

Newgen

SAP Image Enablement Archive Link Configurator

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Introduction

Newgen's SAP Image Enablement solution provides added benefits to the Operational Heads and Business Users from their respective SAP modules (MM, FI, HR etc.)

The documents pertaining to the business transactions for a particular module can be linked and accessed within the SAP GUI.

At the back-end, all the documents are stored in a secured and scalable document repository OmniDocs™, leveraging no added load on the SAP servers.

Only the authorized users can view the respective documents linked with the SAP business objects or directly from the OmniDocs™ web GUI.

- This solution is SAP BC-AL 6.20 Certified
- Solution allows users to access the documents instantly to view directly from the SAP GUI.
- Greater productivity due to efficient document retrieval and reference
- The solution can be seamlessly extended to non-SAP documents in the enterprise ensuring further efficiency.

Pre-requisites

Before configuring SAP Image Enablement you need to fulfill certain pre-requisites.

Kindly make sure that you have performed following operations

- JCO 2.1 has been downloaded from SAP market place. This is required at the time of installation of SAP image enablement solution.
- OmniDocs 7.0 is installed on JBoss 5.0.1.
- OmniDocs Cabinet has been created.
- Newgen SAP Image Enablement solution has been installed.
- Following transport request(s) have been imported in SAP ERP system -

DAT FILE	CO FILE	REQUEST NO
R900317.NG1	K900317.NG1	NG1K900317
R900539.NG1	K900539.NG1	NG1K900539

These request(s) include :

Function Module	ZNG_CONFIG_ARCHLINK
Function Group	ZNG_CONFIG_ARCHLINK
Package	ZNG_CONFIG_ARCHLINK
Data Element	ZSTATUS2
Dictionary - Structure	ZNG_DOCTYPE1
Dictionary - Structure	ZNG_STATUS1

NOTE : These files are available at location
<INSTALLATION_DRIVE>\Program Files\NewgenSAPAddons\SAP ImageEnablement Solutions\Scripts

- An SAP user has been created for service, which will be used to link the documents archived in OmniDocs with the business transactions available in SAP. The SAP user should have following authorizations.
 - RCF authorization to connect to SAP ERP using JCO library.
 - Execution permission for function group OPTB, function module
 - ARCHIV_CONNECTION_INSERT
 - ARCHIV_ARCHIVCONNECTIONS_FIND
 - ZNG_CONFIG_ARCHLINK
 - Execution permission for tCode OAA3, OAC0, OAC2 & OAC3.

- RFC destination SAPHTTP is working properly.
- OmniDocs users named “ngaluser” and “ngcrepuser” have been created. These users should be a member of supervisor group and should not be used by any other service or for any other operation.
- Required data class has been created for the identified scenario.
- Verify that windows service “NGSAPArchiveLinkService” has been created, after the installation of SAP Image Enablement solution and the status is “automatic”.
- SAP server is up and running and is accessible from the machine, where Configurator would be executed.
- OmniDocs server is up and running.
- Microsoft's dll(s) msucr71.dll & msucp71.dll are present in system32. These dll(s) are dependency for SAP JCO.

Identification of scenario

- It is recommended that there is one OmniDocs data class for each business object in SAP.
- Before proceeding with the configurator, the most important part is to identify the scenario for archive link.
- There can be following scenarios
 - Archival of incoming documents from SAP GUI
 - Archival of outgoing documents from SAP GUI
 - Archival of PrintList from SAP GUI
 - Archival of document(s) in OmniDocs and linking it with SAP business transaction on the basis of SAP transaction key field
 - Archival of document(s) in OmniDocs and linking it with SAP business transaction on the basis of BarCode.
- Archival of incoming documents from SAP GUI
 - UpdateData service should be registered (optional), which is automatically registered by Newgen Archive Link Configurator.
 - UpdateData service index the incoming documents in OmniDocs, coming from SAP.
- Archival of outgoing documents from SAP GUI
 - UpdateData service should be registered (optional), which is automatically registered by Newgen Archive Link Configurator.
 - UpdateData service index the incoming documents in OmniDocs, coming from SAP.
- Archival of document(s) in OmniDocs and linking it with SAP business transaction on the basis of SAP transaction key field
 - ArchiveLink service should be registered (mandatory), which is automatically registered by Newgen Archive Link Configurator.
 - Key field should be identified in OmniDocs dataclass.
 - User will enter the key field in the data class, associated with the image and will set the value of linkWithSAP field as 'N' in OmniDocs client. The ArchiveLink service will create the link with respective SAP document.
- Archival of document(s) in OmniDocs and linking it with SAP business transaction on the basis of BarCode
 - BarCode Link service should be registered (mandatory).
 - User will enter the barcode in SAP for the SAP document in the respective tCode.
 - User will enter the same barcode in OmniDocs data class field - “Barcode”, (associated with the image) and will set the value of LinkBcWithSap field as 'N' in OmniDocs client. The Barcode link service will create the link with respective SAP document.

Creation of Data Class

- The data class can be created from OmniDocs admin web interface.
- The data class should have following mandatory fields, along with the key field for SAP business transaction.

SapDocId	String	200
LinkWithSap	String	2
UpdateSapData	String	2
DocumentType	String	60
SapObject	String	60
ObjectId	String	100
LinkBcWithSap	String	2
Barcode	String	2
<KEY_FIELD>	String	<As_in_SAP>

- For Example, for Vendor Master business object is LFA1. Create VendorDC as

SapDocId	String	200
LinkWithSap	String	2
UpdateSapData	String	2
DocumentType	String	60
SapObject	String	60
ObjectId	String	100
LinkBcWithSap	String	2
Barcode	String	2
VendorCode	String	10

Configure system using Newgen Quick Configurator

Make sure you have restarted your machine after installing Newgen SAP Addons.

