

Leveraging OCS and BPEL for seamless document management

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Agenda

- About AKT America, Inc.
- Business Requirement – Functional overview
- Solution using Oracle SOA/BPEL
- Brief Introduction to BPEL
- OCS Web Service APIs
- Integrating Oracle BOM with OCS
- Q&A

About AKT America, Inc.

- Manufacturer of systems used in LCD production
- Operations in US, Europe, and Far-East
- Engineering-intensive with outsourced manufacturing operations
- Key Enterprise Applications:
 - Oracle E-Business Suite
 - Oracle Content Services

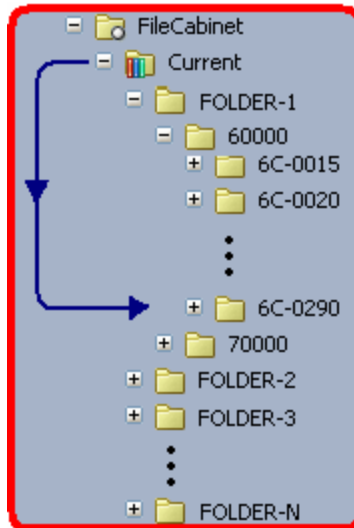
Business Requirement

- Automate document management workflow
- Archive older document versions
- Provide Suppliers with latest version of drawings

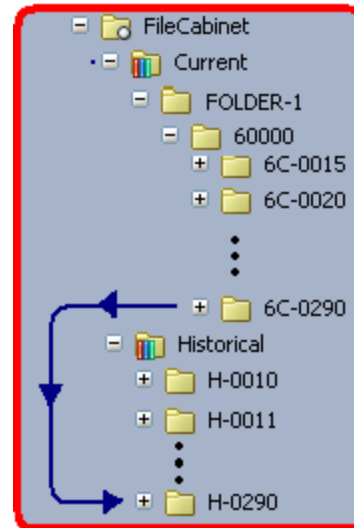
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Business Requirement

