in the DocumentPool. Additionally, it is also possible to use Papyrus WebRepository functions for print-job control.

## PostCalc

If **Papyrus PostCalc** is used to apply for postal discounts, it is authorized by local postal authorities. It calculates postage from page numbers and weight, merges documents into envelopes, adds inserts and optimizes print volumes by priorities for best postal discounts.

User defined bundling routines or **Papyrus PostCalc** produce print lists which can then be selected by the user or operator for actual printing.

The operator and print management dialogs built on **Papyrus WebControl** capabilities can not only be used on the actual server but also anywhere in the network using a standard browser or the **Papyrus Desktop.**

Once a ZIP or postcode sequenced print list is requested for printing, it is passed to **Papyrus DocEXEC** which then assembles the pages from the document pool into a printable document, merges pages for one envelope, assigns inserts, calculates the postage and prints the proper OMR code on each page to control the enveloping.

Destroyed pages can be reprinted at any time from the DocumentPool with or without OMR code. Authorized users can view documents or request individual reprints via the network. DocEXEC applications on client workstations can also be integrated in the bundling processes to allow for postage-optimized printing of all documents.
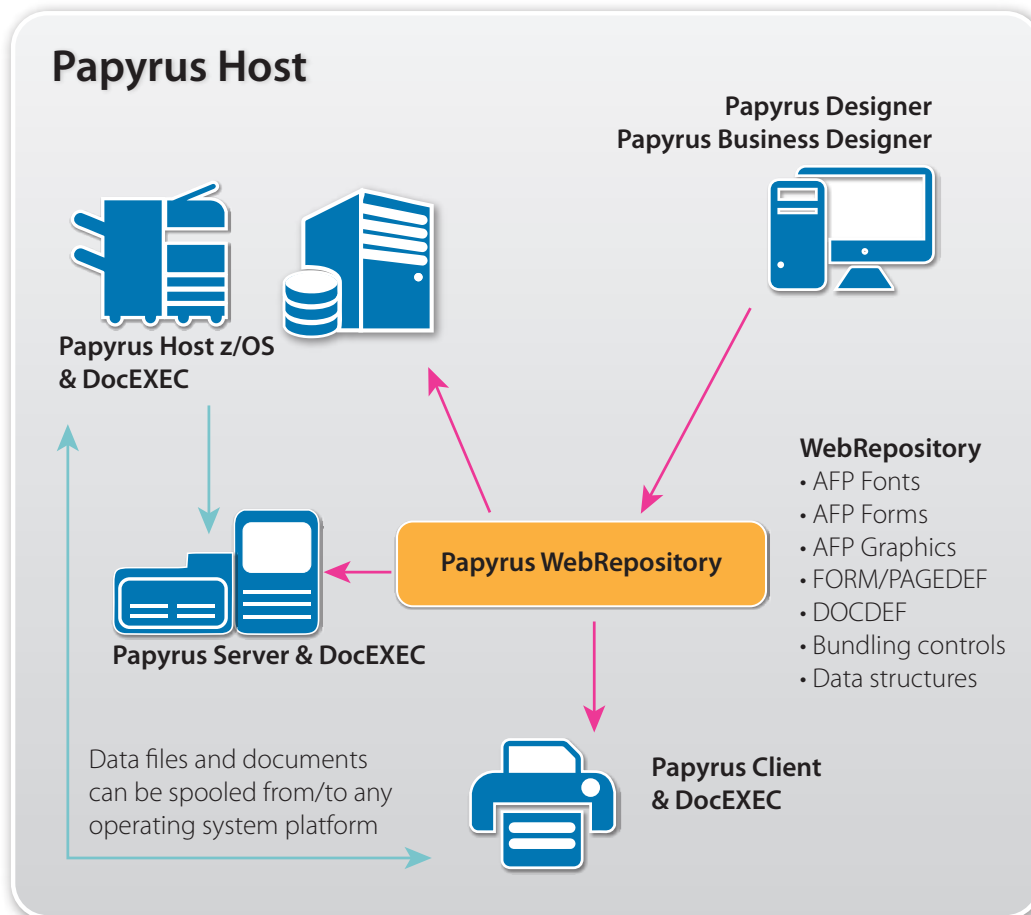
### Order Information

**Papyrus Postprocessing/ DocumentPool**
**Papyrus PostCalc**

These products are only available as **Papyrus DocEXEC** features.

Payrus PostCalc is available for Germany, Switzerland and the UK, but can also be adapted for other postal companies thanks to its flexible, generic definition scheme.

# Papyrus Host 7

**Papyrus Host**

**Papyrus Designer**
**Papyrus Business Designer**

**Papyrus Host z/OS**
**& DocEXEC**

**WebRepository**
• AFP Fonts
• AFP Forms
• AFP Graphics
• FORM/PAGEDEF
• DOCDEF
• Bundling controls
• Data structures

**Papyrus WebRepository**

**Papyrus Server & DocEXEC**

Data files and documents
can be spooled from/to any
operating system platform

**Papyrus Client**
**& DocEXEC**

## Product Description

*Papyrus Host z/OS* provides print management services for the z/OS mainframe. It offers the following functions:

- JES2/3 spool interface as FSS analog to PSF on z/OS
- Send JES2/3, CICS or MQ Series output to *Papyrus Server*
- Receive print files in JES Spool via LAN
- Central resource library within *Papyrus WebRepository* or as z/OS PDS data sets
- Integration with *Papyrus Server* and *Papyrus WebControl*
- Send output to and receive output from CICS Transient Data Queues

- Send and receive data via MQ Series
- Direct printing to channel-attached and TCP/IP-attached printers

*Papyrus Host* guarantees investment protection by making existing host services, such as JES spooling, available to the wider network, and by making the IBM AFP architecture accessible to the actual business user.

*Integration for IBM z/OS mainframes*

## Contact

## Functions

- Send print output from JES2/3 to network printers
- FSS interfaces with JES2/3, like IBM PSF, enable the distribution of output files and their related resources such as fonts and forms to the **Papyrus Server** with **Papyrus WebControl** or **Papyrus WebRepository**
- Output from a server print queue can be sent to JES2/3
- **Papyrus Host** manages all required AFP resources, such as fonts, forms and logos
- Resources can be sent every time, only if modified or never
- **Papyrus Host** can retrieve print files from **Papyrus Server** modules
- Utilizes SNA LU6.2 or TCP/IP for host to server communication
- CICS Transient Data Queue content can be sent to **Papyrus Servers** in the network with **Papyrus WebControl** or **Papyrus WebRepository**
- **Papyrus Server** output can be sent to CICS Transient Data Queue
- **Papyrus Host** MQ Series Interface for receiving/sending MQ messages via standard MQ queues can be used to initiate **Papyrus Host** jobs (e.g. a **DocEXEC** run, PDF conversion) and return their results (AFPDS, PDF, ...) to the calling application – permanent running technology
- Interface to versioned resources in the **Papyrus WebRepository**

## Direct printing options

- **Papyrus Host** provides an option to print directly to Xerox Metacode or PCL printers
- Xerox Metacode and PCL can be printed in batch or on-line mode
- Xerox Metacode files can be written to any storage medium
- All AFP resources are automatically converted to Metacode/PCL and embedded in the print file
- Conversion to PDF for web solutions

## Optional printer support

- IPDS via channel or TCP/IP
- PCL via TCP/IP
- Host jobs can be printed to IPDS, IJPDS, PCL, Postscript, Xerox Metacode, fax, e-mail, PDF and TIFF with **Papyrus Server** and **Papyrus WebControl** or **Papyrus WebRepository**

## PAGEDEF compatibility

- **Papyrus Host** can also print linemode AFP applications using FORMDEF/ PAGEDEF.

## Benefits

- Standard network and workstation printers look like JES2/3 printers to the user
- Host AFP printers can be accessed by the business users via network print queues with **Papyrus WebControl** or **Papyrus WebRepository**
- Integration of host and PC world by using the universal IBM AFP format
- Reduction of operating costs by using centrally managed forms and document applications on host, network and workstation printers
- Reuse forms for FormsFill applications on client workstations
- Ensures an enterprise-wide forms infrastructure and corporate identity compliance
- Output between host and PC's can be shared and queued where printing is least expensive or fastest - as required

## WebControl Interface

**Papyrus WebControl** optionally offers a graphical user interface for print, job, spool and queue management via any web browser or the **Papyrus Desktop**. This includes user authorization based on roles and privileges for accessing the server.

