

Tungsten Invoice Workflow

SAP Integration Guide

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ArchiveLink

Tungsten ArchiveLink is a service integrated in the SAP Web Application Server for linking archived documents and the application documents entered in the SAP system. Linking documents according to content guarantees long-term easy access to the documents. From the screen of the application document, the stored document that is associated with it can be directly displayed. The attributes can be used to search for documents. This replaces time-consuming processes, such as making copies of originals, searching for procedure-related information, etc.

ArchiveLink is a third-party solution that allows Content Manager to store SAP-linked content in Tungsten Invoice Workflow. ArchiveLink implements the standard ArchiveLink HTTP interface (v0045) as defined by SAP.

ArchiveLink also provides some useful “extensions” in addition to standard ArchiveLink functionality, such as attribute indexing of content. The ArchiveLink Interface can be broken down into two major components:

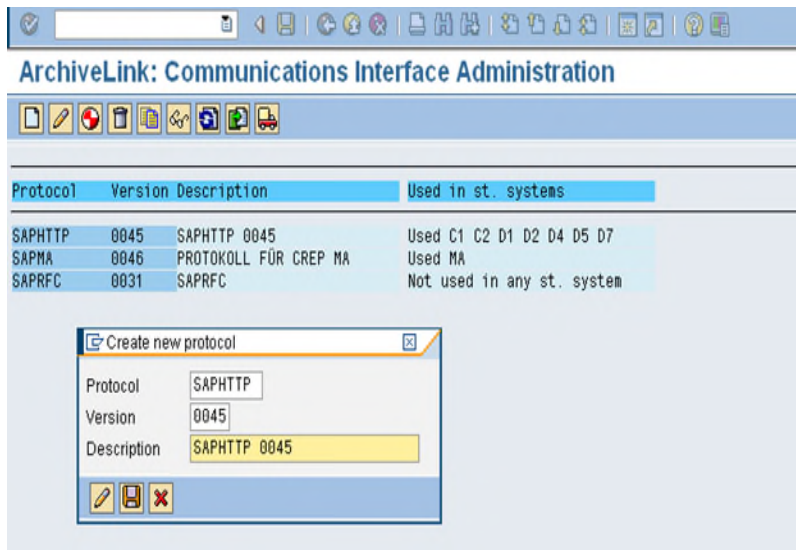
- **ArchiveLink HTTP Interface:** Stores SAP outbound content, content viewer, and other standard ArchiveLink functionality.
- **ArchiveLink Router:** Early and late archiving scenarios (bar-coding), supplemental content links, and spawn SAP workflows from Content Manager.

Initial ArchiveLink Setup

This section describes the general customizations required to setup ArchiveLink in SAP. These configurations are required for all Archivelink scenarios.

General Configuration of ArchiveLink in SAP

First, create the archive link HTTP protocol in transaction ‘OAA3’ in SAP as shown below.

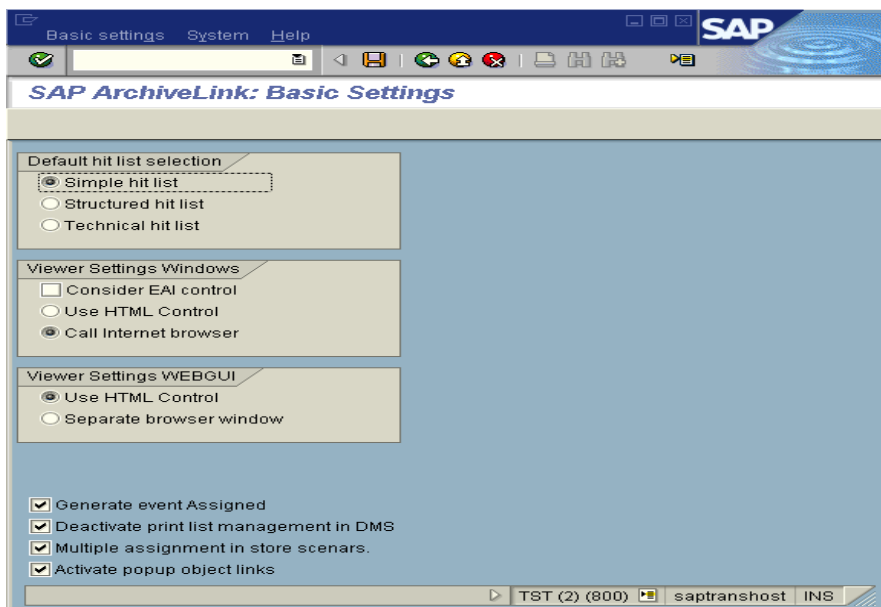


ArchiveLink in SAP

Once the ArchiveLink protocol has been created, generate it '🔄' as shown in the figure above.

Maintain the General ArchiveLink Parameters

Secondly, the general ArchiveLink parameters need to be maintained. For more detailed information, see SAP ArchiveLink documentation. The ArchiveLink Basic Settings - Transaction code OAG4 screen is shown in the figure below.



ArchiveLink Basic Settings

Next, maintain Content Repositories using transaction OAC0 as shown below.

| Content Repository | | | | |
|--------------------|--------------|----------------------|----------|--|
| Content Repository | Document ... | Storage type | Versi... | Description |
| ASAPCONTENTDB | IWBASAP | R/3 database | 0046 | Repository for Roadmap Documents - Database R... |
| BDSCONTENT3 | | R/3 database | 0045 | Database storage for BDS |
| BDS_DB | | R/3 database | 0045 | Database storage for BDS |
| BDS_DB10 | BW | R/3 database | 0046 | Data Storage of BDS for BW |
| BDS_DB11 | | R/3 database | 0045 | Data Storage of BDS for BW |
| BDS_DB12 | | R/3 database | 0045 | Storage for BDS: Excel Templates for Planning |
| BDS_DB14 | | R/3 database | 0045 | |
| BDS_DB16 | | R/3 database | 0045 | Database storage for BDS |
| BDS_DB20 | | R/3 database | 0045 | Database storage for BDS |
| BDS_DB21 | | R/3 database | 0045 | Database storage for BDS |
| BDS_DB24 | | R/3 database | 0045 | Database storage for BDS |
| BDS_DB25 | | R/3 database | 0045 | Database storage for BDS |
| BDS_DB26 | | R/3 database | 0045 | Database storage for BDS |
| BDS_DB2_R | | R/3 database | 0045 | Database storage for BDS |
| BDS_DB30 | IWBASAP | Logical Reposito... | | Scrap |
| BDS_DB31 | | R/3 database | 0045 | Storage for BDS: Comments for STS |
| BDS_DB6 | | R/3 database | 0045 | Database storage for BDS |
| BDS_DB7 | | R/3 database | 0045 | Database storage for BDS |
| BDS_DB8 | BW | R/3 database | 0046 | Database Storage for BDS |
| BDS_DB9 | | R/3 database | 0045 | Database Storage for BDS |
| BIE_NET | | HTTP content ser... | 0046 | Knowledge Warehouse: Intranet |
| BIE_QMM | | HTTP content ser... | 0046 | Knowledge Warehouse: Quality Management Man... |
| BTX_DB_01 | SRM | R/3 database | 0045 | |
| BW_HIER | BW | R/3 database | 0046 | CONTENT BW_HIER |
| BW_MAST | BW | R/3 database | 0046 | CONTENT BW_MAST |
| BW_TMPL | BW | R/3 database | 0046 | CONTENT BW_TMPL |
| C1 | ARCHLINK | HTTP content ser... | 0045 | Commscope Test Content Rep for AP |
| C2 | ARCHLINK | HTTP content ser... | 0045 | Commscope Test Content Rep for AR |
| CD | | HTTP content ser... | 0046 | |
| CFF | CFF | R/3 database | 0046 | Collaborative File System |
| CFFURL | CFF | R/3 database | 0046 | CFF: URL Storage |
| CUSTCONTDB | | R/3 database | 0045 | Storage of content objects in the database |
| CUSTSTRUCT | | Structure storage... | 0045 | Structure storage system |
| D1 | ARCHLINK | HTTP content ser... | 0045 | SAP A/P INVOICES |
| D2 | ARCHLINK | HTTP content ser... | 0045 | SAP A/P INVOICES |
| D3 | ARCHLINK | Logical Reposito... | | DocuSphere ArchiveLink 3.1 |
| D4 | ARCHLINK | HTTP content ser... | 0045 | SAP A/P INVOICES |

