Applies to:
This document applies to Document Info Records in Document Management System module. For more information, visit the ABAP homepage.

Summary
The document would give knowledge about migration of DIR document info records from one system to other system using ALE method. It would also include the possible issues that would come up and solution for the same.

Author: Lalit Mohan Gupta
Company: Capgemini Consulting Pvt Ltd
Created on: 25th October 2010

Author Bio
Lalit Mohan Gupta is working with Capgemini Consulting for around two year now. He is involved in SAP ABAP Implementation projects and Production Support projects.

Nagaraj Kumar Nishtala is working with Capgemini Consulting for around five years now. He is involved in SAP ABAP Implementation, Upgrade and Production Support projects.
# Table of Contents

Introduction to Document Management ............................................................................. 3
  Purpose of DMS .................................................................................................................. 3
  Uses of DMS ..................................................................................................................... 3
  Document Info Record ...................................................................................................... 4
    Document Number .......................................................................................................... 4
    Document Types ............................................................................................................. 4
    Document Parts ............................................................................................................. 4
    Document Version ......................................................................................................... 5
Scenario ............................................................................................................................... 6
ALE Configuration .............................................................................................................. 6
  Configurations on the Source System ............................................................................ 6
  Configurations on the Target System ............................................................................ 13
Steps to Transfer DIR ......................................................................................................... 14
Problem Encountered ........................................................................................................ 16
Reasons & Solution ........................................................................................................... 17
  Maintain RFC Destination in Target System ................................................................. 17
  Define transport of Originals for ALE .......................................................................... 18
Related Content .................................................................................................................. 19
Disclaimer and Liability Notice ........................................................................................ 20
Introduction to Document Management

Purpose of DMS
As the process becomes more complex, the systems for managing the technical documents involved need to be more sophisticated. The many different procedures for describing products (such as design drawings, photographs, and texts) mean that there is a huge increase in digitally stored data.

The quality and availability of documentation is becoming increasingly important. The Document Management System (DMS) in the SAP System offers the following advantages:

- Avoid data redundancy, maintain consistency of data, and minimize the workload involved in entering and updating your data.
- Secure storage of documents
- Easy retrieval of documents.
- Ability to exchange data quickly and securely.
- Reduces access time and workload involved in routine tasks.

Uses of DMS
Document management can be used in various areas of the company like.

- In the design office, document management can be used to manage drawings. All design drawings can be linked to material masters.
- Companies that process complex documents can use document structures to organize these documents. All documents and texts that are logically connected can be grouped together in one document structure.
- A routing contains the sequence of operations for manufacturing a product. Documents can be allocated to the operations in a routing as production resources/tools. These documents may be used, for example, to describe the specifications of a product, or to store inspection requirements.
Document Info Record

Document info record refers to the master record in the SAP system that stores all business information for a document. Document info record contains data such as storage location, status while the original file contains the actual content of the document.

Document info record mainly consists of descriptive data such as description, control data such as status, original application data.

Documents are identified in the SAP system using following document key fields.

Document Number

Document number in short identifies the document as the main part of the key. The document number is an alpha numeric field which can be 25 characters long. The type of number assignment can be either internal assignment number or mixed assignment number. This is configured under document types.

Document Types

Document types are used to categories documents according to their distinguishing features. Document type is an alpha numeric field which can be up to 3 characters. For document type we need to maintain control aspects such as type of number assignment, number range, and storage in knowledge provider.

Document Parts

Document parts further subdivide a document into several documents. Document parts can used to enter different sheets of a complex design for a document number. Document parts can also be used to maintain documents in different languages.
Document Version

Document versions are used to represent the different change or delivery statuses of a document.

Change Document: Initial Screen

Document: 639886
Document Type: 2PK
Document Part: 008
Document version: 03
Scenario
To migrate the Document Info Record including originals from one system to another system. Here in this case the criticality is that the attachments are also to be uploaded in the new system and the best approach to do this would be ALE method.

ALE Configuration
Create RFC destination in the source system. Go to transaction SM59. Input the IP address of the destination system.

Configurations on the Source System

RFC Destination QDF-100

Target System Settings
Load Balancing Status
Load Balancing: Yes

Target Host
System Number

Save to Database as
Save as
Hostname

Gateway Options
Gateway Host
Gateway service

Delete

Configuration of RFC Connections

RFC Connections
- Type
- Comment
- ASAP Connections
- Internal Connections
- Logical Connections
- TCP/IP connections
- Connections via ASAP Driver
Provide the logon details, username and password to access the destination system from source system. Try Remote logon option to check if the connection is established between both the systems.
Create Transactional RFC port using transaction WE21.

**Ports in IDoc processing**

- **Port**: A000002616
  - **Description**: QDF Client 100

**Partner profiles**

- **Partner Type B**: Bank
  - **Partner Type BP**: Benefits provider
  - **Partner Type GP**: Business partner
  - **Partner Type KU**: Customer
  - **Partner Type LI**: Vendor
  - **Partner Type LS**: Logical system

**Message Type DOCMAS**

- **RFC destination**: QDF-100

Add the message type DOCMAS in the outbound parameters using transaction WE20.
Specify Receiver port i.e. transactional RFC destination, message type and basic type. Message type would be DOCMAS for documents and basic type would be DOCMAS05.