## Prerequisites

- z/OS V2.1 or higher
- VTAM 4.0 or higher
- TCP/IP if used
- JES2 or JES3
- CICS/ESA
- MQ Series if used
- SNA if used

## Customized features

- CICS remote transaction support for **Papyrus DocEXEC**
- Archive interfaces
- Version controlled WebRepository
- Client to CICS DB2 interface
- CICS document request

## Order Information
**Papyrus Host 7 for z/OS**

### Training
ISIS Papyrus offers customized in-house workshops as well as standard courses for user training.

### Maintenance
The General Terms and Conditions for Papyrus Software Products apply. The free service period is 6 months from  installation. After this period an optional maintenance contract is offered.

# Papyrus Business Designer 7

## Adaptive Case Management Administration
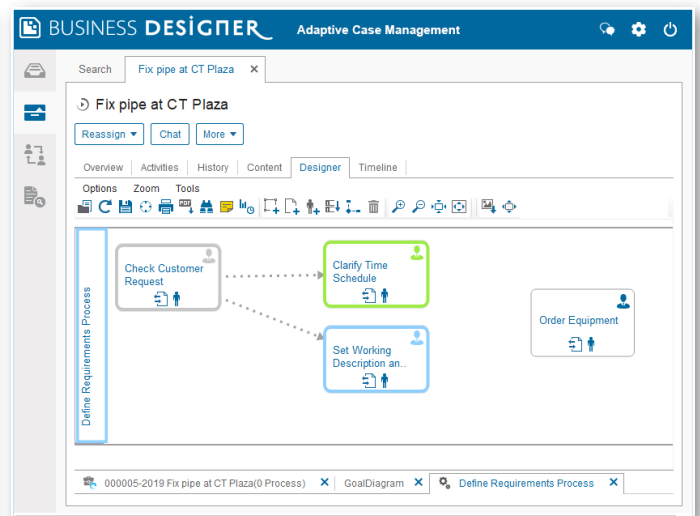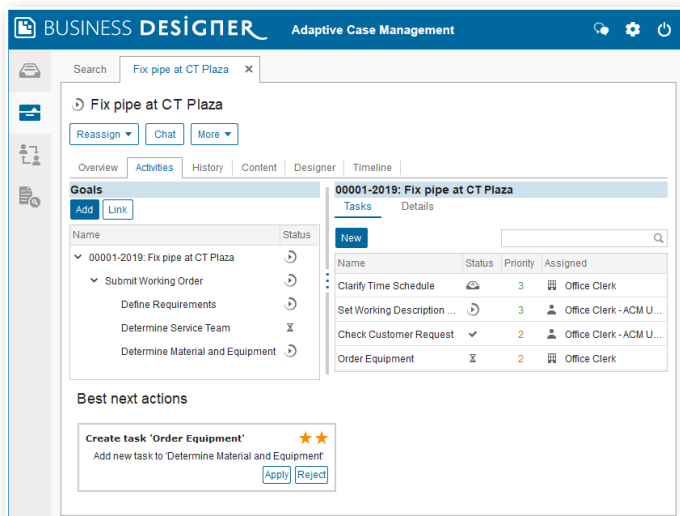
## Product Description

The **Papyrus Business Designer** provides businesses with the necessary means to effectively define and administrate **Adaptive Case Management** applications. **Business analysts** define value streams by means of case templates composed from **Goals** which contain a set of **Task** templates allowing the business clerk to reach the goal in an optimal way for a specific situation. Tasks can be constrained by **natural language rules** to guarantee **compliance** with business regulations and laws. Additionally, business **process fragments** can be defined with the integrated Papyrus Process Designer enabling hybrid approaches where traditional processes are combined with ad hoc user-trained actions. Tasks are assigned to participants and linked with business data and documents (inbound and outbound). All data that are needed by business clerks to complete their work in a seamless working environment are integrated via **Papyrus Adapters**.

**Papyrus Business Designer** leverages the Adaptive Case Management Framework Solution delivered as standard framework with the Papyrus WebRepository.

## Functions

- Value Stream definitions for any type of industry domain
- Customer Cases composed from Goals – Tasks – Sub-processes
- Business Rules in natural language
- Learning from users with patented user-trained Agent

*Business takes ownership for user-trained business process definitions*

## Process Definitions

- Integrated Papyrus Process Designer
- Define Task dependencies
- Pre-constraints and post-constraints using natural language rules
- Define ad hoc Task Templates

## User Trained Processes

- The patented business intelligence component "User Trained Agent" UTA is an integral system component
- Business Designer users are empowered to continuously extend the UTA's knowledge base during daily case work ("training by doing")
- Ad hoc actions and their underlying business data patterns are stored in the knowledge base and used for action proposals (best next actions) to other business users in similar data constellations
- Users can accept or reject proposals which further increase the UTA's knowledge base
- AI facilitates immediate knowledge sharing between users, departments and locations

## Data Integration

- Define SOA-based data interfaces
- Configure Service Tasks for automatic data execution
- Integrate with databases (Oracle, DB/2, MS-SQL, ODBC)
- Integrate with 3rd party applications like SAP, SalesForce, etc.
- Business application integration, legacy system and storage integration with the wide range of Papyrus Adapters and Typemanager interfaces
- Online channels/portals - Web Services, SOAP, HTTPs, Social, Mobile-REST
- Email/messaging – SMTP, POP3, SMS
- Mainframe - JES 2/3 & CICS
- Java, .Net, MQ-Series, FILE, XML, FAX, VOIP, SNMP, LDAP, CMIS
- Comprehensive document and object support - MS Office, SMS, chat, wiki pages, HTML, XML, PDF, audio, video, CAD/CAM, X-ray, photos, etc.
- Seamless integration to Papyrus WebArchive or any other third-party vendor archive
- Integrated security with authentication, authorization, blockchain, auditing, encryption, HTTPS
- Digital signature PKI support

## True Omni-Channel Capabilities

- Conversations across channels, devices (Desktop, Browser, Mobile) cross channels, devices, enterprises and time zones
- Same ACM case immediately executable with the standard Papyrus Mobile App available in Google Play and Apple AppStore – no Mobile development necessary
- Omni-channel operations process incoming and outgoing communications on multiple touch-points, enabling customers to begin an interaction on one channel and finish it on another

## Change Management

- Define Releases and delivery dates
- Assign Case definitions to a certain release
- Define release processes (private and group development, hotfixes)

## Reports

- Logging of all actions in the system and processes
- Reports freely definable
- Reports as AFP, PDF or responsive HTML documents and/or as real-time reporting

## Key Benefits

- Enterprise-level business software solution for consolidation, integration and automation of all customer collaboration processes
- Focus is on customer-centric and dynamic, context-specific communication, combining traditional BPM and agile case management for advanced flexibility and adaptability
- Businesses can build value streams in an agile way to reflect new requirements coming from their clients and customers
- Speed, integration and efficiency in defining customer cases, contracts and claims is achieved with the consolidate Papyrus platform approach
- Increased efficiency due to independence from IT life-cycles and development skills
    - Business users can handle content from paper, email or fax
    - Invoices and bills, delivery notes, work confirmations, orders, credit notes

- Business rules in natural language guarantee process consistency
- Compliance for required data verifications and response guidance
- Fast implementation of processes and change management lowers cost of ownership
- ROI potential within months
- Processes offer agility and flexibility
    - Same process independent of input channel type
    - Applicable for central and decentralized organizations
- High level of personalization based on document or content types
- No database administrator required
- Platform and input channel independence
- Multi-platform scalability
- Provides Machine Learning based user-trained training with supervised decision processes to efficiently handle AI-assisted individual customer case operations in the same platform
- Adaptive Case Management puts the business perspective at the center of processes and empowers business users by utilizing their judgment and expertise to adapt the process to the concrete business situation and create exactly what they need, when they need it – to achieve the best possible process outcomes

## Prerequisites

- Windows Vista/7/8/10/Server 2008/ Server 2012/Server 2016
- Standard office PC
- Min. display resolution of 1280x1024
- Papyrus WebRepository