OACO Content Repositories

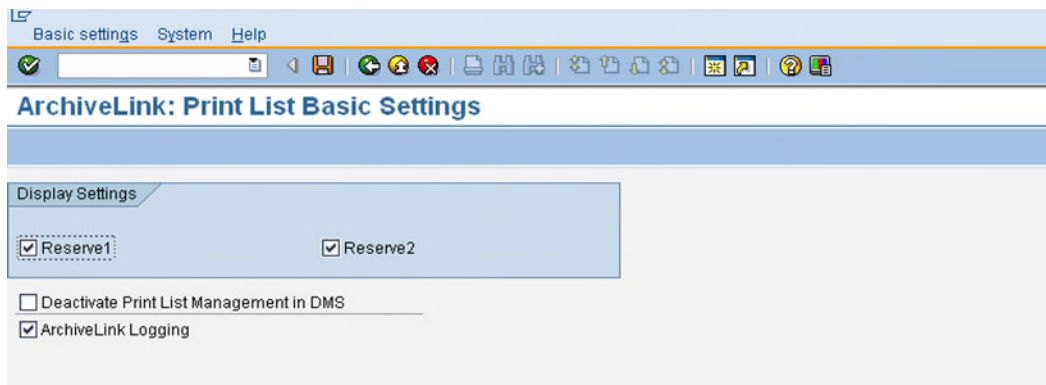
Then, check the ArchiveLink queue settings using transaction code OAQI.

| SAP ArchiveLink: Create all queues (CFBC, CARA, CG... | |
|---|-----------|
| Asynchronous storing | X |
| Error in asynch. storing | X |
| Storage confirmation | X |
| Error in storage confirmation | X |
| Asynchronous retrieval | X |
| Error in asynch. retrieval | X |
| Queue administrator | DEVELOPER |

TST (2) (800) saptranshost INS

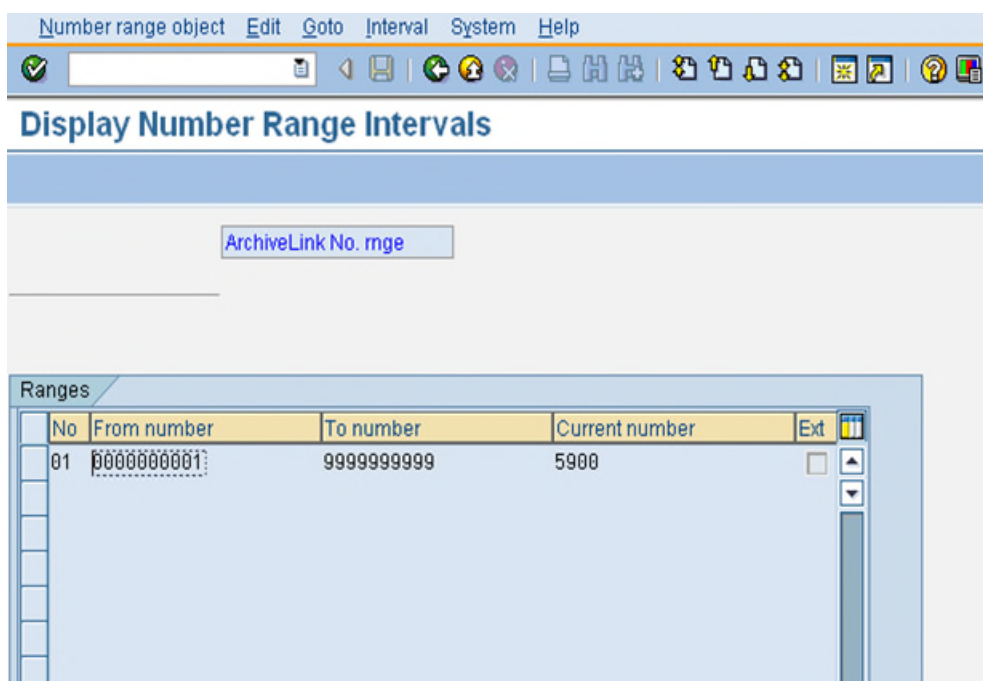
OAQI ArchiveLink Queue Settings

Activate or deactivate the DMS option for Print List using transaction code OAG2.



Activate/Deactivate DMS Option

Maintain Number Ranges for Print List using transaction code OANR.

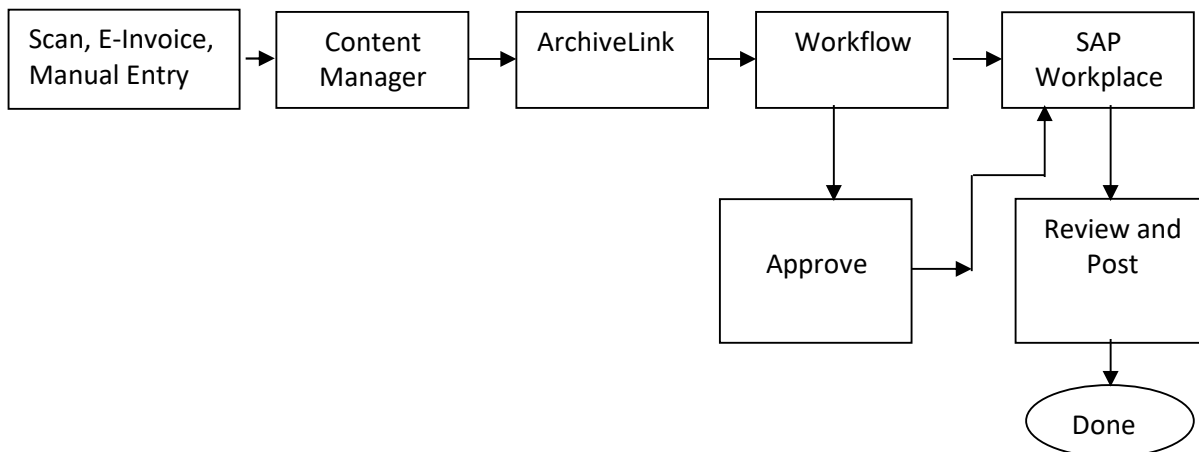


Maintain Number Ranges for Print List

ArchiveLink Scenarios

Early Archiving with Integration of Workflow

This scenario (as shown in the flow diagram below) represents the complete integration between Workflow and SAP. When the invoice is scanned (or captured through e-invoicing), a work item is created in Content Manager. The captured data are mapped to Workflow and the work item goes through the workflow for the approval of the invoice expense. Once the invoice is approved in Workflow, a work item is generated in SAP to post the document. Once the document is posted, the process is completed.



This is just an example of the integration between an SAP workflow and Tungsten Invoice Workflow. This integration can be customized to any level based on requirements of the customer.

Described below is the same example with screenshots.