1. Click on “Newgen ArchiveLink Configurator”. Read the Prerequisite required. Click on next.

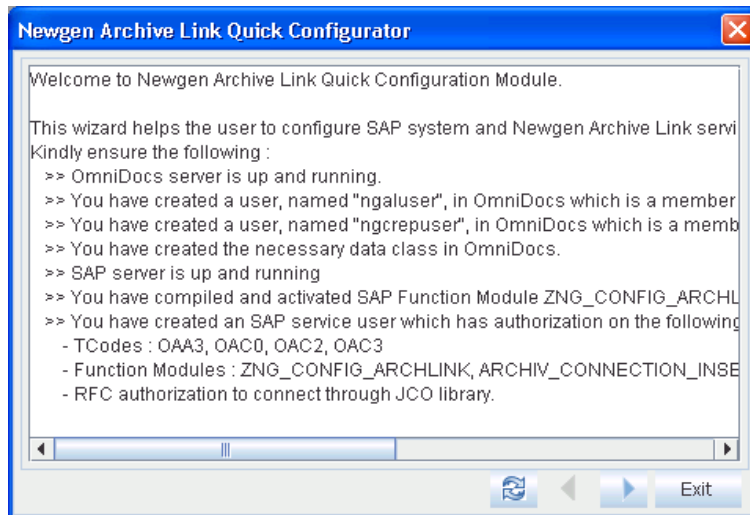


Figure 5.1: Configurator welcome Screen

2. Enter SAP credentials.

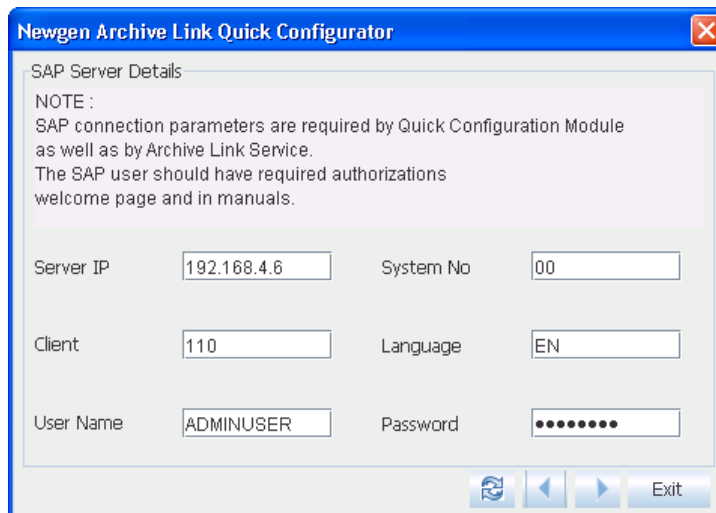
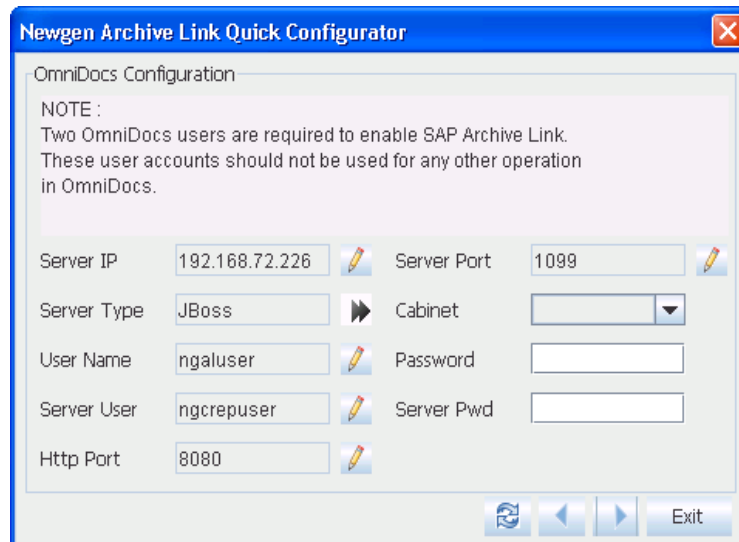


Figure 5.2: Sap Server Detail Screen.

3. Omnidocs Server details will be fetched automatically. If required you can change the same by clicking “Edit” button.





Newgen Archive Link Quick Configurator

OmniDocs Configuration

NOTE :
Two OmniDocs users are required to enable SAP Archive Link.
These user accounts should not be used for any other operation in OmniDocs.

Server IP	192.168.72.226	Server Port	1099
Server Type	JBoss	Cabinet	
User Name	ngaluser	Password	
Server User	ngcrepuser	Server Pwd	
Http Port	8080		

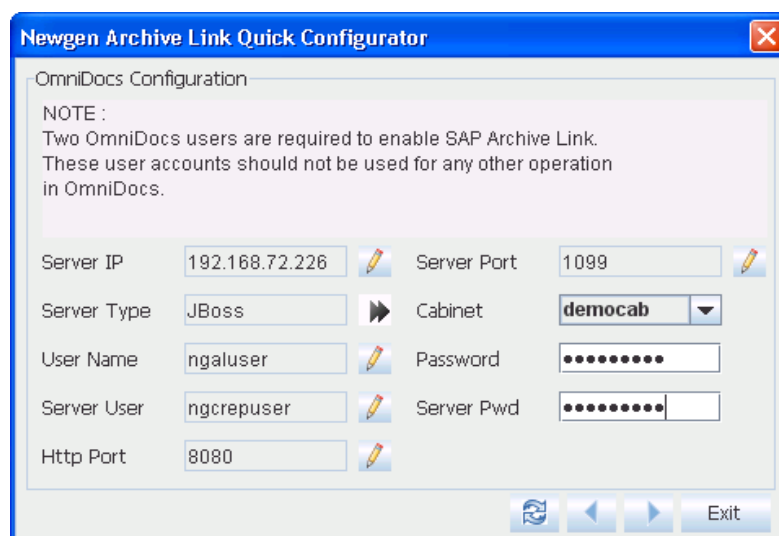
Buttons: Refresh, Previous, Next, Exit

Figure 5.3: OmniDocs Configuration Screen

4. To fetch the Cabinet name. Click on “Fetch Cabinet” Button.



Enter the password of OmniDocs Users. Click Next.



Newgen Archive Link Quick Configurator

OmniDocs Configuration

NOTE :
Two OmniDocs users are required to enable SAP Archive Link.
These user accounts should not be used for any other operation in OmniDocs.