## Order Information

*Papyrus Business Designer* for Windows
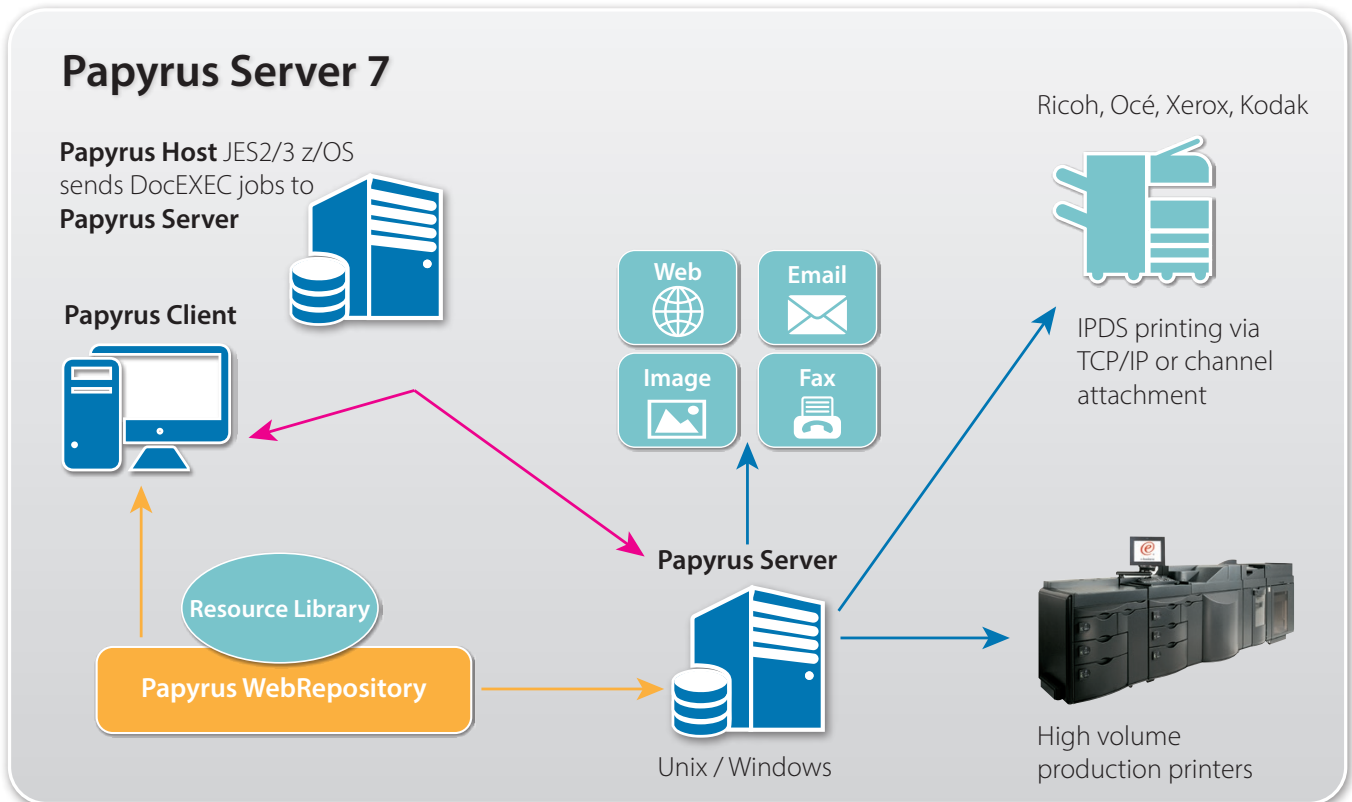
## Training

ISIS Papyrus offers in-house workshops and standard courses for user training.

## Maintenance

The Terms and Conditions for ISIS Papyrus Software Products apply. Free service period is 6 months after installation. A maintenance agreement is offered optionally for updates and product support.

# Papyrus Server 7

*The most flexible and fastest AFP Print Server*



**Papyrus Server 7**

**Papyrus Host** JES2/3 z/OS sends DocEXEC jobs to **Papyrus Server**

**Papyrus Client**

Web

Email

Image

Fax

**Papyrus Server**

**Resource Library**

**Papyrus WebRepository**

Unix / Windows

Ricoh, Océ, Xerox, Kodak

IPDS printing via TCP/IP or channel attachment

High volume production printers

## Product Description

*Papyrus Server* is binary compatible to the print functions of IBM PSF for z/OS. It is not only a data stream converter, but can manage the complete print job including all the resources such as fonts, forms, embedded images and logos. *Papyrus Server* provides resource management, distributed printing to IPDS, IJPDS, PCL Xerox Metacode, Postscript, fax, email, PDF and TIFF as well as archive interfaces.

*Papyrus Server* supports the full range of IBM AFP formatting functions for text and graphics, which includes PAGEDEF and FORMDEF. It also provides all functions of the *Papyrus DocEXEC* formatting engine as an optionally integrated component.

*Papyrus Server* modules can be configured using the *Papyrus WebControl* functions of *Papyrus WebRepository* for integrated graphical print and job management.

*Papyrus Server* connects host systems via TCP/IP or SNA LU6.2 with applications under Windows, AIX and Solaris. It can receive output and AFP resources from JES2/3 or send output to the host over the network. Optionally, output data in ASCII or Xerox Metacode can be routed directly to the printer port. On other platforms, jobs can be received either via file transfer protocols or via TCP/IP.

## PageEXEC AFP Print Support

*Papyrus Server* offers printing of all AFP applications in the network.

- Printing of AFPDS and PAGEDEF applications
- Uses AFP forms, fonts and logos in 240, 300 or 600 dpi and supports outline fonts
- With the help of *Papyrus Host* the output of *Papyrus Server* with all its associated resources can be received by JES2/3 and PSF libraries on z/OS
- IOCA formats are supported
- BCOCA bar codes are emulated with AFP fonts
- Print output from/to page
- *Papyrus DocEXEC* formatting functions are integrated in *Papyrus Server*
- *Papyrus Server* modules can run stand alone or integrated into *Papyrus WebRepository* or *Papyrus WebControl* applications
- Access to version controlled AFP resources in the *Papyrus WebRepository*

## Papyrus Server - IPDS

*Papyrus Server/IPDS* enables the use of IPDS compatible printers at any speed. With this server module, an unlimited number of printers can be controlled. Printers can be channel-attached or connected via TCP/IP.

## Papyrus Server - PCL

*Papyrus Server/PCL* provides support for PCL compatible printers driven at any speed. Print jobs can optionally also be controlled using PJL.

With this server an unlimited number of printers can be controlled. The maximum number of addressable printers in the network is limited only by the operating system. Direct addressing of an unlimited number of printers via TCP/IP is also possible.

## Papyrus Server - Postscript

The *Papyrus Server/Postscript* creates a Postscript file that can be printed on any PS-compatible printer.

## Papyrus Server - IJPDS

*Papyrus Server/IJPDS* supports various Kodak Versamark highlight and full color printers (IJPDS).

## Papyrus Server - Metacode

The *Papyrus Server/Metacode* provides completely seamless conversion of AFP jobs to Xerox Metacode. No resources need to be generated as *Papyrus Server* converts and loads all fonts and forms on-the-fly.

Production printers can be channel-attached or connected via TCP/IP. Xerox output can be routed directly to the printer. Print speed depends on the complexity of the print job and the printer model used.

## Papyrus Server - PDF

*Papyrus Server/PDF* produces PDF documents compliant with PDF Reference Version 1.5 for online viewing or e-delivery.

Supports creation of PDF/A based on PDF 1.7 and compliant with conformance levels PDF/A-1a, PDF/A-1b and PDF/A-2a.
- Supports digital signature
- Support of PDF/UA (ISO 14289)

## Papyrus Server - HTML

*Papyrus Server/HTML* is used to convert AFP documents to HTML. The conversion is compliant with W3C standards and can produce full HTML for web browsers as well as simplified HTML for email clients.

## Papyrus Server - PDF-in

*Papyrus Server/PDF-in* is used to perform conversion of PDF documents to AFP. It provides full control of resolution, resource handling and image representation as well as bookmark conversion and the creation of overlays.

## Papyrus Server - TIFF

The *Papyrus Server/TIFF* creates TIFF G3 or TIFF G4 files for each page of an AFP application with an index or a separate index file.

## Papyrus Server - Fax

The *Papyrus Server/Fax* performs the conversion from AFP to Fax G3 format compliant to ITU-T Recommendation T4. The fax details are extracted from the AFP document and sent to a standard fax modem or ISDN fax service.