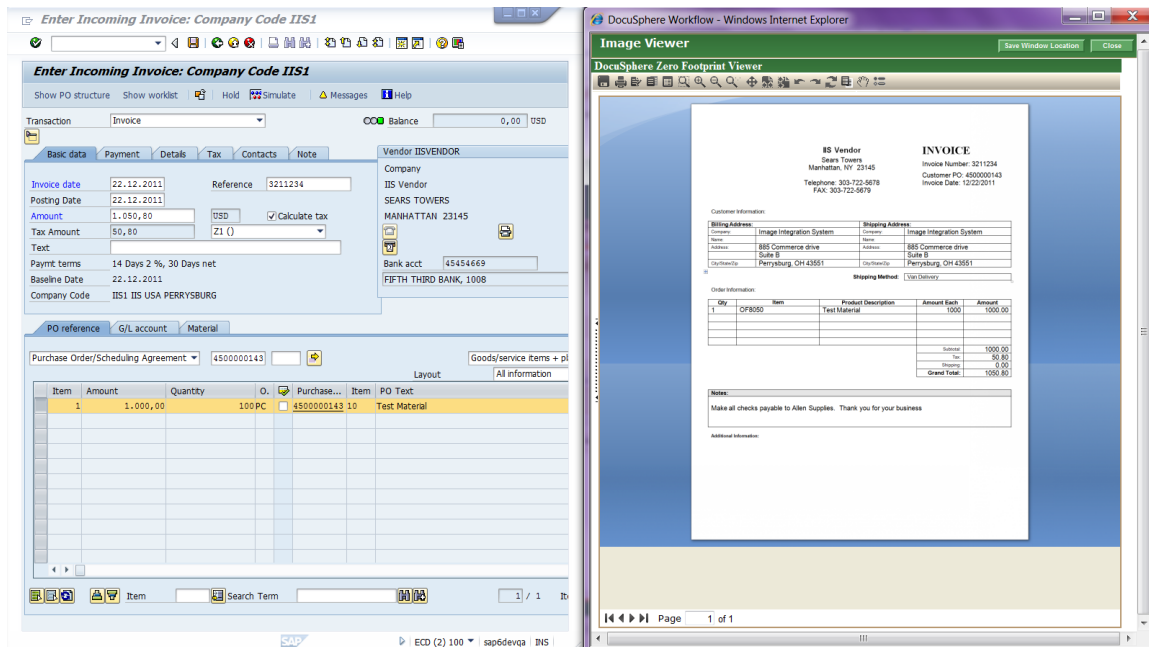
- a. Scan the document into Content Manager.
- b. It will also create a work item in SAP for invoice posting.

Workflow 91

| Item | Status | Creation Date | Creation Time | Lat | Co | Ver |
|-------------------------------------|--------|---------------|---------------|-----|----|-----|
| Create Invoice without verification | | 11.04.2007 | 10:31:19 | 5 | | |
| Create Invoice without verification | | 10.04.2007 | 14:29:28 | 5 | | |
| Change parked document 1900000014 | | 30.03.2007 | 17:15:00 | 5 | | |
| Change parked document 1900000010 | | 30.03.2007 | 15:56:19 | 5 | | |
| Change parked document 1900000009 | | 30.03.2007 | 14:38:20 | 5 | | |
| Change parked document 1900000007 | | 23.03.2007 | 10:21:40 | 5 | | |
| Create Invoice without verification | | 22.03.2007 | 15:27:35 | 5 | | |
| Attachments for incoming invoice 07 | | 14.02.2007 | 14:46:02 | 5 | | |
| FI Invoice Entry SAPAP_88 | | 12.02.2007 | 09:47:29 | 5 | | |
| Create Invoice without verification | | 22.12.2006 | 12:21:39 | 5 | | |
| Create Invoice without verification | | 22.12.2006 | 12:16:07 | 5 | | |
| Create Invoice without verification | | 22.12.2006 | 12:12:21 | 5 | | |
| Create Invoice without verification | | 22.12.2006 | 12:04:20 | 5 | | |
| Create Invoice without verification | | 22.12.2006 | 11:57:08 | 5 | | |
| Create Invoice without verification | | 21.12.2006 | 12:14:41 | 5 | | |
| Create Invoice without verification | | 21.12.2006 | 11:11:20 | 5 | | |
| Create Invoice without verification | | 21.12.2006 | 11:00:34 | 5 | | |
| Create Invoice without verification | | 20.12.2006 | 16:51:02 | 5 | | |
| Create notification of absence | | 06.12.2006 | 14:39:11 | 5 | | |
| FI Invoice Entry SAPAP_59 | | 28.11.2006 | 17:34:19 | 5 | | |
| Create notification of absence | | 28.11.2006 | 17:33:42 | 5 | | |
| Create Invoice without verification | | 09.11.2006 | 10:46:37 | 5 | | |
| Create Invoice without verification | | 09.11.2006 | 10:44:21 | 5 | | |

SAP Work Item

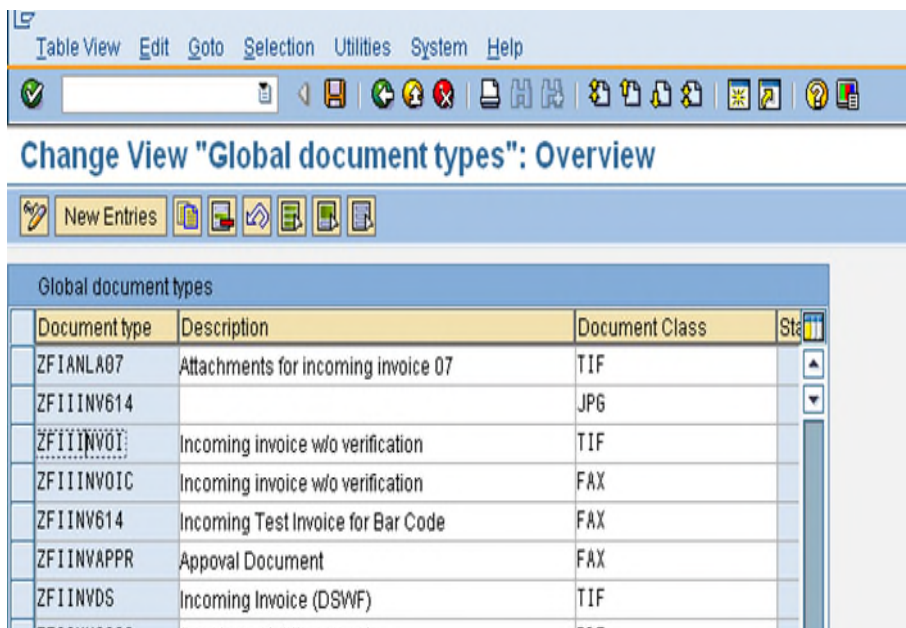
- c. Open the work item in SAP and post the document as shown below.



Post the Document

The following SAP Configuration is required for the above scenario:

- Maintain the document type in transaction OAC2.



OAC2 Document type

- Maintain the linkage in object type, document type, content repository, link table, etc., in transaction OAC3.:

Table View Edit Goto Selection Utilities System Help

Display View "Links for Content Repositories": Overview

| Object Type | Doc. Type | L | Cont.Rep.ID | Link | Retent.Period |
|-------------|-------------|---|-------------|-------|---------------|
| BKPF | ZFI0PIE101 | X | D1 | TOA01 | 0 |
| BKPF | ZFIANLA06 | X | D1 | TOA01 | 120 |
| BKPF | ZFIANLA07 | X | D2 | TOA01 | 120 |
| BKPF | ZFIIINV614 | X | MA | TOA01 | 0 |
| BKPF | ZFIIINV01 | X | D4 | TOA01 | 0 |
| BKPF | ZFIIINV01C | X | D4 | TOA01 | 0 |
| BKPF | ZFIIINV614 | X | D4 | TOA01 | 0 |
| BKPF | ZFIIINVDS | X | D1 | TOA01 | 0 |
| BKPF | ZFIIINV0106 | X | D4 | TOA01 | 120 |
| BKPF | ZTEST | X | HN | TOA01 | 0 |
| BKPF | ZTEST2 | X | HN | TOA01 | 0 |
| BUS0001 | PI_AUFTRAG | X | MA | TOA01 | 0 |
| BUS0001 | PI_MALI | X | MA | TOA01 | 0 |
| BUS0001 | PI_MES6 | X | MA | TOA01 | 0 |
| BUS0001 | PI_PRUELOS | X | MA | TOA01 | 0 |
| BUS0001 | PI_SHEET | X | MA | TOA01 | 0 |
| BUS0001 | PI_USER | X | MA | TOA01 | 0 |

Position... Entry 18 of 320

OAC3 Maintain Linkage

- c. Maintain the workflow parameters for early archiving in transaction SOA0.