Server IP	192.168.72.226	Server Port	1099
Server Type	JBoss	Cabinet	democab
User Name	ngaluser	Password
Server User	ngcrepuser	Server Pwd
Http Port	8080		

Buttons: Refresh, Previous, Next, Exit

Figure 5.4: OmniDocs Configuration Screen

Use refresh button to load default configuration.

5. Select the Dataclass created in OmniDocs for any bussiness object. Example VendorDC. Select the data class field, containing the key field for SAP transaction (eg. VendorCode).

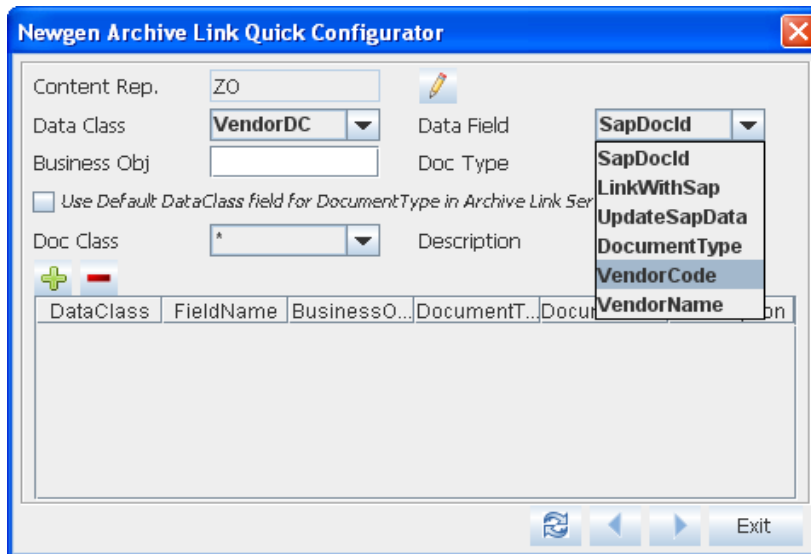


Figure 5.5: Linking of Dataclass field with SAP document Type.

6. Enter SAP Business Object , SAP Document Type, Select Document Class and Enter Description.

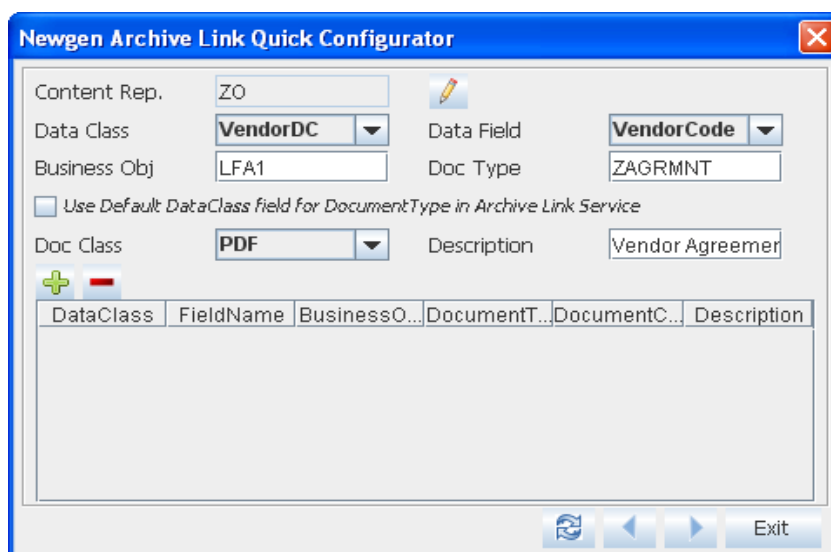


Figure 5.6: Linking of Dataclass field with SAP document Type.

7. Add the Selection by Clicking “Add” button



Press Next.

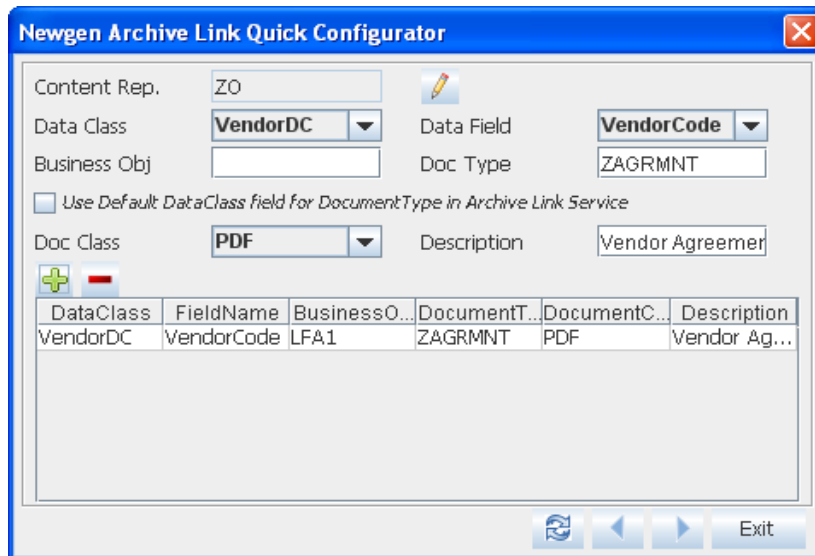


Figure 5.7: Linking of Dataclass field with SAP document Type.

8. Click ok.

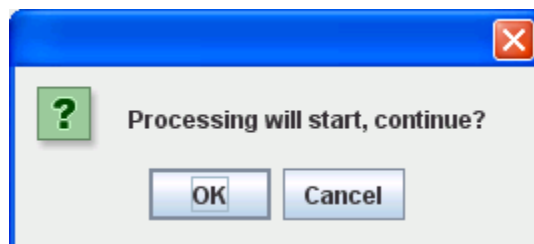


Figure 5.8: Confirmation Screen to start the process.