<table>
<thead>
<tr>
<th>Partner profiles: Outbound parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Partner No.</strong></td>
</tr>
<tr>
<td><strong>Partner Type</strong></td>
</tr>
<tr>
<td><strong>Partner Role</strong></td>
</tr>
<tr>
<td><strong>Message Type</strong></td>
</tr>
<tr>
<td><strong>Message Code</strong></td>
</tr>
<tr>
<td><strong>Message Function</strong></td>
</tr>
</tbody>
</table>

**Outbound Options**

| Receiver port | AU000002015 |
| Pack. Size | QDF Client 100 |
| Queue Processing | |
| Output Mode | |
|ecided | 1 |
| Collect IDocs | |

**IDOC Type**

| **Basic Type** | DOCMAS05 |
| Extension | Documents with UPS Link |
| View | |

**Cancel Processing After Syntax Error**

**Seg. release in IDoc type**

**Segment Appl. Rel.**
Create a distribution model using transaction BD64. Add the sender system and receiver system and the message type in the model.

Go to Environment and generate partner profiles.

Change Distribution Model
Generate Partner Profile

- Model View: DOCMAS, to:
- Partner System:
- Check Run:

Default Parameters for Partner Profile

- Postprocessing: Authorized Users
  - TY: US, ID: [redacted]

Outb. Parameters

- Version: 3, IDoc record types from Version 4.0 onwards
- Pack. Size: 100 IDocs

Output Mode

- © Transfer IDoc immediately
- ○ Collect IDocs and transfer

Inb. Parameters

- Processing
  - © Trigger immediately
  - ○ Trigger by background program

Log for Partner Profile Generation

| Partner | 
|---------|---
| System 00F-100 | System 00F-100 as a partner type already exists
| System 000-890 | System 000-890 as a partner type already exists

Port

| System 00F-100 | Port A00000020016 with RFC destination 00F-100 already exists

Outb. Parameters

| System 00F-100 | Outbound parameters for message type DOCMAS DOCMAS85 already exist
|                | Outbound parameters for message type SYNCH SYNCHRON already exist

**Migration of DIR (Document Info Record) with Attachments - DMS**

**SAP COMMUNITY NETWORK**

© 2010 SAP AG
Now distribute the Model View so that it is distributed to the destination system.
Configurations on the Target System

Once your distribute the model view, it is distributed in the destination system. Add DOCMAS in the inbound parameters of the source logical system. Use process code as DOCM.
Steps to Transfer DIR

We can use transaction BDA5 to transfer DIR from one system to other. You need to input Document number, document type, document part, document version and logical system where the DIR is to be transferred.
Check in CV03N for DIR in the target system.
Problem Encountered

When we transfer the document info record using IDOC method, we might encounter error while opening the originals. I would give an error saying “Error while checking out:”
Reasons & Solution
When we debug in the destination system while opening the attachment, it can be understood that the error is because the system was not able to find the data for the attachments. This data is contained in the DRAO database table.

Maintain RFC Destination in Target System
You need to maintain an RFC destination in the target system with the credentials of the source system. While transferring of document info record, there should be a two way connection between the systems to exchange data. Also save the default login credentials to be used during data exchange.

RFC Destination QDO - 090

<table>
<thead>
<tr>
<th>Remote Login</th>
<th>Connection Test</th>
<th>Unicode Test</th>
<th>RFC Destination</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection Type</td>
<td>J</td>
<td>ASAP Connection</td>
<td>QDO - 090</td>
<td>Description 1</td>
</tr>
<tr>
<td>Description 2</td>
<td></td>
<td></td>
<td></td>
<td>Description 3</td>
</tr>
</tbody>
</table>

**Administration**

<table>
<thead>
<tr>
<th>Trusted System</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status of Secure Protocol</td>
<td>Inactive</td>
<td>Active</td>
</tr>
</tbody>
</table>

**Logon**

<table>
<thead>
<tr>
<th>Language</th>
<th>EN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client</td>
<td>099</td>
</tr>
<tr>
<td>User</td>
<td>[Redacted]</td>
</tr>
<tr>
<td>PW Status</td>
<td>Saved</td>
</tr>
<tr>
<td>Password</td>
<td>**********</td>
</tr>
</tbody>
</table>
Define transport of Originals for ALE

Display IMG

- Existing BC Sets
- BC Sets for Activity
- Activated BC

Structure
- SAP Customizing Implementation Guide
- Activate Business Functions
- SAP NetWeaver
- Enterprise Structure
- Cross-Application Components
- Notification
- European Monetary Union: Euro
- Document Management
- Control Data
- Define Number Ranges for Document Numbers
- Maintain Screen for Object Link
- Maintain Key Fields
- Define Revision Levels
- Maintain Role
- General Data

Change View "Define document types": Overview

Change View "Define transport of originals for ALE": Overview
Related Content

Document: IDoc Type DOCMAS04

Document does not exist in the target system

For more information, visit the ABAP homepage.
Disclaimer and Liability Notice

This document may discuss sample coding or other information that does not include SAP official interfaces and therefore is not supported by SAP. Changes made based on this information are not supported and can be overwritten during an upgrade.

SAP will not be held liable for any damages caused by using or misusing the information, code or methods suggested in this document, and anyone using these methods does so at his/her own risk.

SAP offers no guarantees and assumes no responsibility or liability of any type with respect to the content of this technical article or code sample, including any liability resulting from incompatibility between the content within this document and the materials and services offered by SAP. You agree that you will not hold, or seek to hold, SAP responsible or liable with respect to the content of this document.