Table View Edit Goto Selection Utilities System Help

Change View "Workflow Document Types": Overview

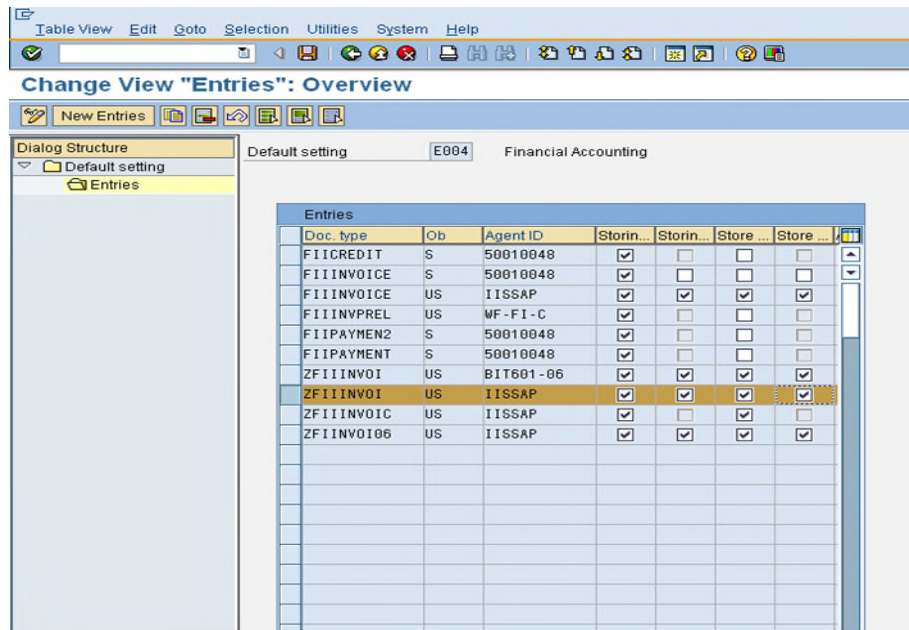
| Doc. Type | Description | Object type | Method | Task | Task |
|-------------|--|-------------|----------------|------------|------------|
| QMILETTER1 | Documents for customer complaint | BUS2078 | CREATE | TS7869 | |
| QMILETTER2 | Documents for notif of defects to vendor | BUS2078 | CREATE | TS7869 | |
| QMILETTER3 | Documents for internal problem message | BUS2078 | CREATE | TS7869 | |
| SDIACINFO | Sales activity information | VBKA | CREATE | TS7869 | |
| SDIACINQ | Customer inquiry (sales activity) | VBKA | CREATE | TS7869 | |
| SDIACRESP | Cust.responses to sales activities | VBKA | CREATE | TS7869 | |
| SDICONPLAI | Complaint | VBKA | CREATE | TS7869 | |
| SDICONTRAC | Customer contract | VBKA | CREATE | TS7869 | |
| SDICONTRCH | Customer contract change | VBKA | EDIT | TS7869 | |
| SDIDELPLAN | Customer Scheduling Agreement | VBKA | CREATE | TS7869 | |
| SDIDELPLCH | Customer delivery schedule change | VBKA | EDIT | TS7869 | |
| SDIINQUICH | Customer inquiry change | VBKA | EDIT | TS7869 | |
| SDIINQUIRY | Customer inquiry | VBKA | CREATE | TS7869 | |
| SDIORDCHAN | Customer order change | VBKA | EDIT | TS7869 | |
| SDIORDER | Customer order | VBKA | CREATE | TS7869 | |
| SDIORDER00 | | VBKA | CREATE | TS30001128 | TS30001117 |
| SDIPOD | Delivery note | VBKA | CREATE | TS7869 | |
| ZAPPR | External Approval | BKPF | CREATE | WS99500229 | WS99500229 |
| ZAPPRM | External Approval MM Invoice | BUS2081 | CREATE | WS99500232 | WS99500232 |
| ZBARCODE | Test for barcode workflow | ZBARWFL | TESTBARTRIGGER | TS99500169 | TS30001128 |
| ZFI0PIE101 | FI/AP Invoice | BKPF | CREATE | WS99500052 | |
| ZFIANLA06 | Attachment for incoming invoice 06 | BKPF | CREATE | TS30001117 | |
| ZFIANLA07 | Attachments for incoming invoice 07 | BKPF | CREATE | TS30001128 | TS30001117 |
| ZFIIINV01 | Incoming invoice w/o verification | BKPF | CREATE | WS99500244 | TS30001128 |
| ZFIIINV01C | Incoming invoice w/o verification | BKPF | CREATE | WS99500241 | |
| ZFIIINV614 | Incoming Test Invoice for Bar Code | BKPF | CREATE | TS30001117 | |
| ZFIIINVDS | Incoming Invoice (DSWF) | BKPF | CREATE | WS99500228 | TS30001117 |
| ZFIIINV0106 | Supplemental Documents | BKPF | CREATE | TS30001128 | TS30001117 |
| ZIORDER06 | Customer ordering group 06 | VBKA | CREATE | TS30001128 | TS30001117 |
| ZLFA1 | Vendor Master Attachment | LFA1 | CREATE | TS30001128 | TS30001117 |
| ZTEST | Test global doc type | BKPF | CREATE | TS30001128 | |
| ZTEST2 | Test global doc type | BKPF | CREATE | TS30001128 | |

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Workflow Parameters for Early Archiving

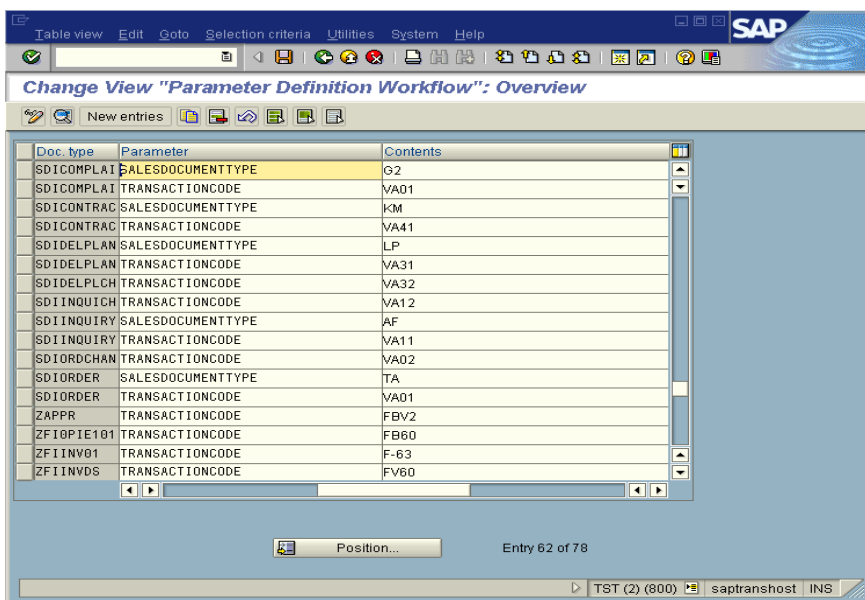
In this example, the task 'TS30001128' is for early archiving and the workflow 'WS99500244', is the workflow that gets triggered.

- d. Workflow pre-settings using transaction code OAWS as shown below.



OAWS Workflow Pre-settings

- e. Maintain workflow parameters: Initial values of the workflow container elements can be defined here using transaction code OACA.



OACA Workflow parameters

Early Archiving with Barcode

In this scenario, the paper document is scanned, first entering the barcode number, and the application is created in SAP with the barcode details later. If the paper barcode number matches the SAP barcode number, then the document gets attached to the desired SAP transaction.

The process is explained below with screenshots:

- a. Scan (or manually insert) the document into Content Manager and enter the barcode number.

Note: The SAP Process Flag will need to be a “B” upon release to Content Manager.
The ArchiveLink Router will create the preliminary link (pending link).