9. After successful Configuration below message will appear.

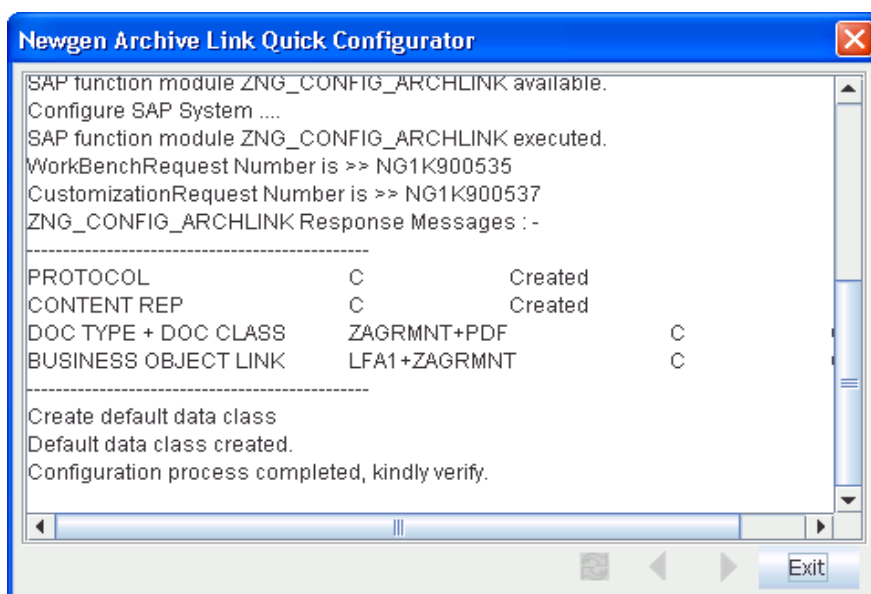


Figure 5.9: Message Screen after successful configuration.

```

Verify OmniDocs Service credentials ....
OmniDocs service credentials verified.
Verify Content Repository credentials ....
Content Repository credentials verified.
Execute required database script ....
Database script executed successfully
Configure Archive Link Service
Archive Link Service configured successfully
Configure repository on OmniDocs Server
Repository configured on OmniDocs Server
Verify SAP credentials ....
SAP credentials verified.
Verify existence of Function Module "ZNG_CONFIG_ARCHLINK" ....
SAP function module ZNG_CONFIG_ARCHLINK available.
Configure SAP System ....
SAP function module ZNG_CONFIG_ARCHLINK executed.
WorkBenchRequest Number is >> NG1K900535
CustomizationRequest Number is >> NG1K900537
ZNG_CONFIG_ARCHLINK Response Messages :-

-----
PROTOCOL C          Created
CONTENT REP          C          Created
DOC TYPE + DOC CLASS ZAGRMNT+PDF C          Created
BUSINESS OBJECT LINK LFA1+ZAGRMNT C          Created
-----

Create default data class
Default data class created.
Configuration process completed, kindly verify.

```

Figure 5.10: Message logs after successful configuration.

Restart OmniDocs Server(Jboss-5.0.1) and all services (eg. Wrapper , SMS) after successful configuration as above.

In services.msc, restart NGSAPArchiveLinkService as indicated in below figure.

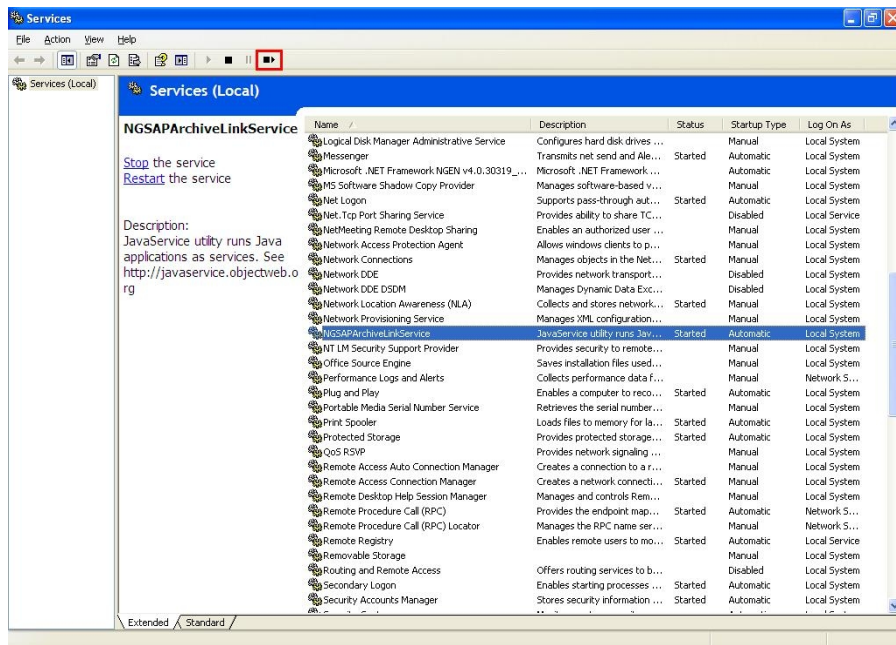
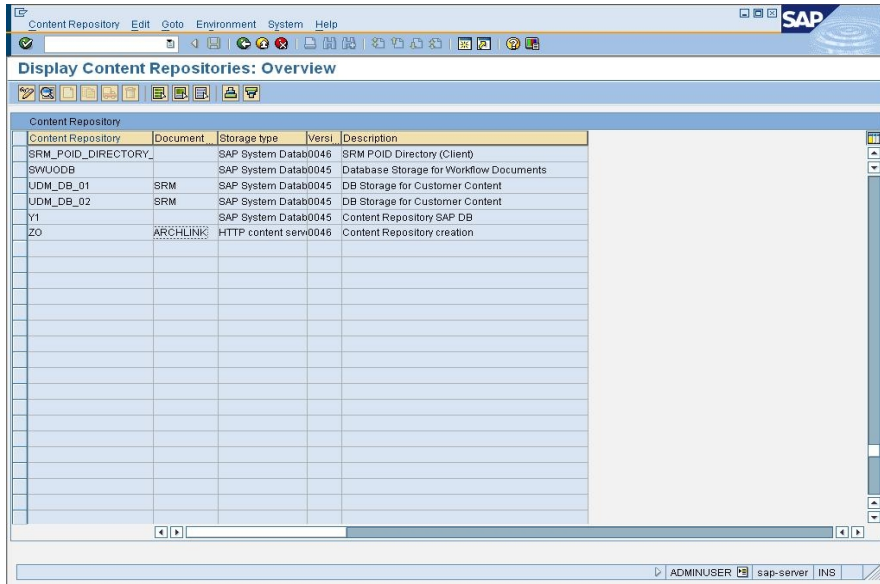


Figure 5.11: Restart NGSAPArchiveLinkService.