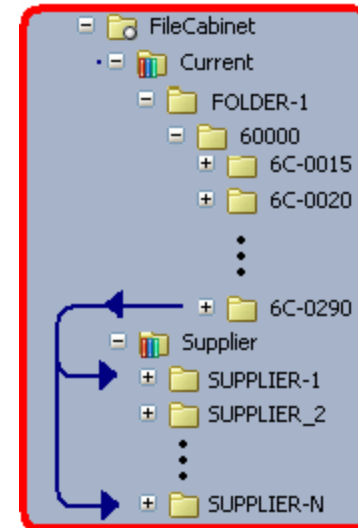
Re-Position



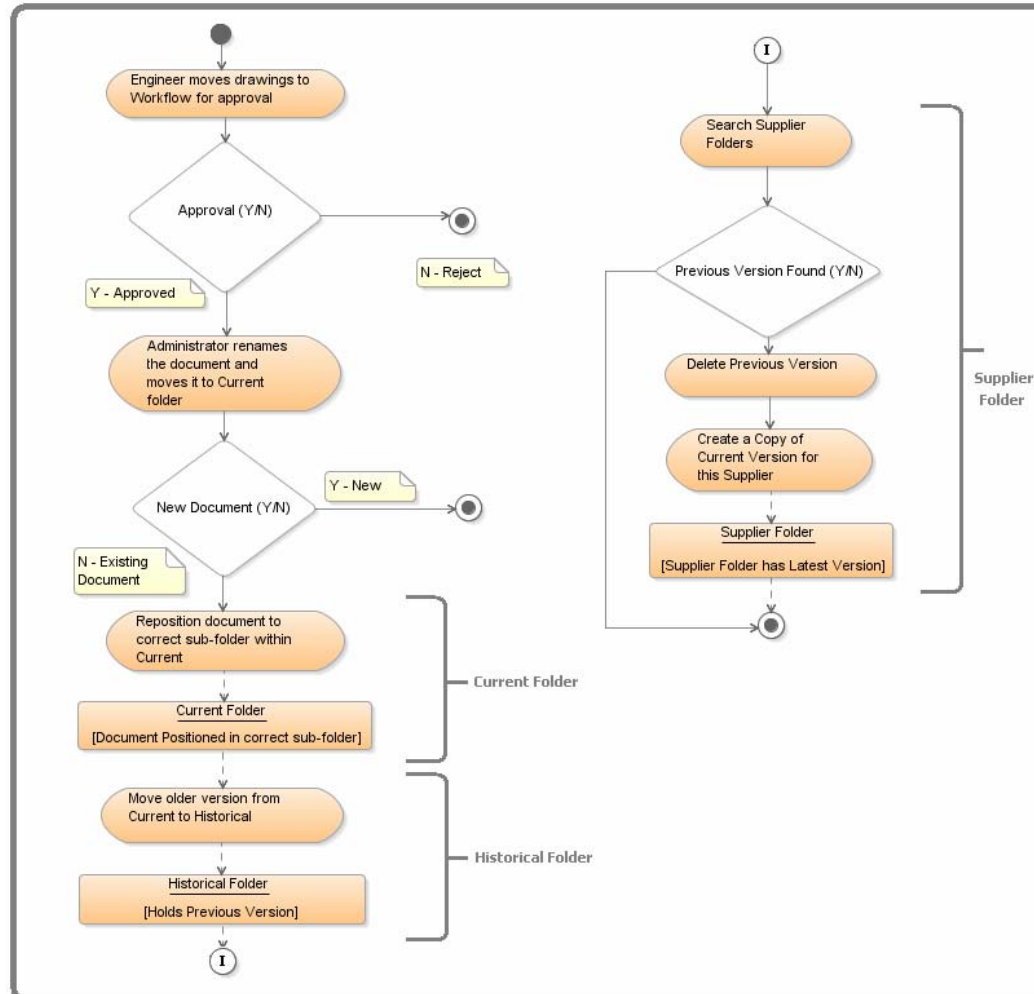
Archive



Supplier



Document Management Workflow



Solution using Oracle SOA/BPEL

- OCS-AQ integration
- AQ Adapter in BPEL listens to AQ
- Instantiates BPEL process
- BPEL Process interacts with ContentDB through OCS Web Services

Brief Introduction to BPEL

- XML based Orchestration Language
- Standards based loosely-coupled integration
- BPEL PM - Component of SOA Suite
- Design BPEL processes using JDeveloper
- Deploy processes to BPEL PM

BPEL Terminologies

- Partner-Links - WebService interaction point
- WSDL file - WebService specifications
- Adapters - Facilitate interaction with external entities
 - DB Adapter
 - AQ Adapter
 - EBS Adapter – Business Events, Concurrent Programs
 - Other Third-Party adapters for specific applications

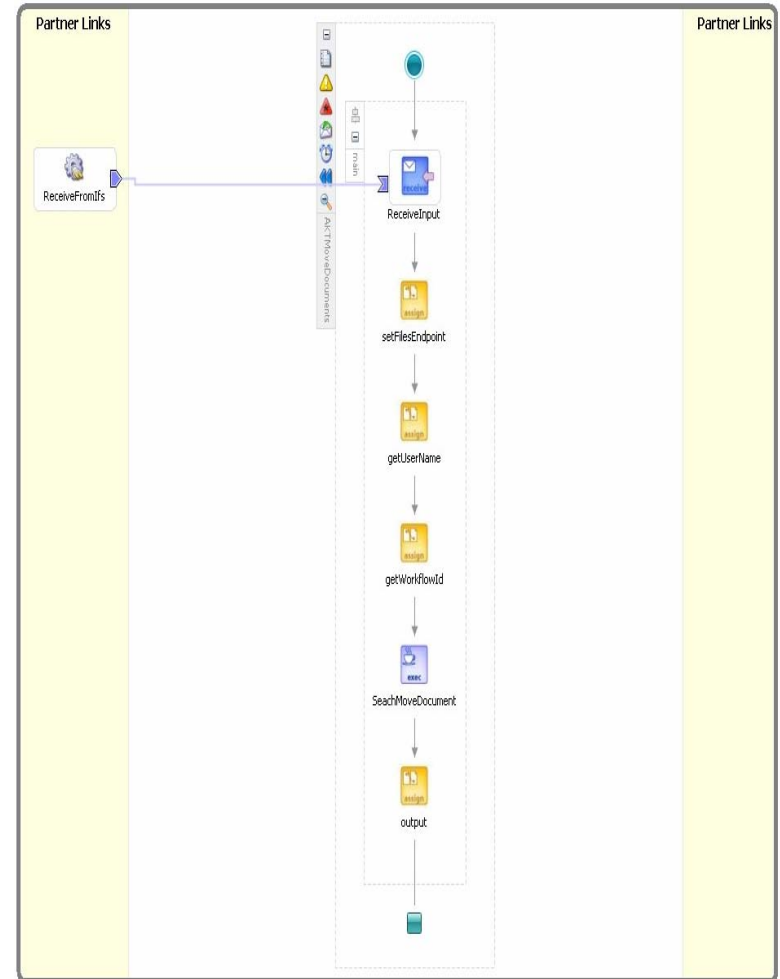
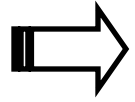
BPEL Process