- b. Enter the same barcode number while entering the transaction. Here this barcode can be automatically populated by a barcode wand USB instrument.

Enter Vendor Invoice: Company Code IIS1

Transactn: Invoice Bal: 0,00

Basic data | Payment | Details | Tax | Notes

Vendor: V000100 SGL Ind: ☐ Reference: REF15879

Invoice date: 15.02.2012

Posting Date: 15.02.2012

Cross-CC no.:

Amount: 1000 USD ☐ Calculate tax

Tax Amount:

Text:

Company Code: IIS1 IIS USA PERRYSBURG

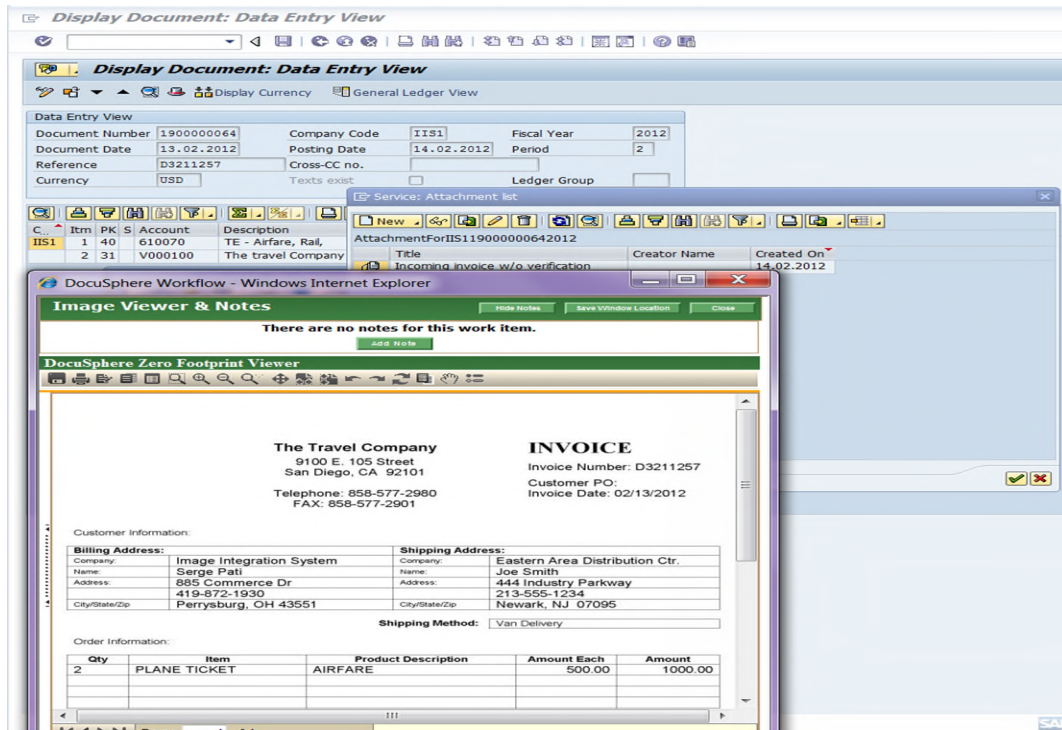
Bar Code: DMIINM Document Type: Incoming Test Invoice for Bar Code

0 Items (No entry variant selected)

| Item | S. | G/L Acct | Short Text | D/C | Amount in doc.curr. | Loc.curr.amount | Tax Jurisdiction | Assignment |
|------|----|----------|------------|-------|---------------------|-----------------|------------------|------------|
| 1 | | 610070 | | Debit | 1000 | 0,00 | CA00000000 | |
| | | | | Debit | | 0,00 | | |
| | | | | Debit | | 0,00 | | |
| | | | | Debit | | 0,00 | | |
| | | | | Debit | | 0,00 | | |
| | | | | Debit | | 0,00 | | |
| | | | | Debit | | 0,00 | | |
| | | | | Debit | | 0,00 | | |
| | | | | Debit | | 0,00 | | |
| | | | | Debit | | 0,00 | | |

Enter Barcode

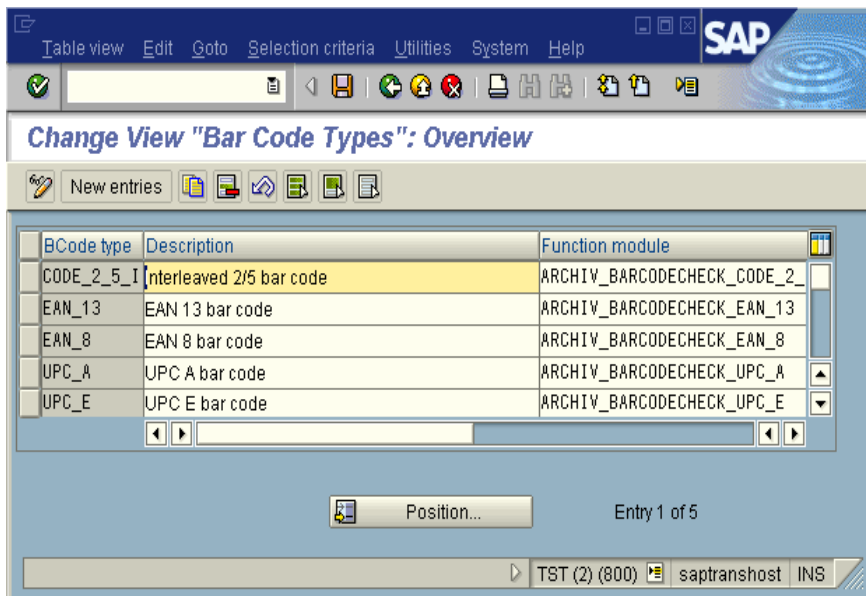
The document can be viewed from the SAP transaction as shown below.



View Document from SAP Transaction

The steps required for configuration for Archiving with barcode are shown below:

- Maintain barcode types using transaction code OAD4.



OAD4 Maintain Barcode Types

- Define the linkage between business object, document type, barcode type and other details in the transaction OAC5.

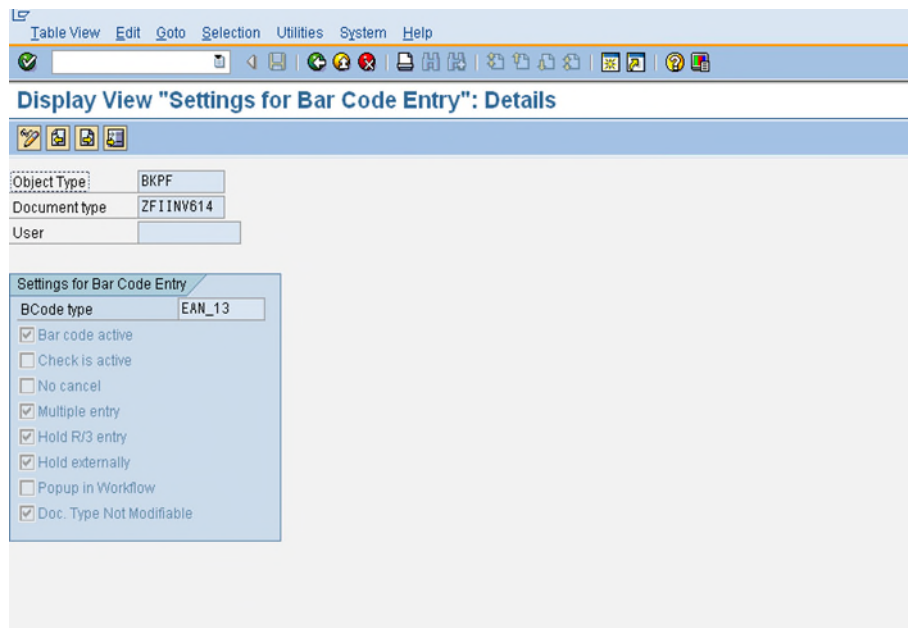


Table View Edit Goto Selection Utilities System Help

Display View "Settings for Bar Code Entry": Details

Object Type: BKPF
Document type: ZFIIINV614
User:

Settings for Bar Code Entry

BCode type: EAN_13

☒ Bar code active
☐ Check is active
☐ No cancel
☒ Multiple entry
☒ Hold R/3 entry
☒ Hold externally
☐ Popup in Workflow
☒ Doc. Type Not Modifiable

Define Linkage OAC5

- C. Configure the barcode popup based on Company Code, SAP Document Type (RE, KR) and Archive Document Type (ZFIIINV01, ZMMINVOICE) using transaction OBD5.

