SAP Sourcing / CLM Webcast – Object Migration

March 2012
Agenda

- Overview of Change Management in Sourcing / CLM

- Object Migration
  - Introduction to Object Migration
  - Demo of Object Migration
  - Requirements & Best Practices

- Configuration Workbooks
  - What are Configuration Workbooks?
  - Requirements & Best Practices

- Object Migration vs Configuration Workbooks
  - General Guidelines
Overview of Change Management
Change Management

- There are several ways to manage changes in Sourcing / CLM
  - Object Migration
  - Configuration Workbooks
  - CSV
  - Manual

- Each approach has “best fit” and limitations

- It is system administrator’s responsibility to keep track of changes made in the source system

- It is system administrator’s responsibility to determine what objects need to be migrated and what the dependencies are
Change Management

- Most On-Demand customers have 2 landscapes – Development and Production

- On-Premise customers typically have 3 or more landscapes - Development, QA, and Production. In this case, the QA system can be used to validate the migration packages

- All configurations should be performed in source and then migrated to target system. Migration path in a 3 landscape scenario should be:
  - Development → QA
  - Development → Production

- Common Sourcing objects that are migrated includes:
  - Localized Resources, Value Lists, Extensions, Page Customizations
  - Queries / Reports
  - Scripts, Workflows
  - Doc Types, Phases Configurations
  - Workbench configurations
  - Libraries – Attachment, Information, Questions and Schedule Library
Change Management

Migration Strategy

- Migration strategy should be finalized and communicated with the implementation team prior to the start of realization phase.
- Examples:
  - Page Customizations should be created using configuration workbook and applied to Dev, QA and Prod. Page Customizations should not be created or updated manually in the UI.
  - All custom Script Definition IDs should start with Z-
  - All custom Query Definition IDs should start with Z-
  - All manual configuration changes should be tracked separately and a process should be put in place to ensure the manual steps are applied in the target system.

<table>
<thead>
<tr>
<th>Object Name</th>
<th>OMA</th>
<th>Configuration Workbook</th>
<th>Manual</th>
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</thead>
<tbody>
<tr>
<td>Localized Resource</td>
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<tr>
<td>Value List Type</td>
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<tr>
<td>Value List Value</td>
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<tr>
<td>Extension</td>
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<td>Page Customization</td>
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<td>Report</td>
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<tr>
<td>RFx Question Library</td>
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Object Migration
Introduction to Object Migration

- Object Migration is a technique designed to move objects from one Sourcing landscape to another.

- In simplistic view, the process involves exporting data from source system and import it into the target system.

- Can be used for full import (during production cutover) and for partial imports (ongoing changes).

- Whenever an object is being migrated, ensure any dependent objects already exist in the target system.
Introduction to Object Migration

Object Migration process

Determine what to export in source system

• The first step is to create an object migration "package" in the source system
• A package consists of one or more set of instructions to tell the object migration tool what to export
• To create a package use Single Object or Object List or Dataset options depending on what you are trying to export

Trigger export from source system

• Trigger the export. This step tells the system to export the data as per the instructions in the package defined in the previous step
• System will create an "export.oma" which contains the exported data

Import export file (oma file) to target system

• In the target system go to Setup → System Administration tab → Import
• Import the oma file using the import functionality
• When importing oma file there is no need to select the object type
• Check import results for any errors
Introduction to Object Migration

Export Types

- Single Object
  - Allows selection of a single object for export
  - Useful when migrating a specific item. For example, a new column has been added to an existing query and needs to be migrated

- Object List
  - Allows you to select an entire class of objects to export by selecting from a set of available queries (OML queries)
  - Custom OML Queries could be developed and used with this option
  - Useful in cases where you want to apply your own selection criteria
    - Example: A custom OML query to get all localized resources that are in the “custom” bundle

- Dataset
  - Allows you to select a very broad set of related objects
  - Useful during production cutover but typically not for continued support
Demo of Object Migration
Roles

Who performs the export from Source system?
- System Administrator who performs configurations such as Extensions, Page Customizations, etc.
- Report Developer
- Script or Workflow Developer
- Security team

It is important that the person performing the export have a good understanding of the configuration objects and how they are related

Who performs the import to the Target system?
- In an On-Premise deployment typically the Basis team with the appropriate access
- Note: Import access + access to objects being imported is required for a successful import
Requirements & Best Practices