## Papyrus Server - E-Mail

The *Papyrus Server/E-Mail* allows you to send different document formats as email attachments via the SMTP protocol to any mail server.

## WebControl Interface

*Papyrus WebControl* optionally offers a graphical user interface for print, job, spool and queue management via any web browser or the *Papyrus Desktop*. This includes user authorization based on roles and privileges for accessing the servers.

## Prerequisites

- z/OS 2.1/2.2/2.3 or
- z/Linux or
- Windows Vista/7/8/10/Server 2008/ Server 2012/Server 2016 or
- AIX 6.1/7.1 or
- HP-UX Itanium 11.31 or
- Solaris V10/V11 or
- Linux (SLES 11/12, RHEL 5/6/7)

# Papyrus WebControl™ 7

**Papyrus WebControl**

Papyrus WebRepository
Papyrus WebArchive

To internet for customer sign-off and distribution

**Papyrus DocEXEC**
For high volume document formatting

Web Browser or **Papyrus Client Papyrus Designer**

**Intranet and Internet via TCP/IP**

**Papyrus Server/ Metacode**

**Papyrus Server/IPDS** or integrated PSF IPDS

**Papyrus Server/ Postscript**

**Papyrus Server/ Fax**

**Papyrus Server/ PCL**

**Archive**

## Product Description

*Papyrus WebControl* offers integrated print, job, spool and queue management across all platforms and multiple output channels.

*Papyrus WebControl* assembles the renowned *ISIS Papyrus* document products into the most complete printer and system independent document production and distribution solution. It is based on the *Papyrus Objects* infrastructure.

*Papyrus WebControl* can be used on Windows, Unix, Linux and z/OS platforms, supports different printer types like IPDS, IJPDS, Xerox Metacode, Postscript and PCL and offers universal interfaces to archive systems.

*Papyrus WebControl* provides the following features:
- A complete network print job management solution for in-house print shops, print service or Direct Mail providers
- A single resource library with platform independent forms and fonts
- Management of the complete life cycle of a high volume production job
- Tools to view, manage and control development, customer sign-off, volume-formatting, print production, distribution and archiving through standard web browsers or *Papyrus Client* and *Papyrus Desktop*
- Server based job control and management

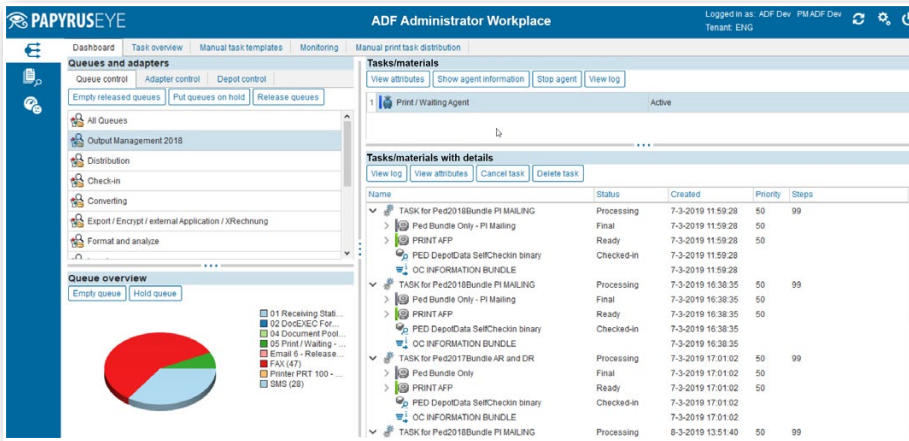*Papyrus WebControl* is built on *Papyrus Objects* written in C++, which provides the perfect tool for cross-platform IT environments.

This web-enabled technology allows you to also use your browser to access *Papyrus Server* via the Intra/Internet. *Papyrus Objects* is the infrastructural component of Papyrus Software offering object management in a workflow sense.

## Prerequisites

- z/OS 2.1/2.2/2.3 or
- Windows Vista/7/8/10/Server 2008/ Server 2012/Server 2016 or
- AIX 6.1/7.1 or
- HP-UX Itanium 11.31 or
- Solaris V10/V11 or
- Linux (SLES 11/12, RHEL 5/6/7)

- TCP/IP
- Printing through a Windows printer driver can be done on any standard network printer

## Job Management

- Control of not-to-print documents, which can also be distributed via CD-ROM/DVD, Fax, e-mail or the Internet
- Manage the complete life cycle of a volume production job
- Create jobs from predefined templates
- Create jobs with multiple steps e.g. DocEXEC formatting – IPDS printing – Archiving
- Job splitting for parallel processing
- Calling third party programs
- Job logging and job recovery

## Spool Management

- Manual and scheduled submission of jobs (local and remote)
- Defining customized queues from templates for various jobs and spools
- User management features allow users and work groups to access selected queues and jobs on one or more servers depending on their role and privileges
- Hold output queues with a simple mouse click
- Reroute output spools to channel attached printers or network printers
- Prioritize spools for faster throughput or split big jobs in smaller units and print them in parallel on several printers
- Drag and drop job control
- Definition of job priorities, e.g. printing large jobs last
- Creation of specific job classes
- User administration and multiuser support
- Remote access to multiple servers from single operator view (*Papyrus Desktop* or browser)
- Reroute jobs to other queues
- Submit print jobs from both local and remote workstations
- Load balancing of printers
- Selection of Best Match job queues

*Spool Management Options:*
Define customized queues for various jobs and various spools. User management capabilities allow the user or a work group to access queues and jobs that run on a server or mainframe. Include platform queues to be shown and handled on the user panel. Prioritize spools for faster throughput. Manage and re-route any printer stream from existing JES or other spooling systems.

## Print Management

- Manage print jobs on all printers with TCP/IP address from any workstation in the network
- Manage *DocEXEC* formatting jobs
- Execute PAGEDEF - Linemode jobs with the help of *PageEXEC*
- Supports the following printers: AFP to PCL, IPDS, IJPDS, Postscript, Xerox Metacode, PDF, Fax, TIFF and GIF
- Direct printing of the following formats: PCL, Postscript, Metacode, IJPDS
- 'Up and Running' operation mode for continuous feeding of all *Papyrus Server* modules

*Print Management Options*
Send *PageEXEC* or *DocEXEC* jobs for document formatting from your clients to *Papyrus Server* modules running on different platforms within your intranet or Internet environment.

## Order Information
*Papyrus WebControl™ 7 for z/OS Unix, z/Linux, HP-UX Itanium, AIX, Solaris, Linux or Windows*

## Training
ISIS Papyrus offers customized in-house workshops as well as standard courses for user training.

## Maintenance
The General Terms and Conditions for Papyrus Software Products apply. The free service period is 6 months from installation. After this period an optional maintenance contract is offered.