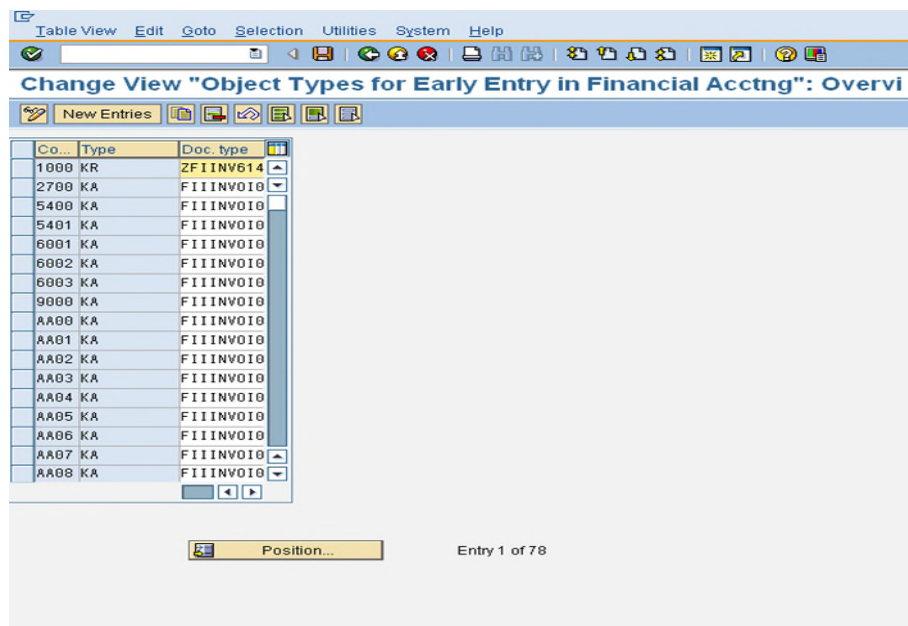


Table View Edit Goto Selection Utilities System Help

Change View "Object Types for Early Entry in Financial Acctng": Overview

New Entries

| Co. | Type | Doc. type |
|------|------|------------|
| 1000 | KR | ZFIIINV614 |
| 2700 | KA | FIIINV010 |
| 5400 | KA | FIIINV010 |
| 5401 | KA | FIIINV010 |
| 6001 | KA | FIIINV010 |
| 6002 | KA | FIIINV010 |
| 6003 | KA | FIIINV010 |
| 9000 | KA | FIIINV010 |
| AA00 | KA | FIIINV010 |
| AA01 | KA | FIIINV010 |
| AA02 | KA | FIIINV010 |
| AA03 | KA | FIIINV010 |
| AA04 | KA | FIIINV010 |
| AA05 | KA | FIIINV010 |
| AA06 | KA | FIIINV010 |
| AA07 | KA | FIIINV010 |
| AA08 | KA | FIIINV010 |

Position... Entry 1 of 78

Archive Document Type OBD5

Late Archiving with Barcode

In this scenario, the application is first created in SAP with barcode details and later the paper document is scanned. If the barcode number entered in SAP transaction matches with the barcode number of the paper entered at scan or insertion time, then the document is linked with the transaction.

The screenshot shows the SAP Financial Accounting - Vendor Invoice Entry screen. The title bar includes menus: File, Document, Edit, Goto, Extras, Settings, Environment, System, Help.

Enter Vendor Invoice: Company Code IIS1

Transaction: Invoice **Bal.:** 0,00

Buttons: Tree on, Company Code, Hold, Simulate, Park, Editing options

Basic data | Payment | Details | Tax | Notes

| | | | |
|----------------------|--------------------------|------------------|--|
| Vendor | V000100 | SGL Ind | |
| Invoice date | 15.02.2012 | Reference | REF15879 |
| Posting Date | 15.02.2012 | | |
| Cross-CC no. | | | |
| Amount | 1.000,00 | USD | <input type="checkbox"/> Calculate tax |
| Tax Amount | | | |
| Text | | | |
| Paymt terms | 14 Days 2 %, 30 Days net | | |
| Baseline Date | 15.02.2012 | | |
| Company Code | IIS1 IIS USA PERRYSBURG | | |

Vendor

Address

Company
The travel Company
PO Box 44
92101
☎ 858-577-2980

Bank data: not available

FC - Enter Bar C-code

Bar Code: 000000

Document Type: Incoming Test Invoice for Bar Code

☒ ☐

1 Items (No entry variant selected)

| Item | S.. | G/L acct | Short Text | D/C | Amount in doc.curr. | P... | Cost cen... | Order | F.. | Sales order | It... |
|------|--------|--------------|------------|-----|---------------------|------|-------------|-------|-----|-------------|-------|
| ✓ | 610070 | TE - Airfare | Debit > | | 1.000,00 | | 300300 | | | | |
| | | | Debit > | | | | | | | | |
| | | | Debit > | | | | | | | | |
| | | | Debit > | | | | | | | | |
| | | | Debit > | | | | | | | | |
| | | | Debit > | | | | | | | | |
| | | | Debit > | | | | | | | | |
| | | | Debit > | | | | | | | | |
| | | | Debit > | | | | | | | | |
| | | | Debit > | | | | | | | | |

At the bottom are icons for document management and printing.

After the transaction is created in SAP, the document and barcode coversheet can be sent to the scan station. Upon scan and release to Workflow, the link will be made by the ArchiveLink Router. **Note:** *The SAP Process Flag will need to be a "B."*

The screenshot displays two overlapping software windows. The top window, titled 'Display Document: Data Entry View', is a data entry form for a document. It includes fields for Document Number (1900000064), Company Code (1131), Fiscal Year (2012), Document Date (13.02.2012), Posting Date (14.02.2012), Period (2), Reference (D3211257), Cross-CC no., Currency (USD), and Ledger Group. A 'Service: Attachment list' window is also open, showing a table with columns for Item, PK, S, Account, Description, Title, Creator Name, and Created On. The bottom window, titled 'DocuSphere Workflow - Windows Internet Explorer', is an 'Image Viewer & Notes' window. It displays an invoice for 'The Travel Company' with the address 9100 E. 105 Street, San Diego, CA 92101. The invoice number is D3211257, dated 02/13/2012. The customer is Joe Smith, located at 444 Industry Parkway, Newark, NJ 07095. The shipping method is 'Van Delivery'. The invoice also includes a table for 'Order Information' with columns for Qty, Item, Product Description, Amount Each, and Amount. The table shows 2 units of 'PLANE TICKET' for an amount of 1000.00, and 'AIRFARE' for an amount of 500.00.

Display Document: Data Entry View

Document Number: 1900000064 Company Code: 1131 Fiscal Year: 2012
 Document Date: 13.02.2012 Posting Date: 14.02.2012 Period: 2
 Reference: D3211257 Cross-CC no.: Texts exist: Ledger Group:
 Currency: USD

Service: Attachment list

| Item | PK | S | Account | Description | Title | Creator Name | Created On |
|------|----|---|---------|---------------------|-----------------------------------|--------------|------------|
| 1 | 40 | | 610070 | TE - Airfare, Rail, | AttachmentForIIS119000000642012 | | |
| 2 | 31 | | V000100 | The travel Company | Incoming invoice w/o verification | | 14.02.2012 |

DocuSphere Workflow - Windows Internet Explorer

Image Viewer & Notes

There are no notes for this work item.