Requirements

- Object Migration requires that each landscape is running the same version of software.
- Object Migration also relies on supporting objects to be present.
  - Example: When migrating Workflows, all the dependent objects like Value Lists, Phase Configurations, Workflow Definitions, Document Types should be taken into account.
- Ensure the context, cluster and directory configuration ids are the same in both source and target systems.
- There are rare circular dependencies, in these cases rerunning the import usually does the trick.
- Generated OMA file should not be edited.
- Make sure System property `doc.numbering_table.token.deployment` is set uniquely on each landscape so no object collisions occur. Also make sure if production refreshes occur this property is reset.
Best Practices:

- Object Migration should be performed from one direction. For example, once the data is migrated from Development to QA, it should not be migrated back to Dev system.
- There should be only one source system from where the object migration packages are created, typically Development system.
- By default, system creates “export.oma”. It is recommended to change the name to something more meaningful. Example: reports.oma, scripts.oma, etc.

For more details in Object Migration, refer to Software Change Management section of the Solutions Operations Guide. This guide can be found in SMP https://websmp109.sap-ag.de/eso
## Recommended Naming Conventions:

<table>
<thead>
<tr>
<th>Object Name</th>
<th>Recommended Naming Convention</th>
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<tbody>
<tr>
<td>Query Definition</td>
<td>Use Id starting with “CUSTOM-” or “Z-”</td>
</tr>
<tr>
<td>Report</td>
<td>Use Id starting with “CUSTOM-” or “Z-”</td>
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<td>Workflow Definition</td>
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</tr>
<tr>
<td>Localized Resource</td>
<td>Use bundle name “CUSTOM”</td>
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Limitations of Object Migration:

- Not a fully automated way to push changes. Some level of manual effort involved
- Changes imported into the target system cannot be undone
- Unlike SAP ERP, Sourcing does not have extensive built-in versioning control
- Business Documents (transactional data) cannot be migrated using OMA
- In some cases, inactive objects will be migrated and there is no option to filter them out.
  - Example: migration of extensions
  - **Note:** New tool to delete inactive extensions will be available in Sourcing 9.0
Configuration Workbooks
Configuration Workbooks

- Configuration Workbook is a technique that allows creating and managing configurations in Sourcing

- Configuration Workbook contains a Configuration sheet (first sheet of the workbook) that controls the import process. In the Configuration sheet the user can specify what object gets in imported into the system

- Each object is in a separate sheet in the workbook

- A Configuration Workbook can be created from the Enterprise Deployment Workbook available in the Reference Guide
  - To get a copy of the Enterprise Deployment Workbook, click on Reference Guide → Additional Information Section
Configuration Workbooks

Configuration Workbook – process

**Creation of Configuration Workbook**
- Create a new Configuration workbook from the Enterprise Deployment workbook
- On the Configuration sheet, list the objects that you want to manage using the workbook
- Each object listed in the Configuration sheet should have a corresponding sheet in the workbook

**Add Configurations**
- Add your configurations to the workbook
- Make sure tabs are sequenced correctly based on the object dependency
- Determine what tabs to import

**Import**
- In the target system go to Setup → System Administration tab → Import
- Import the Configuration Workbook. Note: There is no need to select the object type
- Check import results for any errors
Configuration Workbooks

Show sample Configuration Workbook
Requirements & Best Practices

- If you are using workbooks to manage configurations for a certain object, continue to use the same process till the end. Try not to make changes directly on the UI.
  - Example: You are using workbooks for Value Lists, continue to use the workbook to add a new Value List or to make updates to existing Value Lists

- It is best to keep a separate configuration workbook for each module
  - Example: Project_Configurations.xls, MA_Configurations.xls, etc.

- Do not mix objects from different classes in the same tab
  - Example: Do not have extensions from Projects and extensions from Master Agreements in the same sheet of the workbook
Requirements & Best Practices

Requirements & Best Practices…contd

- Reimport of workbook is ok in most cases

- Keep the workbooks simple with just the required sheets

- Use Solution Manager or similar tools to keep track of the versions of the workbooks. Also if multiple people are working on the configurations, ensure they are working with the latest version of the workbook
Object Migration Vs Configuration
Workbooks
Object Migration Vs Configuration Workbooks

When to use what? Some general guidelines…

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## Object Migration Vs Configuration Workbooks

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Thank You!