Verification of configuration

1. Verify the SAP Content Repository “ZO” in OAC0 tCode.

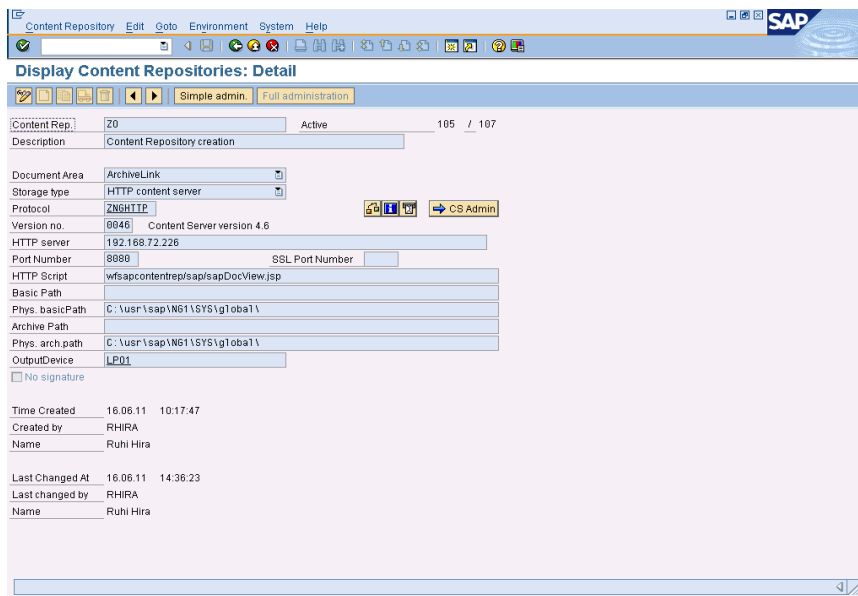


The screenshot shows the SAP 'Display Content Repositories: Overview' screen. It features a table with columns: Content Repository, Document, Storage type, Versi, and Description. The table lists several repositories, with 'ZO' highlighted in the first column. The status bar at the bottom indicates the user is 'ADMINUSER' on 'sap-server' in 'INS' mode.

Content Repository	Document	Storage type	Versi	Description
SRM_POID_DIRECTORY_		SAP System Datab0046		SRM POID Directory (Client)
SWU00B		SAP System Datab0045		Database Storage for Workflow Documents
UDM_DB_01	SRM	SAP System Datab0045		DB Storage for Customer Content
UDM_DB_02	SRM	SAP System Datab0045		DB Storage for Customer Content
Y1		SAP System Datab0045		Content Repository SAP DB
ZO	ARCHLINK	HTTP content serv0046		Content Repository creation

Figure 6.1: SAP Screen to verify content repository.

Below screen will appear after clicking “ZO” content repository to test HTTP connection with OmniDocs Server.



The screenshot shows the 'Display Content Repositories: Detail' screen for repository 'ZO'. It displays various configuration details for the repository, including document area, storage type, protocol, version, and paths. The status is 'Active' with 105 / 107 documents. The 'CS Admin' button is visible.

Field	Value
Content Rep.	ZO
Description	Content Repository creation
Document Area	ArchiveLink
Storage type	HTTP content server
Protocol	HTTP
Version no.	0046
Content Server version	4.6
HTTP server	192.168.72.226
Port Number	8080
SSL Port Number	
HTTP Script	wfsapcontentrep/sap/sapDocView.jsp
Basic Path	
Phys. basicPath	C:\usr\lsap\NG1\SYS\global\
Archive Path	
Phys. arch.path	C:\usr\lsap\NG1\SYS\global\
OutputDevice	LP01
No signature	<input type="checkbox"/>
Time Created	16.06.11 10:17:47
Created by	RHIRA
Name	Ruhi Hira
Last Changed At	16.06.11 14:36:23
Last changed by	RHIRA
Name	Ruhi Hira

Figure 6.2: SAP Screen to verify content repository.

Click on “Test Connection” button, to test HTTP connection with OmniDocs Server with ZO.



The screenshot shows the SAP Content Repository: Detail screen for repository 'ZO'. The 'Test Connection' button has been clicked, and a status bar at the bottom indicates 'Connection test for content repository ZO was successful'.

Content Rep.	ZO	Active	105 / 107
Description	Content Repository creation		
Document Area	ArchiveLink		
Storage type	HTTP content server		
Protocol	ZNGHTTP		
Version no.	0046	Content Server version 4.6	
HTTP server	192.168.72.226		
Port Number	8080	SSL Port Number	
HTTP Script	wfsapcontentrep/sap/sapDocView.jsp		
Basic Path			
Phys. basicPath	C:\usr\sap\N61\SYSGloba1\		
Archive Path			
Phys. arch.path	C:\usr\sap\N61\SYSGloba1\		
OutputDevice	LP01		
<input type="checkbox"/> No signature			
Time Created	16.06.11	10:17:47	
Created by	RHIRA		
Name	Ruhi Hira		
Last Changed At	16.06.11	14:36:23	
Last changed by	RHIRA		
Name	Ruhi Hira		

Connection test for content repository ZO was successful

Figure 6.3: SAP Screen to verify content repository – connection test successful.

Click on “Status Information” button, to view the ZO content repository status information.