PAPYRUS
SOFTWARE

# Papyrus Client/Desktop 7

*Move your business
letters to the web*
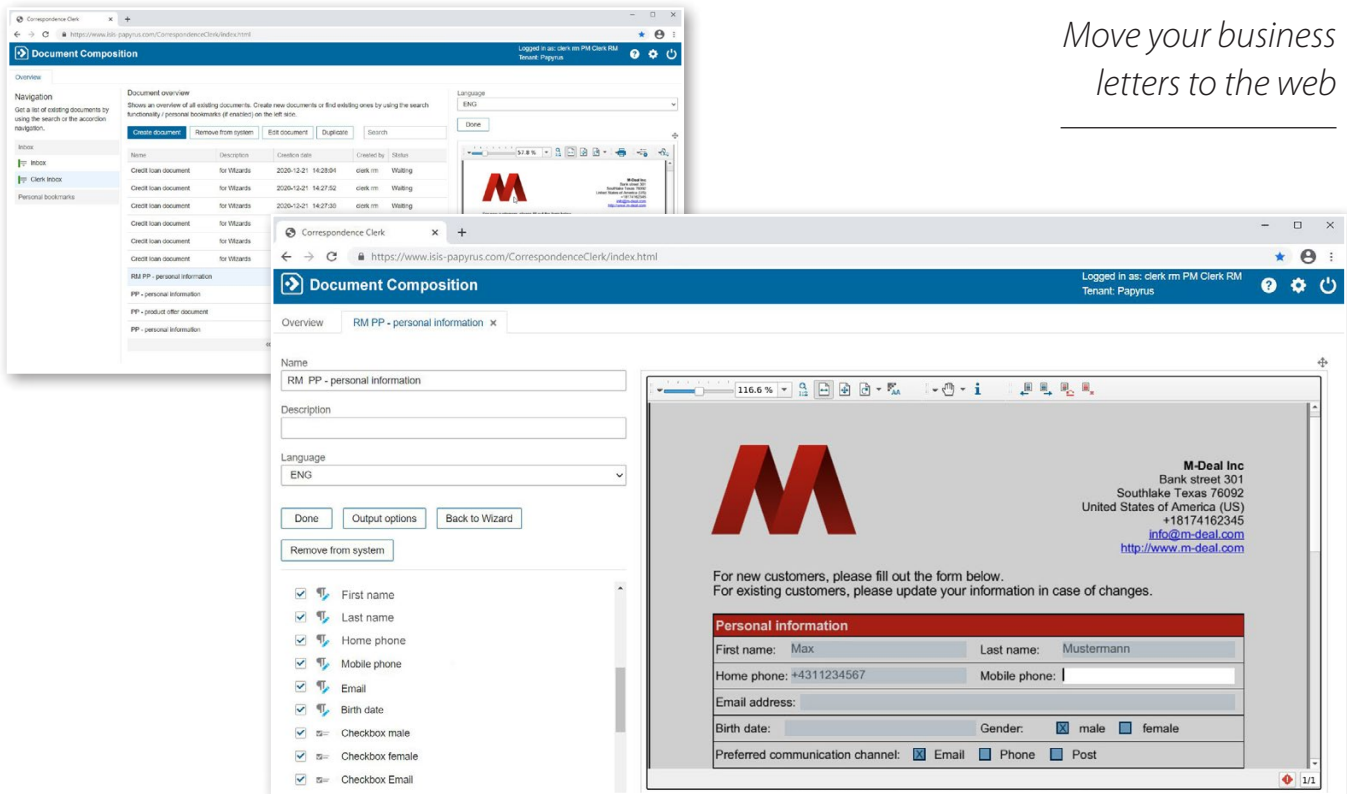
## Product Description

*Papyrus Client* provides business users with an intuitive interface to all Papyrus business applications with features for viewing, editing and composing business documents. Papyrus business user interfaces are based on Papyrus Desktop, Papyrus EYE Widgets, Papyrus WebPortal HTML or Papyrus Enterprise Mobile App technologies following user experience design paradigms in order to provide the most effective user interaction on any device.

Business documents are composed on business user workstations with *Papyrus Client* which supports the full feature set that *Papyrus DocEXEC* provides on server platforms and the mainframe, on premise and in the Cloud. Application integration with Papyrus Business Correspondence, Document Capture and Adaptive Case Management Solutions utilize HTML, REST and database services of server backend systems for a full workflow solution based on *Papyrus WebRepository*.

- Viewing, filling and printing of digital forms on Desktop, Web/HTML or Mobile.
- View AFP-formatted documents including AFP raster, outline and standard true type fonts.
- Interactive formatting of dynamic documents with options for wizard guidance and free text editing.
- Dark processing and interactive formatting of documents in AFP and PDF format directly on the user's workstation.
- Supports document indexing (ACIF TLE index) and full text search functions.
- Print AFP documents directly via Windows print drivers to any desktop printer.
- Support for PCL3/4/5/6 printing from user workstation.
- Integrated with the Papyrus Business Designer for forms/letter/document and Wizard design
- Uses Papyrus WebRepository application integration.

## Contact

## Functions and Features

- Filling of document fields and forms with optional wizard guidance.
- Papyrus DocEXEC feature set allows for interactive document creation by business users with data input.
- Integrated text editor for fully fledged text processing by business users.
- Support for standard SQL-database interfaces for on-the-fly data queries and updates.
- Seamless integration with any Papyrus business user interface technology (Windows desktop, HTML Web client and Mobile App).
- Papyrus WebRepository application integration provides business event-control. E.g. send documents into department inboxes for viewing, editing and sign-off using Papyrus Client.
- Integration with business applications and archive systems via HTML, REST and database services.
- Viewing and printing of documents and forms in all orientations to local and network attached PCL printers.
- Allows to print entire documents or selected pages.
- Provides document indexing (ACIF TLE index) for metadata and search.
- Supports PDF, HTML, Web and AFP document output formats.
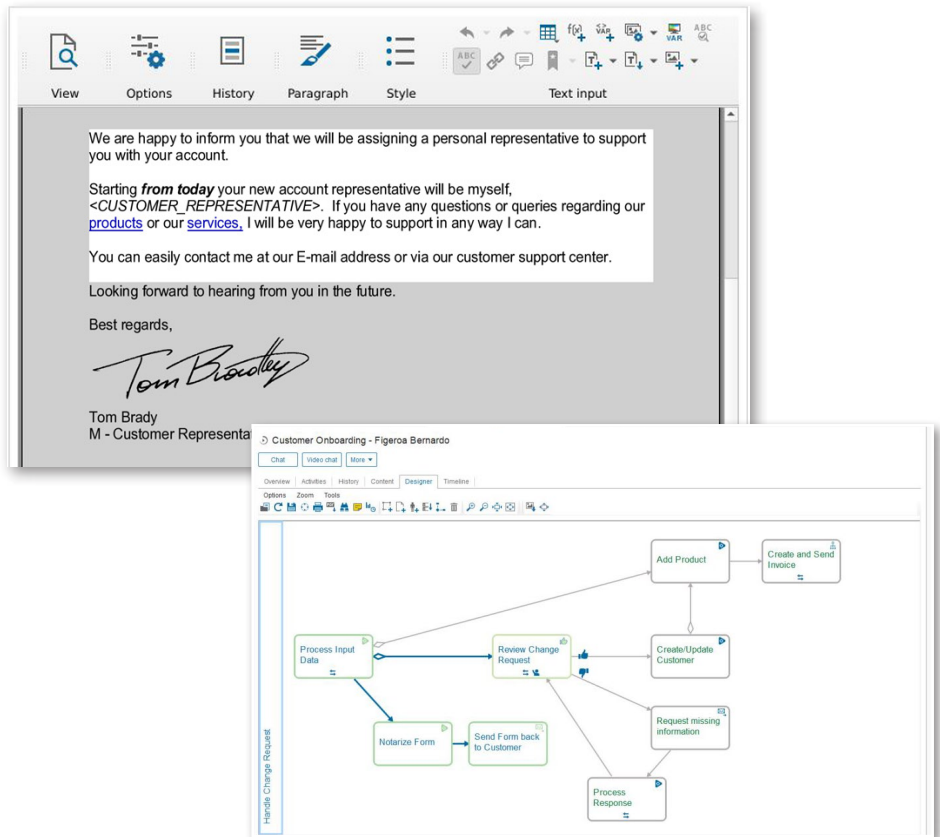
## Papyrus AFP Viewer

The freeware Papyrus AFP Viewer can be used to view, print and annotate AFP files in file systems or on the Web.

- View AFP files generated by Papyrus DocEXEC but also any non-Papyrus products like DCF, ACIF, etc.
- Utilizes original AFP fonts (raster, outline) or true type fonts for AFP document viewing and printing in 240, 300 and 600 dpi.

## Papyrus Desktop

Various Papyrus Desktop technologies provide an easy-to-use business user interface for authorized users to access centrally managed business services like template libraries, print servers, printer queues and archive systems. Papyrus Client can be fully integrated into business applications using Papyrus Desktop, Papyrus EYE Widgets, Papyrus WebPortal/HTML or Papyrus Enterprise Mobile App technologies giving business users like clerks and supervisors fully authenticated application access.

## Benefits

- Runs on-premise (mainframe, UNIX, Windows) or in the Cloud as HTML Web client (no Plugins) or as native Windows desktop application.
- Platform independent document architecture guarantees WYSIWYG output for PDF, AFP, HTML and Web variants.
- Printing on standard network printers.
- Papyrus Business Designer for reusable CI

compliant forms and document definitions by business users without IT involvement leverages operational costs through centrally managed resources.
- Truly digital FormsFill applications without printing.
- Indexed keyword search, full text search.
- Application integration between mainframe, server and workstation platforms with database integration.
- Papyrus WebRepository solutions integration with Business Correspondence, Document Capture and Adaptive Case Management.

