Service Oriented Architecture in Action: SOA Leverages Papyrus as Central Document Factory

Papyrus Adapters deliver SOA on Windows, UNIX and z/OS for interoperability with third party applications and legacy infrastructures

SOA is not merely a promise but rather a practical strategy available today to enable organizations to integrate with any third-party application or even with custom legacy business applications. This way, the usage of SOA becomes a benefit across the organization by integrating with a central content management system.

Taking an interoperable approach – beyond mere integration – to deliver specific business value with SOA, customer-focused organizations can now use data from legacy business applications for personalized business communications that transform transactions into 1:1 interactions with customers.

With Papyrus changes in the business correspondence require no changes in third party or legacy applications because the platform's own metadata repository manages access to business content including the change management and rollout.

Integration can be so simple.

The essence of SOA is standardization facilitating loose application coupling. The complexity of legacy applications is hidden behind the SOA interface, and its definitions can be reused for other interfaces like WebServices, with the added operational benefit of considerably reduced IT costs.

The Papyrus Platform offers a SOAP and REST adapter, allowing flexible coupling between the business application data and the document management system:

- With the Papyrus SOAP Adapter, SOAP messages can be fully and transparently generated while executing business rules.
- WebServices have become the standard technology for SOA integration utilizing REST/JSON interfaces which use the Papyrus REST Adapter.
- Alternatively, communication can also be established with JAVA or .NET applications in a transparent way.

While a SOA interface must be capable to transport complex XML or JSON data structures, the SOAP Adapter is configured via the WebServices Definition Language (WSDL), Papyrus can receive any data formats also using e.g. MQ Series to integrate with the Papyrus internally used data structures. Because neither SOAP nor REST/JSON or MQ Series require Java or .NET programming, dependencies on compilers and libraries are eliminated to fully embrace the power of loosely coupled systems.

Another advantage of the Papyrus Adapters is that services, including the function execution and the data, can become generally available for use by different applications and platforms. Linking of applications with hard coded APIs is obsolete and a high degree of reusability and flexibility is achieved.

Extended flexibility and maintenance

The Papyrus SOAP and REST Adapter configuration does not influence the definition of the adapter itself, so business applications can change over time and benefit from a stable and consistent interface delivering the following key benefits:

- Common, reusable interfaces for all operating systems
- Maintenance of interface definitions by application administrators
- Standardized interface to trigger document processes
- Interface definition independent from document data content

Application Use Case: Central Document Factory

For improving business applications like customer care, contract management, insurance policy management, claims management, contract management, account opening, loan and mortgage servicing, or simply serial letter mailings, Papyrus has successfully established a central service for document generation and management utilized by many finance and insurance organizations.

With a focus on data access, control and process management, Papyrus simplifies the integration of content and document management at every step of the process, from document creation to Omni-channel distribution processing to inbound mail capture and response generation.



The SOAP and REST interfaces can receive document requests from any application, select the right document template and content stored in the Repository, execute business rules to determine how the document will be created, handled and delivered:

- Receive business data
- Generate document with unique ID
- Return document for previewing in PDF, etc.
- Trigger central post processing
- Select output channels for print and e-delivery (e-mail, Web, Social media, chat, SMS, FAX)

Typical application integration use cases:

- Request from the leading business application a list of existing Papyrus document templates for selection by business users.
- Return a list of Papyrus services like document preview or print to authorized applications.
- Trigger any of these published Papyrus services and send the results to the calling application.

- Papyrus requests from other applications additionally needed data during the document process, without complex JAVA programming or BPEL/SOA orchestration.
- Document classification and data extraction of incoming documents using OCR and intelligent data extraction algorithms. Extracted data are returned to initiate a business process.

This streamlined interoperability level enables the definition of new documents in Papyrus without programming effort: Just define the needed data fields via the used SOA interface and deliver the ready formatted document type to any output channel.

Papyrus is the central hub for inbound and outbound business document processing for all your customer communication. Defined business compliance rules apply to meet security requirements enabling every authorized application of your organization to start a document process, send documents, preview documents for sign-off and search documents in an archive.