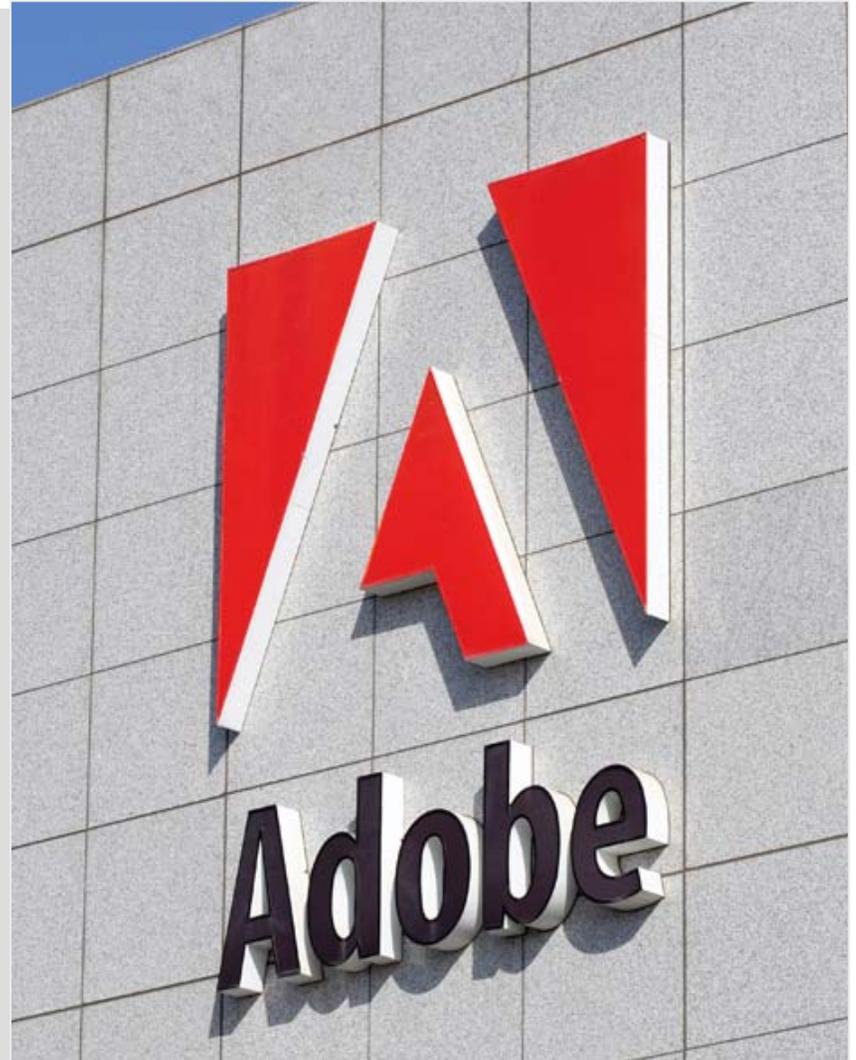# Role of Documents within a SOA/POA Architecture

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Overview

- Document Challenges

- Re-inventing Document Centric Processes

- Document Services Tiers

- Defining Document Services

- Conclusion

Document Challenges

- ## Security and privacy even outside the firewall

  - How can you protect confidential information ?

  - How can you ensure confidence in receipt ?

- ## Improved user adoption

  - How do people interact with structured documents ?

  - How can you address their expectations for the quality of delivery ?

- ## Compliance with regulations

  - How can you comply with document formats ? E.g. PDF/A for archiving

  - How can you adhere to formal processes ? E.g. Insurance claims, financial statements

- ## Seamless integration of information

  - How to make appropriate information in documents accessible to other applications?

  - How to make it easier to integrate data into documents ?

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Re-inventing Document Centric Processes: 3 Tiers

Service Oriented Architecture

Process Oriented Architecture

Document Services

- Model for architecting document-centric processes into SOA into 3 distinct Tiers

- Open, standards-based approach to developing applications that utilize documents as the interface

- Allows IT to add or eliminate services to meet changing technical requirements or business needs.

Service Oriented Tier

- The SOA tier builds applications as services. SOA can be defined using three different views or elements that are required:

- **Applications:** The developer breaks down underlying artifacts and improves the aspect orientation of discreet units of application or business logic.

- **External interfaces:** This developer exposes both configuration interfaces and activity interfaces.

- **Transport:** The developer enables SOA by providing transports to the collection of services within composite applications.

Process Oriented Tier

- The process oriented tier gets applications oriented around business processes or workflow so that services can be integrated into applications.

- **Intra-application workflows:** Developers combine the services interfaces of different applications, essentially exposing and serializing APIs to create new functionality or new transaction types that persist across several applications or infrastructure layers.

- **External workflows:** Developers can externalize business processes and workflows to interface to a set of pre-existing applications.

- **Human-centric workflows:** Developers can provide interfaces for people to access the various functions. This access can be granted based on the roles of the different actors that need to request, submit, review, or approve the things that cannot be automated.

Document Services Tiers

- **Document services:** Developers can deploy document services on the same layer as other services and therefore can be easily combined with other applications that require access to the API.

- **Intelligent documents:** Developers can dynamically assemble intelligent documents at runtime. Intelligent documents are actually secure, dynamic digital containers for delivering and executing document services. The documents integrate XML content and high-fidelity presentation in PDF or Flash with business logic.

- **Universal clients:** Users interact with the documents through universal clients. Examples of universal clients include standard web browsers, Adobe Reader or Adobe Flash Player to enable people to view and engage with interactive, quality digital documents anywhere at any time.

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Defining Document Services

Generation
- Transform
- Scan
- OCR
- Print

Collaboration
- Annotate
- Review
- Approve
- Revise

Security & Control
- Certify
- Protect
- Control
- Redline

Process Management
- Create Form
- Extract Data
- Delegate
- Barcode

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Tier Interactions

Applications

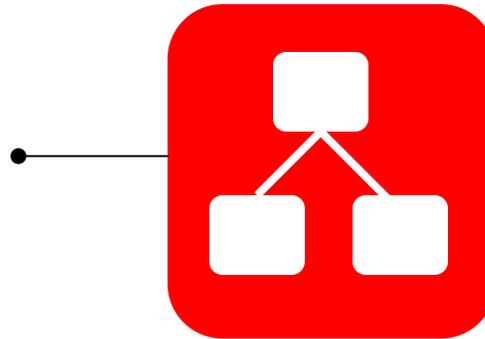Inter-Application
Workflow
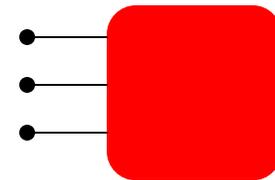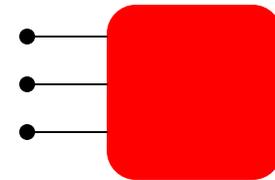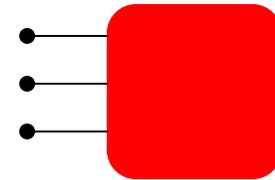
Document Services

Conclusion

- Document services can be integrated into SOAs as an interface, to align with business logic, and to be orchestrated into complex business workflows.

- Architecture allows dynamic customized documents that can be generated on demand and delivered instantly in a secure manner.

- Fundamentally changes the way organizations structure their business processes. Allows new business models and products to be supported.

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