## Prerequisites

- Windows Vista/7/8/10/Server 2008/Server 2012/Server 2016.
- Standard Windows workstation with min. display resolution of 1280x1024.
- Papyrus Client/HTML requires a standard Internet Browser supporting WebAssembly (Wasm). No Plugins needed.
- Papyrus Desktop/EYE Widgets requires Papyrus Windows application installed on the user workstation.
- The document formatting functions of Papyrus DocEXEC are included in the standard product.
- Papyrus Business Designer for document, forms and wizard resource definitions managed through Papyrus WebRepository.
- Server formatting and print processing can be done using Papyrus Server on mainframe, Unix and Windows.
- Printing to any network printer through a Windows printer driver.

# PAPYRUS SOFTWARE

# Papyrus WebArchive™ 7

**Papyrus WebArchive 7**

**Distributed, Scalable, Cross-Platform**

WebArchive centralized access point

Intranet/ Internet

Depot
Depot
Depot
Depot
Depot
Depot
Depot

Depot
Depot
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Depot

Depot
Depot

**Immediate Access (SSD)**

**Short-term Archive (HDD)**

**Long-term Archive (Tape)**

## Product Description

*Papyrus WebArchive* opens the world of large-scale distribution of dynamically generated, personalized customer documents to the corporate intranet. Organizations that regularly send documents electronically or by mail to a large number of customers now have the possibility with *Papyrus WebArchive* to not only make these documents accessible company-wide at any time, but also to make them available for customers via the Internet.

The *Papyrus WebArchive* builds on the mature technologies of *Papyrus Objects* and *Papyrus Server* to archive AFP files in virtually any other format. Viewing or printing via browsers can be in PDF, GIF, TIFF or even AFP format if *Papyrus Client AFP Viewer Plug-In* or the free *Papyrus AFP Viewer* is used.

*Papyrus WebArchive* can either be integrated into existing web services or used in combination with a *Papyrus WebRepository* installation as a stand-alone archiving solution on all supported z/OS, Unix, Linux and Windows platforms.

*Papyrus WebArchive* offers a standardized XML interface and provides bidirectional connections via CMIS or SOAP Adapters to any third-party archiving system.

## Contact

## Applications

Many customer oriented businesses can benefit from using Papyrus WebArchive without having to change their existing document and print applications!

### Finance and Banks

The Papyrus WebArchive can be used to distribute customer documents and account statements to branch servers or to make them available as a central service.

### Insurance companies

Papyrus WebArchive allows the creation of customer specific folders, which are easily accessible for both internal and external employees. Centrally created documents can be stored there as well as those created by field staff. In this way, every customer inquiry can be answered immediately and on the basis of complete information. All customer documents can also be directly printed, faxed or sent by e-mail from the Papyrus WebArchive.

### Telecommunication and Utility Companies

With WebArchive, billing information is available not only to the company's employees, but also to the customers themselves via the Internet at any time. Links make it possible to integrate the documents directly into other applications.

### Industry and Engineering Companies

Every document, from technical drawings and parts catalogs to billing information, can be offered for internal and worldwide access via the WebArchive.

### Benefits

- Provides users with access to all inbound and outbound documents and related business processes
- Alternative or value added services
- No duplicate document development
- Constant quality for print and web presentation
- Reduced print and mail costs
- Link to other web-based services
- No conversion effort or quality loss when viewing in AFP format
- AFP to PDF conversion
- AFP to GIF conversion
- AFP to TIFF conversion optional

## Functions

*Papyrus WebArchive* enables the use of mainframe and client/server mass produced documents in TCP/IP based intranets or the Internet. Supported input formats are AFP print files, line-mode data with Xerox DJDE or AFP controls, SAP formats and all other input formats supported by *Papyrus DocEXEC.*

The Papyrus Host connected to the z/OS JES2/3 print spool enables transparent transmission of documents to *Papyrus WebArchive*. The processing of the data file can be done on the mainframe or on a server as required.

Documents can be stored either in an external database or in a Depot Node of the *WebRepository*. For external long-term archiving any storage solution can be used. A folder structure can be automatically defined based on index data from a wide variety of applications. This enables, among other things, the use of digitally signed documents within Adaptive Case Management. Alternatively, an index and search database can be filled with values from the document index and automatically processed.

Employees as well as external users can directly access the *WebArchive* via the *WebRepository's* built-in portal engine using customizable *Papyrus EYE* applications. In addition, *Papyrus Adapters* (e.g. SOAP) and/or *Type Managers* can be used to integrate the *WebArchive* into other web-based solutions. After successful login, users are shown a list of the documents in their personal folder or the result of a database query. All listed documents can be opened for viewing as AFP, PDF, GIF or TIFF.

Documents in AFP format can be opened and viewed using *Papyrus AFP Viewer*, the *Papyrus Mobile App* or an *AFP plug-in* for the browser. All of them are available as free downloads. AFP documents can also be compressed and encrypted so that an additional password is required for the actual viewing.

Using the AFP plug-in for the web browser, not only provides perfect AFP printing, but also allows for an additional level of security through the optional encryption.

Users can access their documents, preview them, and release them as part of a quality assurance process. Authorized users can also add information (so called stickers) to documents to highlight or comment on certain information on a document page (for example, adding a phone call memo in a customer care solution). This information is stored in the *WebArchive* together with the document for later retrieval.

The *Papyrus WebArchive* can be accessed via the following Papyrus applications: Windows application, web-interface and the Papyrus Mobile App for Android and iOS.

## Prerequisites

- TCP/IP infrastructure and standard HTTP services for *Papyrus WebPortal*
- Optionally SQL database (Oracle, DB/2, MS SQL Server)
- Required hardware configuration primarily depends on number of users

- z/OS 2.1/2.2/2.3 or
- Windows Vista/7/8/10/Server 2008/ Server 2012/Server 2016 or
- AIX 6.1/7.1 or
- HP-UX Itanium 11.31 or
- Solaris V10/V11 or
- Linux (SLES 11/12, RHEL 5/6/7)

## Order Information

*Papyrus WebArchive*
for z/OS native, z/OS Unix, z/Linux, HP-UX Itanium, AIX, Solaris, Linux, Windows

## Optional

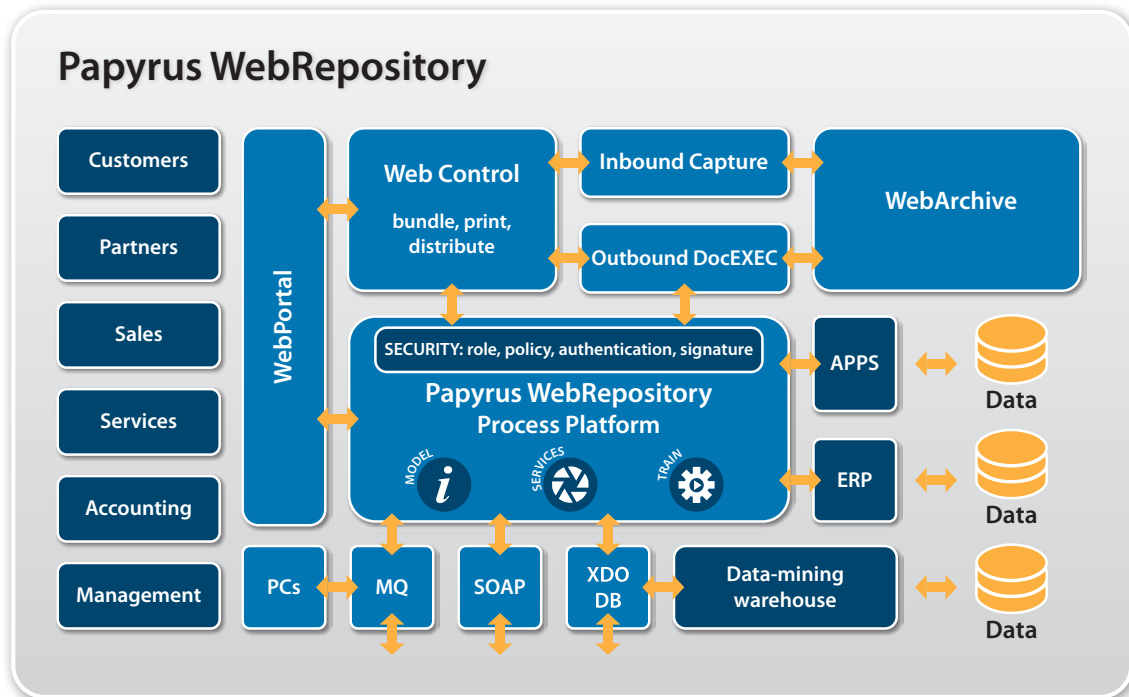*Papyrus WebRepository* for portal capabilities

## Training

ISIS Papyrus offers customized in-house workshops as well as standard courses for user training.