DocuSphere Zero Footprint Viewer

The Travel Company
 9100 E. 105 Street
 San Diego, CA 92101
 Telephone: 858-577-2980
 FAX: 858-577-2901

INVOICE
 Invoice Number: D3211257
 Customer PO:
 Invoice Date: 02/13/2012

Customer Information:

| Billing Address: | | Shipping Address: | |
|------------------|--------------------------|-------------------|--------------------------------|
| Company: | Image Integration System | Company: | Eastern Area Distribution Ctr. |
| Name: | Serge Patt | Name: | Joe Smith |
| Address: | 885 Commerce Dr | Address: | 444 Industry Parkway |
| | 419-872-1930 | | 213-555-1234 |
| City/State/Zip: | Perrysburg, OH 43551 | City/State/Zip: | Newark, NJ 07095 |

Shipping Method: Van Delivery

Order Information:

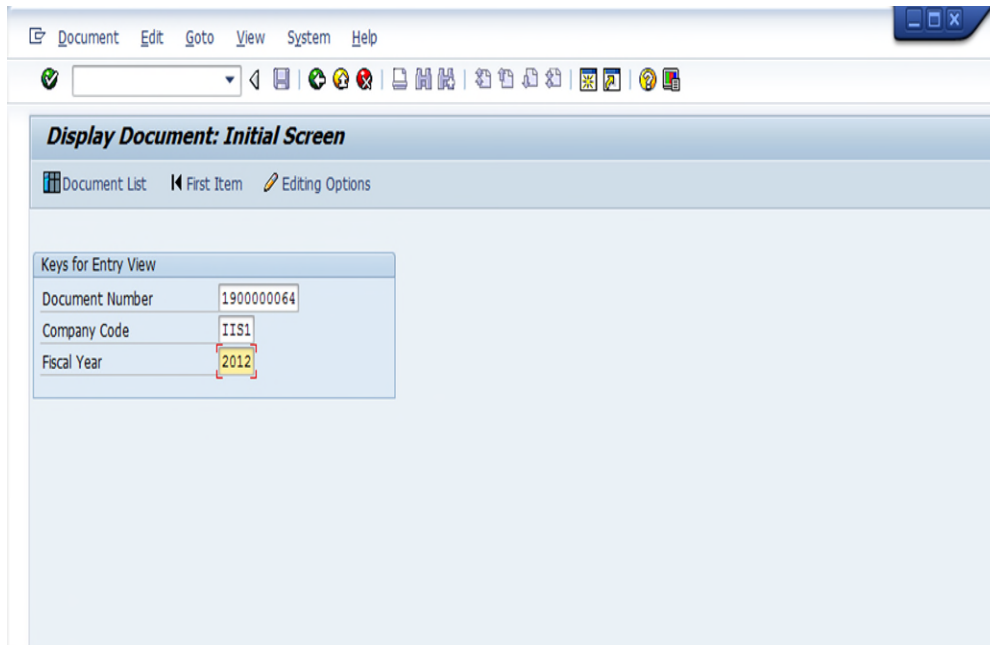
| Qty | Item | Product Description | Amount Each | Amount |
|-----|--------------|---------------------|-------------|---------|
| 2 | PLANE TICKET | AIRFARE | 500.00 | 1000.00 |

Page 15 of 40

Manual Storing

In manual storing, you can attach documents to a posted document directly from an SAP application on a local desktop (local drive).

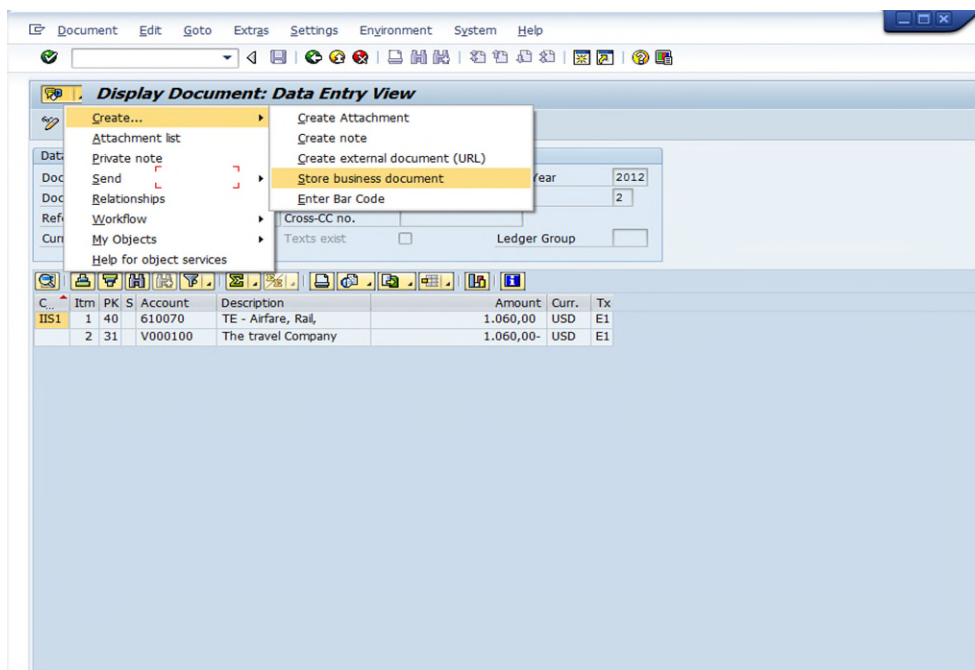
Go to transaction FB03 or FB02 and enter the required invoice number as shown in the figure below.



The screenshot shows the 'Display Document: Initial Screen' in SAP. The menu bar includes Document, Edit, Goto, View, System, and Help. Below the menu is a toolbar with various icons. The main area has a title bar 'Display Document: Initial Screen' and three buttons: Document List, First Item, and Editing Options. A 'Keys for Entry View' section contains three input fields: Document Number (1900000064), Company Code (IIS1), and Fiscal Year (2012).

FOB02 Enter Invoice Number

To attach a document from desktop, follow the path shown by the screen shots below.

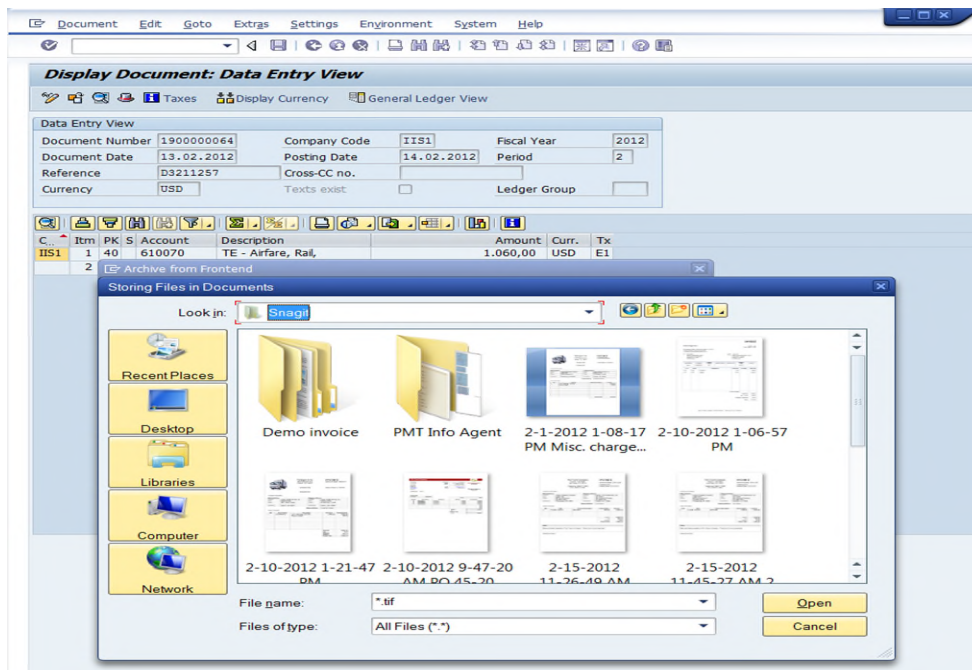


The screenshot shows the 'Display Document: Data Entry View' in SAP. The menu bar includes Document, Edit, Goto, Extras, Settings, Environment, System, and Help. Below the menu is a toolbar with various icons. The main area has a title bar 'Display Document: Data Entry View' and a menu on the left with options: Create..., Attachment list, Private note, Send, Relationships, Workflow, My Objects, and Help for object services. A context menu is open over the 'Create...' option, showing options: Create Attachment, Create note, Create external document (URL), Store business document, and Enter Bar Code. The 'Store business document' option is highlighted. In the background, there are input fields for Year (2012) and Enter Bar Code (2). Below the menu, there is a table with columns: C., Itm, PK, S, Account, Description, Amount, Curr., and Tx.