The screenshot shows the SAP Content Repository: Detail screen for repository 'ZO'. The 'Status Information' button has been clicked, and the 'Server status' section is expanded, showing the following details:

Content Rep.	ZO	Active	105 / 107
Description	Content Repository creation		
Document Area	ArchiveLink		
Storage type	HTTP content server		
Protocol	ZNGHTTP		
Version no.	0046	Content Server version 4.6	
HTTP server	192.168.72.226		
Port Number	8080	SSL Port Number	
HTTP Script	wfsapcontentrep/sap/sapDocView.jsp		
Basic Path			
Phys. basicPath	C:\usr\sap\N61\SYSGloba1\		
Archive Path			
Phys. arch.path	C:\usr\sap\N61\SYSGloba1\		
OutputDevice	LP01		
<input type="checkbox"/> No signature			
Server status	RUNNING		
Description	OmniSuite		
Vendor	NSTL		
Version	8.1		
Build	001		
pVersion	0046		
Server time	16.06.2011 20:49:14		
Contrep status	RUNNING		
Description	NSTL content repository pointing to cabinet democab		
Time Created	16.06.11	10:17:47	

Figure 6.4: SAP Screen to verify content repository – SAP content rep. information.

2. Verify SAP Protocol in OAA3 tCode.

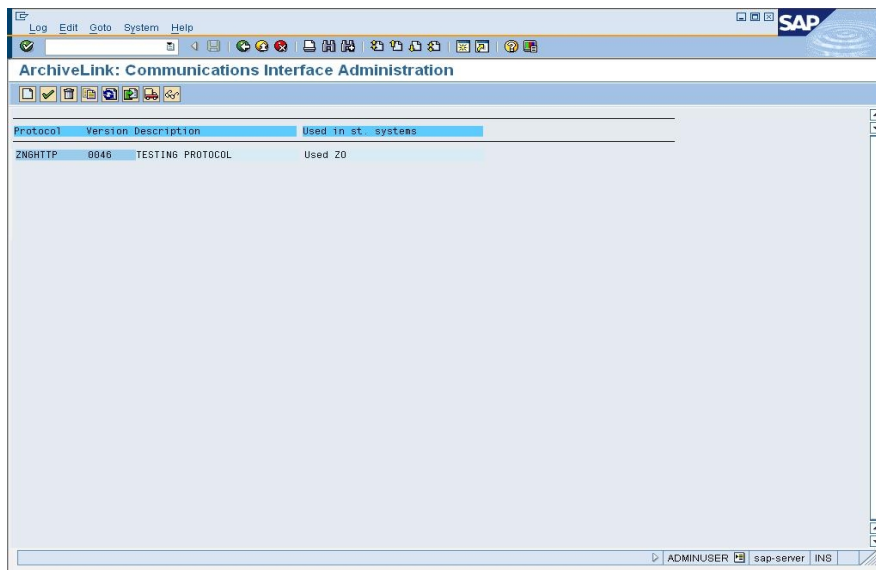


Figure 6.5: SAP Screen to verify Protocol.

3. Verify SAP document Type in OAC2 tCode.

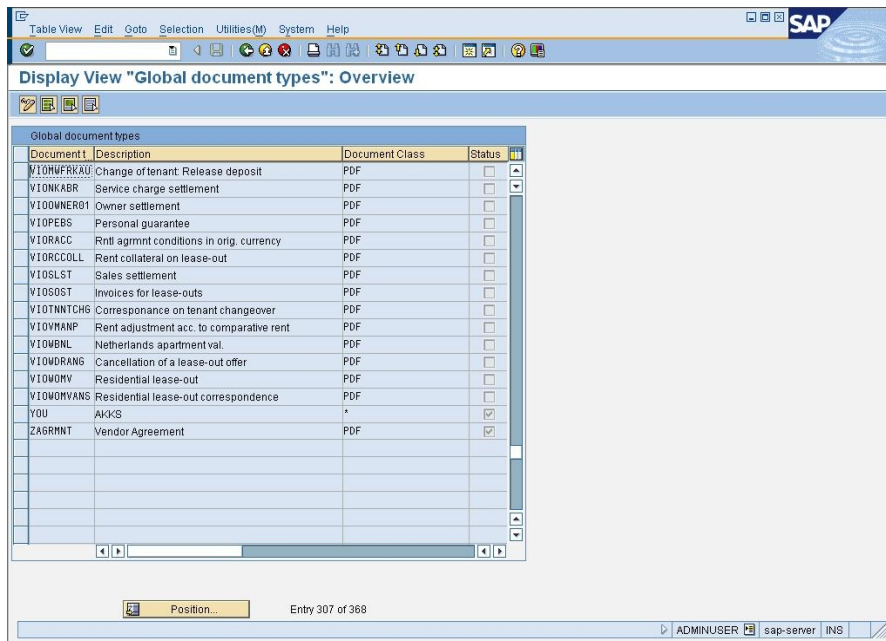


Figure 6.6: SAP Screen to verify Document Type.

4. Verify SAP Business Object Linking with SAP in OAC3 tCode.

Table View Edit Goto Selection Utilities(M) System Help

Display View "Links for Content Repositories": Overview

Links for Content Repositories

ObjectType	Doc. Type	L	Cont.Rep.ID	Link	Retent.Period
EMPLOYTXDE	HRDELSTA	X	A2	TOAHR	0
GLOBASSIGN	HRMGEP_GE	X	A2	TOAHR	0
GLOBASSIGN	HRMGEP_OL	X	A2	TOAHR	0
LFA1	ZAGRMT	X	Z0	TOA01	0
MKPF	MMIDELNT	X	D3	TOA01	0
MKPF	MMIDELNTOR	X	A2	TOA01	0
NIWE	GENPRILIST	X	GS	TOA01	0
PAPL	HRIAPPLICA	X	A2	TOAHR	0
PAPL	HRIAPPLINT	X	D3	TOAHR	0
PAPL	HRICERTAPL	X	A2	TOAHR	0
PAPL	HRIDIFLAPL	X	A2	TOAHR	0
PAPL	HRIREFEAPL	X	A2	TOAHR	0
PAPL	HRIRESUAPL	X	A2	TOAHR	0
PBS_NOTIF	HRPBS_NV	X	A2	TOAHR	0
PBS_NOTIF	HRPBS_VAD1	X	A2	TOAHR	0
PBS_NOTIF	HRPBS_VAD2	X	A2	TOAHR	0
PBS_NOTIF	HRPBS_VADM	X	A2	TOAHR	0

Position... Entry 251 of 392

Figure 6.7: SAP Screen to verify linking of Business object with document type.