## Maintenance

The General Terms and Conditions for Papyrus Software Products apply. The free service period is 6 months from installation. After this period an optional maintenance contract is offered.

*WebArchive* is a worldwide trademark of ISIS Papyrus Software AG.

# PAPYRUS SOFTWARE

# Papyrus WebRepository 7

## Papyrus WebRepository

Customers

Partners

Sales

Services

Accounting

Management

WebPortal

Web Control
bundle, print, distribute

Inbound Capture

Outbound DocEXEC

WebArchive

SECURITY: role, policy, authentication, signature

Papyrus WebRepository
Process Platform

MODEL *i*

SERVICES

TRAIN

APPS

ERP

Data

Data

PCs

MQ

SOAP

XDO DB

Data-mining warehouse

Data

## Product Description

The **Papyrus Business Application Platform**, which is based on the Papyrus Objects Meta System, enables you to define, deploy and continuously expand comprehensive business applications. These applications can integrate every aspect of your business – including internal and external communications, interfacing with external data sources, data processing and storage, as well as business process management and workflow execution. Applications are designed with object-oriented models using business classes and templates in a visual development environment. They are managed with version control and a central user access and authorization concept that provides different clients/tenants with customized access.

**Papyrus WebRepository** is the core component of the Papyrus Objects architecture. It enables the control of all applications and document types across all platforms and output channels, for online and offline users. It provides full control for change management, security and versioning. **Papyrus Desktop** enables administrators and application developers to configure the system, define customized templates and build custom business applications. Business users are provided with GUIs based on **Papyrus EYE Widgets** or **Papyrus Desktop/HTML** for

all business applications/solutions. These can be customized to meet specific requirements. The **Papyrus Enterprise Mobile App** provides the same functionality for iOS and Android.

**Papyrus WebRepository** provides the following key features:
- Centralized installation and administration of Papyrus Objects Domains with an unlimited number of nodes
- Management of all document resources (text blocks, forms, fonts, logos,...) with version/variant control and validation
- Integrated print management/job control
- Sophisticated user authorization concept based on roles, privileges and policies
- Change management and version control from development, to testing and production
- Load balancing for high volume applications
- Integrated backup and hot standby solutions for high availability setups
- Security and auditing for the complete document life cycle
- Proxy management between nodes to guarantee offline capabilities
- Enterprise application integration with Papyrus Adapters and Type Managers
- BPM Workflow Designer following the BPMN standard
- UML-compliant class design

## Papyrus Frameworks and Solutions

*Papyrus WebRepository* comes with a set of predefined solution frameworks which serve as a basis for customized application design. These out of the box solutions include:

- *Business Correspondence:* designed to manage all aspects of creating personalized customer correspondence, regardless of input and output channels
- *Business Document Capture:* designed for acquiring all types of inbound communication, automatically classifying it, extracting and validating data for indexing, as well as categorizing and distributing it for further processing using ACM
- *Automated Document Factory:* designed for intelligent end-to-end automation of print and mail-shop production processes, including formatting, printing, post-processing, email, fax and web delivery as well as archiving
- *Print and E-Delivery:* designed for outbound channel handling and tracking of printed and electronically delivered documents
- *Adaptive Case Management (ACM):* integrated, goal-oriented business process management beyond the rigidity of process management and the simplicity of case management
- *Reporting:* designed for generating reports and business user dashboards based on a variety of data sources
- *WebControl:* designed for print, job, spool and queue management across all platforms and output channels
- *WebArchive:* a fully integrated short-, mid- and long-term archiving solution with resource management, version control and interfaces to third party archive systems

## Functional Description

The *Papyrus WebRepository* is unique as developers can specify any class definition required and build their own application frameworks which are configured and deployed by administrators using templates. By defining the state machine of an object, its behavior within complex business processes can be easily defined, executed and monitored in the Papyrus Objects environment. Objects are stored in the Object Space (a Papyrus provided object relational database) in a proprietary format and are usually just a few kilobytes in size. This reduces memory, disk space and bandwidth requirements. The integrated Papyrus Query Language is a versatile query and scripting language which gives developers and administrators full control of the Object Space.

Any kind of resource can be stored in a binary attribute, enabling the management of fonts, forms, logos, document definitions, PQL scripts, executables, XML, HTML and virtually any other format. By enabling relationships between object types powerful object structures can be defined as template trees for use by administrators for efficient application deployments.

*Papyrus WebRepository* is accessible via fat clients *(Papyrus Desktop)* as well as via thin clients, i.e. web browsers connected to a *Papyrus WebPortal*. The *Papyrus Enterprise Mobile App*, which is available for iOS and Android, also connects to a Papyrus WebPortal via a REST interface and thus enables the seamless integration of mobile devices. The freely configurable GUIs are an integral part of the application design which guarantees identical results for any client.

## Productivity Features

- A central facility to store class and template definitions
- Management of any type of object and definition of its features
- Version control for classes, templates and instances with validity dates
- Life cycle management for objects with development status
- User Trained Agent - an integrated business intelligence component for enterprise wide knowledge sharing
- Import/Export of object frameworks
- Enterprise Application Integration with Papyrus Adapters for loose coupling based on interfaces like MQ, SOAP, REST and DB Type Managers (Oracle, DB/2, ODBC)
- Integrated Portal for Web and Mobile solutions

## Management Features

- Resource Collection for centralized resource management
- Settings Collection for individual framework configuration
- Single-Sign-On techniques for user authentication using LDAP
- Authorization framework for control of role-based access to objects and methods
- Papyrus Application and Performance Analyzer for tracing and tuning
- Integrated functions for auditing and audit report generation
- Integration with processes and tools like Papyrus DocEXEC, Papyrus Print and Email Servers, Papyrus Capture Recognition Server, etc.

## Papyrus Desktop Features

- GUI for accessing all Object Spaces
- Class and Template editor for defining and modifying objects
- Visual drag & drop application design

## Prerequisites

- z/OS 2.1/2.2/2.3 or
- Windows Vista/7/8/10/Server 2008/ Server 2012/Server 2016 or
- AIX 6.1/7.1 or
- HP-UX Itanium 11.31 or
- Solaris V10/V11 or
- Linux (SLES 11/12, RHEL 5/6/7)

- TCP/IP and UDP for communication between nodes of Papyrus Objects
- High performance storage system for Object Spaces
- Optional: external database (DB/2, Oracle, MS SQL Server) for application integration using Papyrus Type Managers

### Order Information

*Papyrus WebRepository* for z/OS Unix, z/Linux, HP-UX Itanium, AIX, Solaris, Linux or Windows

### Training

ISIS Papyrus offers customized in-house workshops as well as standard courses for user training.

### Maintenance

The General Terms and Conditions for Papyrus Software Products apply. The free service period is 6 months from installation. After this period an optional maintenance contract is offered.