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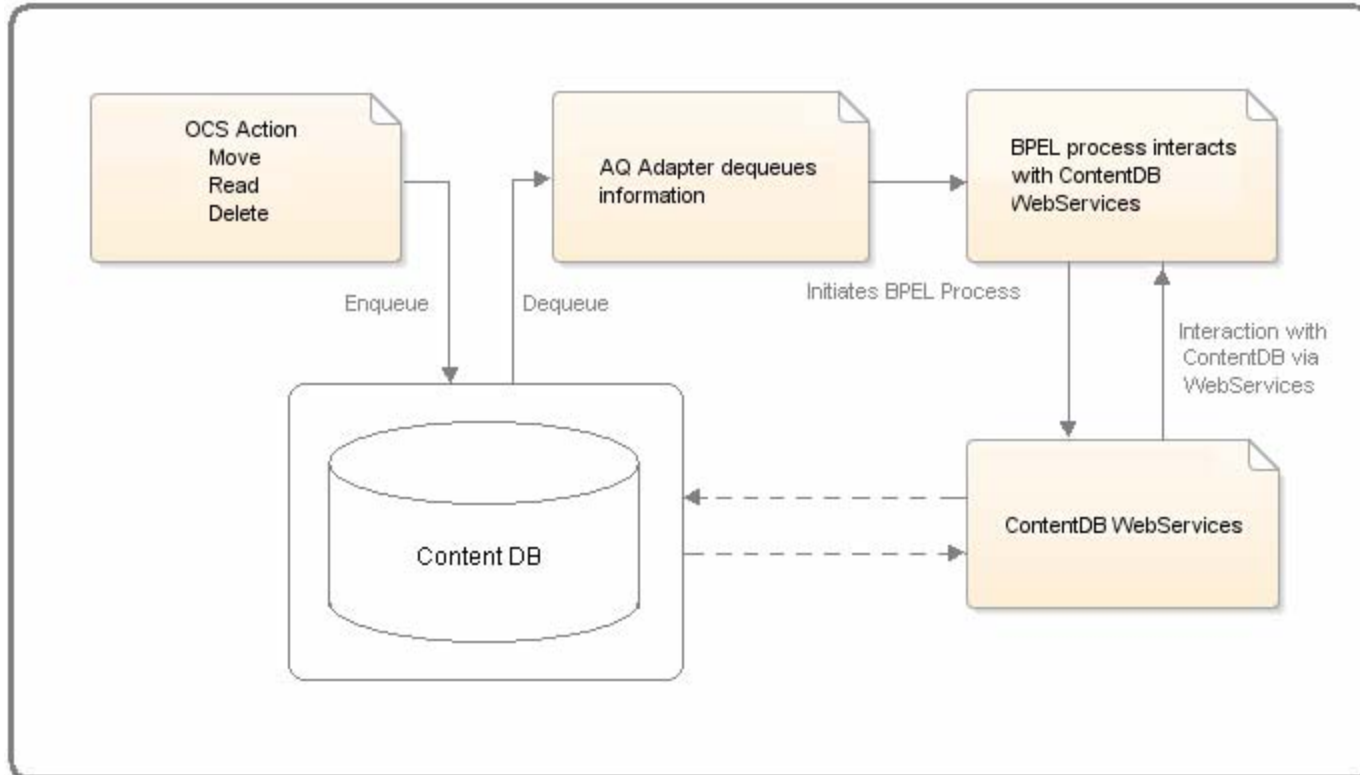
12 <partnerLinks>
13   <partnerLink myRole="Dequeue_role" name="ReceiveFromIfs" partnerRole="Dequ
14 </partnerLinks><!-- -----
15 <variables>
16   <variable name="ReceiveInputVariable" messageType="ns1:IFSQUEUEMESSAGE_msg
17   <variable name="fileseendpoint" type="ns3:string"/>
18   <variable name="connectasuser" type="ns3:string"/>
19   <variable name="workflowid" type="ns3:string"/>
20   <variable name="filename" type="ns3:string"/>
21   <variable name="outputinfo" type="ns3:string"/>
22 </variables><!-- -----
23 <sequence name="main">
24   <receive name="ReceiveInput" partnerLink="ReceiveFromIfs" portType="ns1:De
25   <assign name="setFileEndpoint">
26     <copy>
27       <from expression="'http://nu.us.amat.com:7778/content!'">
28       <to variable="fileseendpoint"/>
29     </copy>
30   </assign>
31   <assign name="getUserName">
32     <copy>
33       <from variable="ReceiveInputVariable" part="IFSQUEUEMESSAGE" query="/n
34       <to variable="connectasuser"/>
35     </copy>
36   </assign>
37   <assign name="getWorkflowId">
38     <copy>
39       <from variable="ReceiveInputVariable" part="IFSQUEUEMESSAGE" query="/n
40       <to variable="workflowid"/>
41     </copy>

```

Underlying
XML



Technical Architecture



OCS Web Service APIs

- File/Folder operations exposed via manager interfaces
- Sample Manager Interfaces
 - CommonManager
 - FileManager
 - LockManager
 - TrashManager ...

Integrating Oracle BOM with OCS

- Objective: Generate Technical Publications for BOM assembly in Oracle and link it with drawings from OCS
- Component drawings/images extracted into separate directory
- Publication Process
 - Explode BOM structure
 - Filter components based on validation rules
 - Search and extract drawings from ContentDB repository
 - Generate HTML Component Catalog

Project Timelines

- Design, Implementation and Testing completed in 2 months
- Project went live in December 07

Thank You!

Ubex Corporation

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Q&A

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