5. Verify Archive Link Service and Update Service.

Newgen SAP Archive Link Service Manager

OmniDocs Configuration

App Server IP: 192.168.72.226 App Server Port: 1099 App Server Type: JBoss

Cabinet Name: democab DMS User Name: ngaluser DMS Password:

Sleep Time: 20 Encoding: UTF-8

SAP Configuration

SAP HostName: 192.168.4.6 SAP System No: 00 SAP Client: 110

SAP User Name: RHIRA SAP Password: Language: EN

JCO Version: 2.1 JCO Pool Size: 10

Service Configuration

Service Name: Service Type: ArchiveLink DMS Data Class:

SAP Repository: SAPDocId Field: Hook Class Name:

Active Count: 0

Enable	ServiceName	DataClassName	ServiceType	SAPDocId	SAPContentRep	Active
<input checked="" type="checkbox"/>	UpdateData	NGSAPDefault	UpdateData	SapDocId	ZO	No
<input checked="" type="checkbox"/>	AL_1308735196256	VendorDC	ArchiveLink	SapDocId	ZO	No

Figure 6.8: Newgen SAP Archive Link Service Manager

How to use Archive Link functionality

1. Open SAP tCode (Display/Change tCode for Business Object, eg. Tcode XK03 – to view Vendor Master).
Click on Service Object Button .



Create ---> Store Business Object.

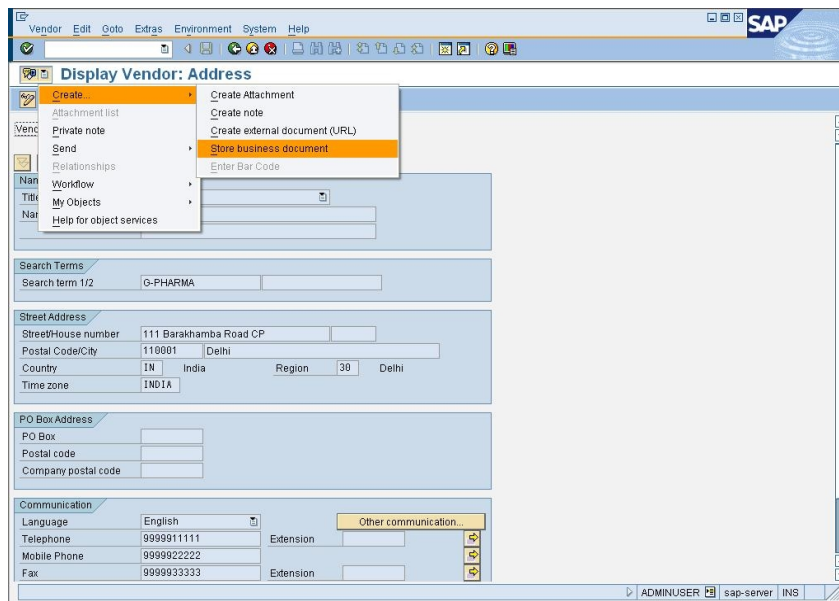


Figure 7.1: SAP tCode XK03 Screen .

2. Document Type which was created is displayed as shown in below figure.

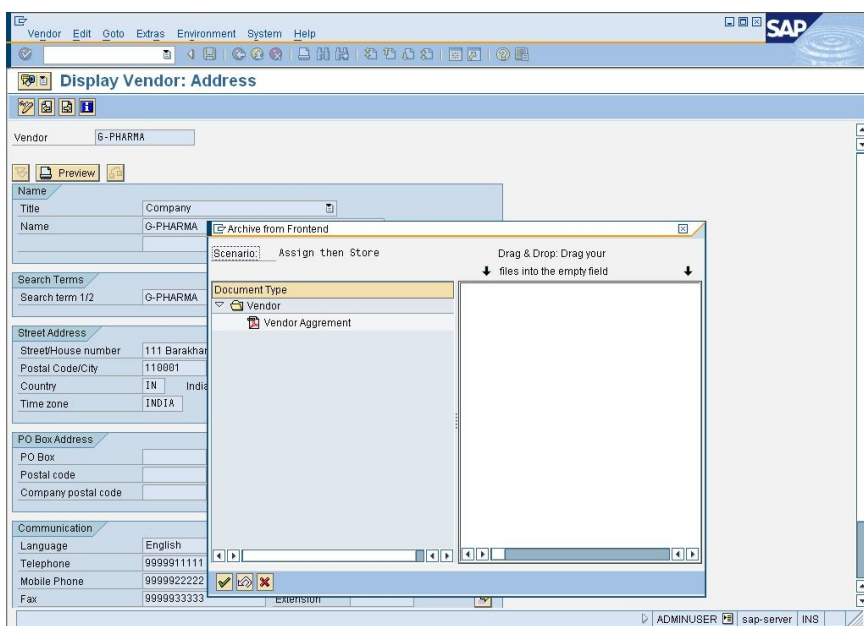


Figure 7.2: Document Type to be attached Screen .

3. Click on Document Type (eg. Vendor Agreement) and attach a PDF Type Document.

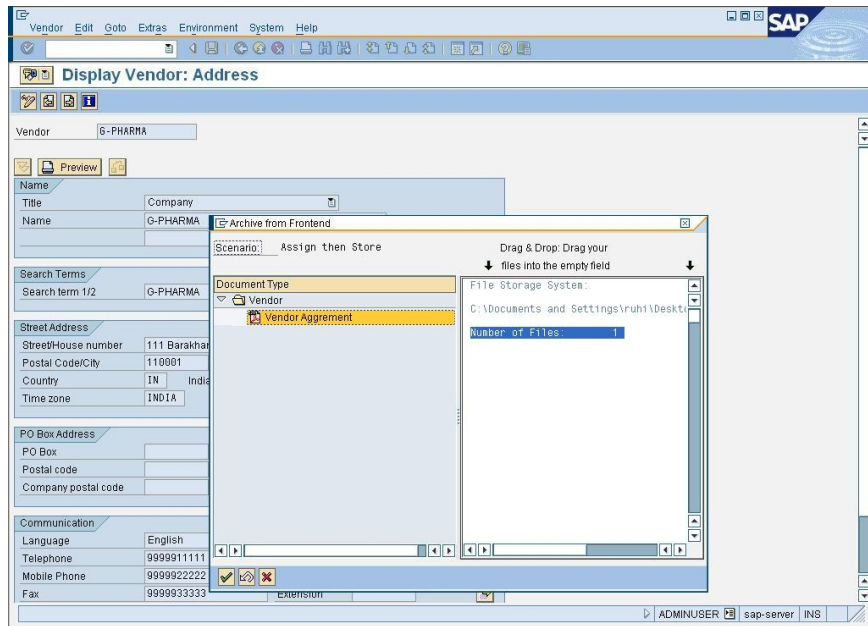


Figure 7.3: Successful attachment screen .