# Papyrus Operations Designer

## Automated Document Factory Administration
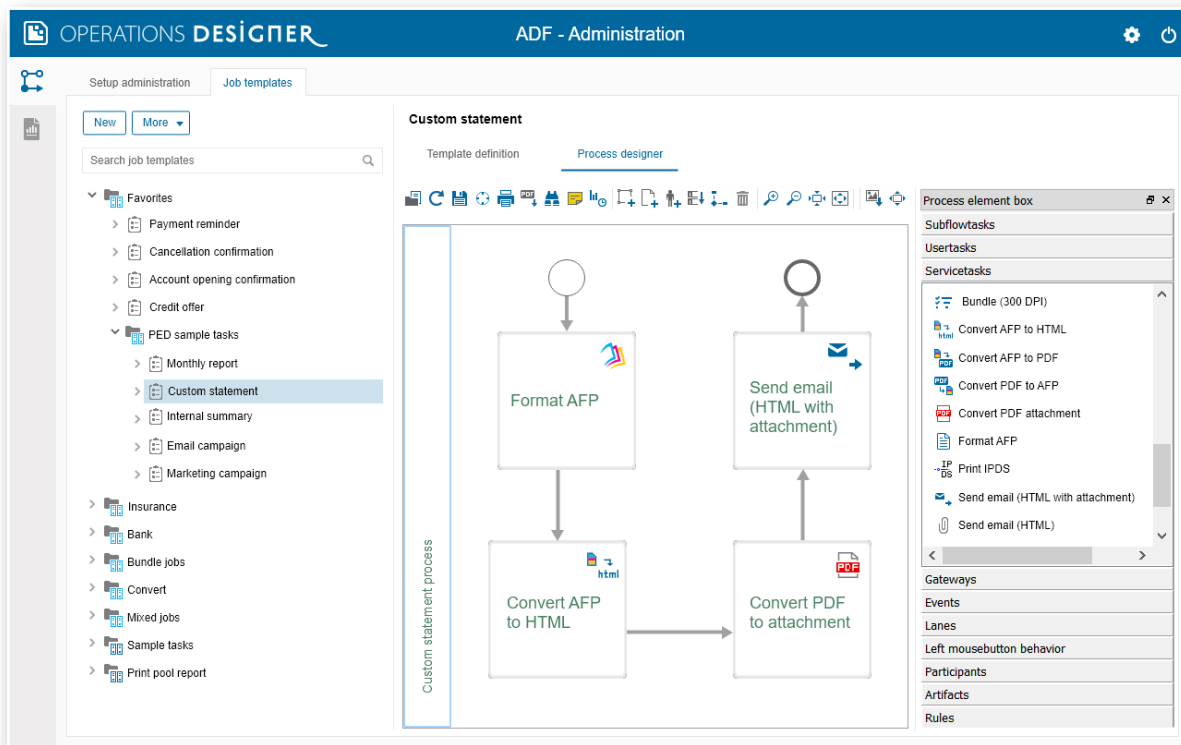


*Production administration takes ownership for print and mail shop production processes*

## Product Description

The **Papyrus Operations Designer** with its **Automated Document Factory administration capabilities** provides businesses with intelligent, end-to-end automation of print and mail shop production processes. **Production administrators** take control of production process templates for complete centralized lifecycle management - across all platforms - of all document resources from data, formatting, printing and post-processing to multichannel delivery to archiving. **Multiple environments** (e.g. test and production) can be configured: Papyrus Adapters receive data from external systems and handle their distribution into the workflow queues with the necessary routing rules. **Report templates** are defined with the integrated **Papyrus Reporting Solution** including the selection of metadata that shall be queried from the production systems.

**Papyrus Operations Designer** leverages the Automated Document Factory Framework Solution delivered as standard framework with the Papyrus WebRepository.

## Administration Principles

- Job templates are assembled from a library of task and step components to define the production workflow.
- Papyrus Process Designer can be used to extend process definition possibilities in a visual way.
- All document types from batch/online/on-demand production, letters from front office users and any other PDF or AFP document are collected in the central document pool.
- Bundling, sorting, merging and channel matched re-composition of digital documents at time of delivery is supported.
- Each document page can be augmented with additional information, such as a barcode, page numbering, a message on available white space and the creation of document copies.
- Documents are seamlessly tracked from creation over centralized or decentralized printing to final enveloping in the letter shop.
- Multi-channel output is achieved through the major document architectures such as AFP and PDF.
- Documents are transformed with Papyrus Server into the target channels at distribution time for utmost channel independence.

## Contact

## Functions

- Create and edit job templates
- Define tasks and steps
- Add, delete, modify queue, tool, adapter templates
- Configure production and test systems
- Add queues, tools, adapters to ADF setups
- Add and administrate queues, tools, adapters to ADF setups
- Configure load balancing for different ADF environments
- Define reports

## Supported Output Channels

- Print to IPDS, PCL, Postscript, Metacode, IJPDS, TIFF.
- Edelivery by email (HTML, Text and/or PDF attachment), Webpage, Mobile devices or SMS.
- The unique document design approach allows companies to have a single template for all output channels. One central document building block library and reusing elements across print, PDF and HTML guarantees efficiency and corporate design.

## Change Management

- Manage the full life cycle of production processes and templates
- Define change management process: private and group development
- Deactivate or restore process definitions to last productive version
- Manage document resources and their life cycle with "valid from - to"

## Integration

- Business application integration, legacy systems and data integration with the wide range of Papyrus Adapters and Typemanager interfaces
- Comprehensive document and object support - MS Office, SMS, chat, wiki pages, HTML, XML, PDF, audio, video, CAD/CAM, photos, etc.
- Seamless integration to Papyrus WebArchive or any other third-party vendor archive
- Integrated security with authentication, authorization, blockchain, auditing, encryption, HTTPS
- Digital signature PKI support

## Report Definitions

- Define meta data and queries
- Reports available on dashboards for real-time reporting
- Reports freely definable as AFP, PDF or responsive HTML documents

## Key Benefits

- Enterprise-level business software solution for consolidation, integration and automation of all production activities
- Increased efficiency due to independence from IT life-cycles and development skills
- Fast implementation of processes and change management lowers total cost of ownership
- ROI potential within months
- No database administrator required
- Platform and output-channel independence
- Multi-platform scalability

## Prerequisites

- Windows Vista/7/8/10/Server 2008/Server 2012/Server 2016
- Standard office PC
- Min. display resolution of 1280x1024
- Papyrus WebRepository
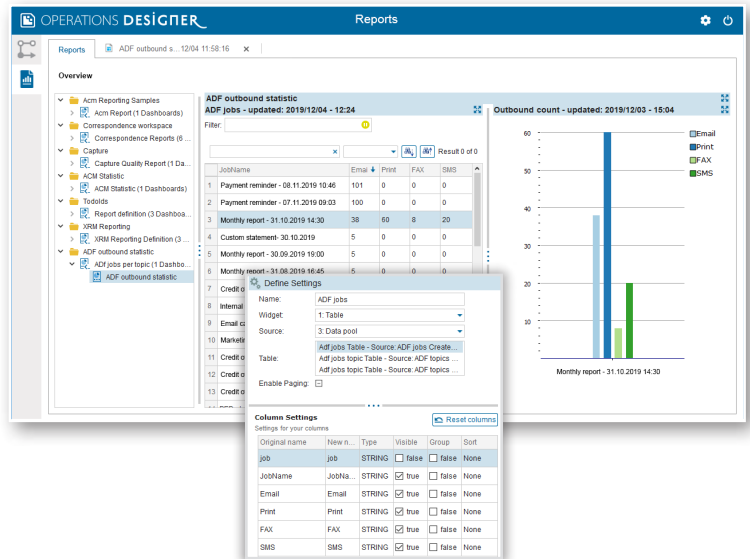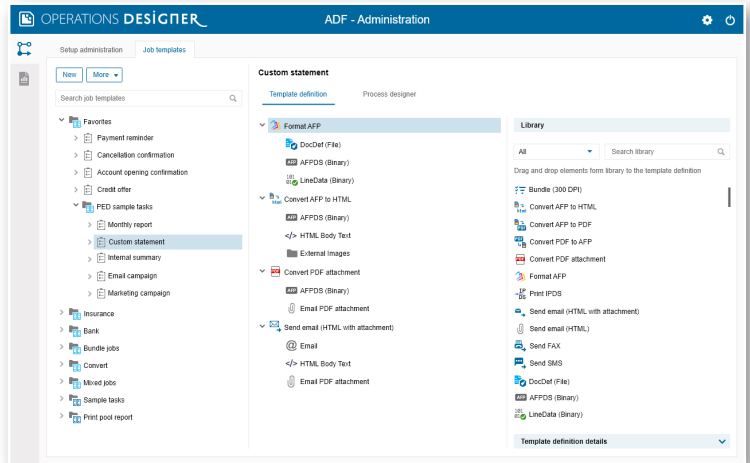




## Order Information

*Papyrus Operations Designer* for Windows

## Training

ISIS Papyrus offers in-house workshops and standard courses for user training.

## Maintenance

The Terms and Conditions for ISIS Papyrus Software Products apply. Free service period is 6 months after installation. A maintenance agreement is offered optionally for updates and product support.