4. After successful attachment, to view the document click on “Service Object” button and click “Attachment List” option.

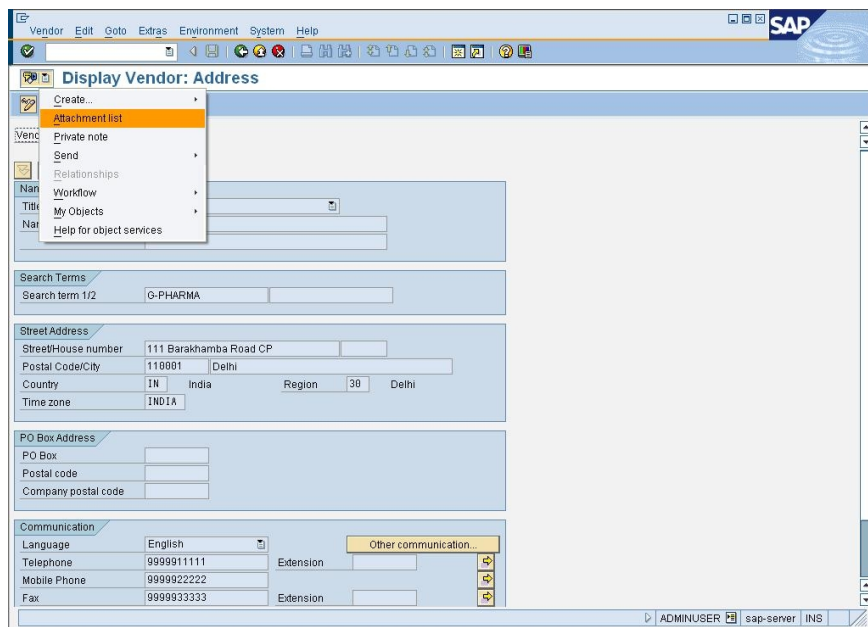


Figure 7.4: To view attached document screen .

5. Below screen appears - list of attached document. Click to view the attached document.

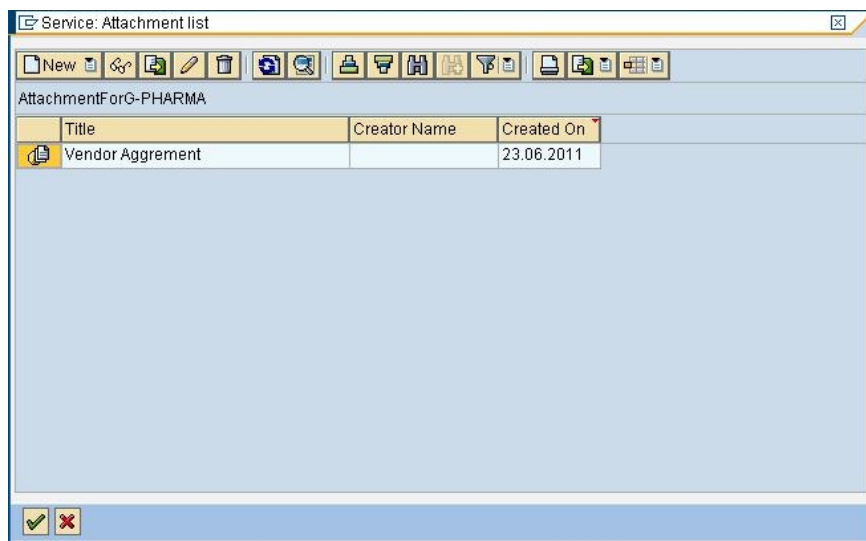


Figure 7.5: List of attached document screen .

6. Document can be viewed as below.

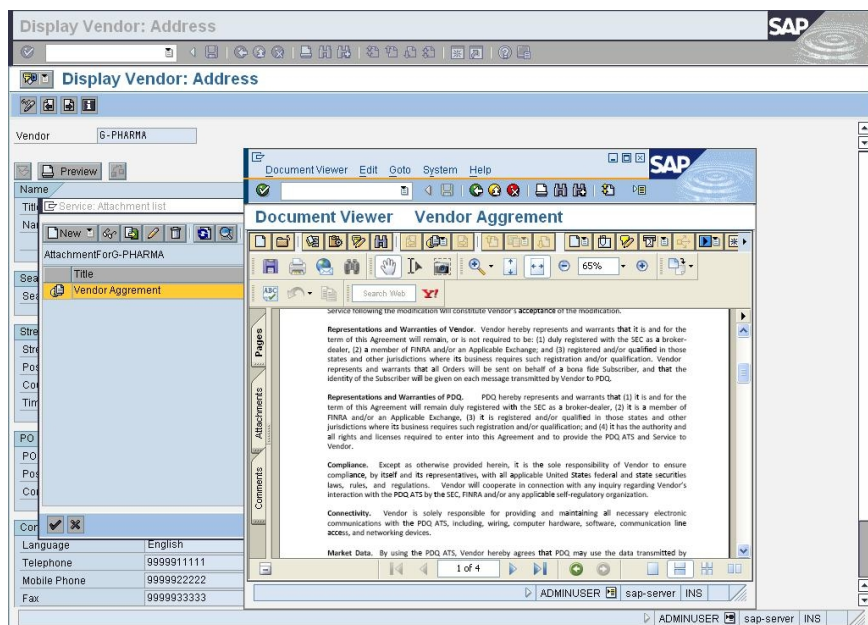


Figure 7.6: View Attached document screen .