| C. | Itm | PK | S | Account | Description | Amount | Curr. | Tx |
|------|-----|----|---|---------|---------------------|-----------|-------|----|
| IIS1 | 1 | 40 | | 610070 | TE - Airfare, Rail, | 1.060,00 | USD | E1 |
| | 2 | 31 | | V000100 | The travel Company | 1.060,00- | USD | E1 |

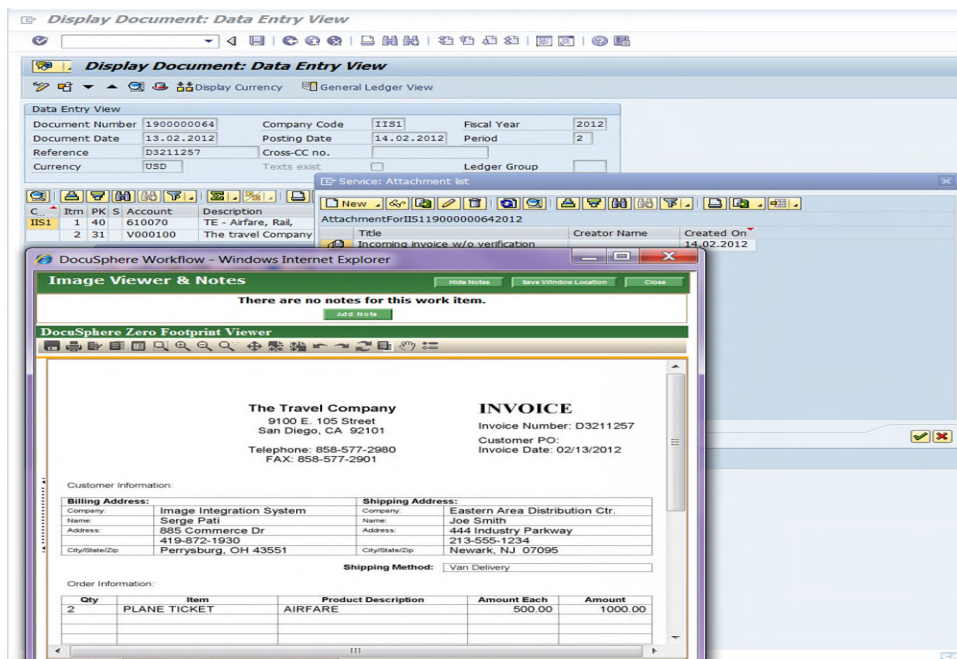
Attach Documents from Desktop

Attach the required document from desktop or from local hard drive.



Attach Documents from Desktop or Local Hard Drive

Now the document is linked to the transaction.



Documents are now linked

Summary of the configuration required for manual storing:

- a. Maintain the document type in OAC2.

- b. Maintain the linkage between document type, business object, content repository, etc., in transaction OAC3.
- c. Maintain the workflow document type customizing as mentioned earlier. Refer to the section [Early Archiving with Integration of Workflow](#).

Storing Outgoing Documents

Outgoing documents are all documents that have been created in a SAP system using SAP script or SAP Smart Forms. For example, these include correspondence, invoices, order confirmations, etc. This process is useful to store outgoing documents in a storage system and link them to the appropriate application documents.

Here is an example for a billing document.

The screenshot shows the SAP 'Change Billing Document' (OAC3) transaction. The 'Billing document' field is set to '90024205'. Below it, the 'More Search Criteria' section includes fields for 'Document Number', 'Company Code', 'Fiscal Year', and 'Reference', with a 'Search' button. An 'Output output' window is open, displaying a table of output records.

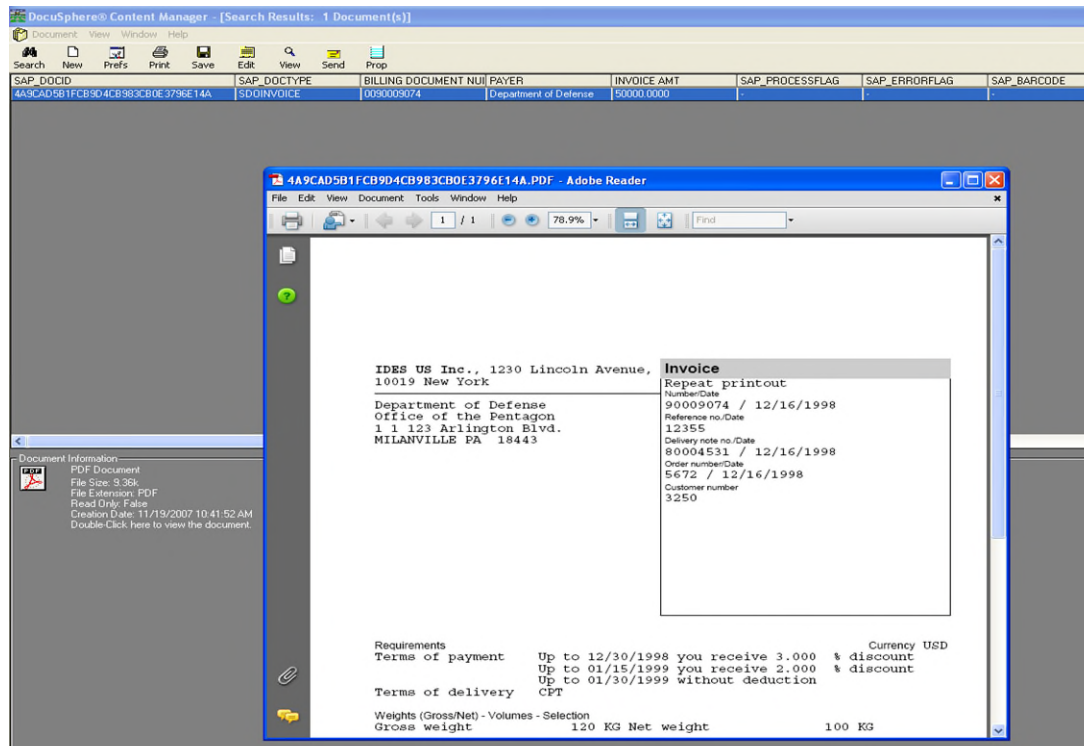
| Message type | Name | Created on | Created at | Process status | Transm. Medi... |
|--------------|---------|------------|------------|----------------|-----------------|
| RD00 | Invoice | 07.11.2007 | 09:21:57 | 1 | 1 |

At the bottom of the 'Output output' window, there are icons for 'Print Options' and a 'Print' button.

Outgoing Billing Documents

Select the required output type and click on the Print button on the screen as shown in the figure below. This will store the PDF generated from the billing document to Content Manager with the indexing details.

Note: Here the output type should be configured with SAP script program or Smart Form details. The storage system of the output type should be 'Print and archive' or 'Archive only'. The 'Document type' should be configured for archiving with content repository details.



PDF stored in Content Manager

Summary of the configuration required:

- Create the Document Type in transaction code OAC2.
- Create the Object Type and Document Type linkage in transaction code OAC3.
- Mention the Document Type in the Output Type that is going to be used.
- Create the Device Type 'ARCH'.

Storing Print Lists

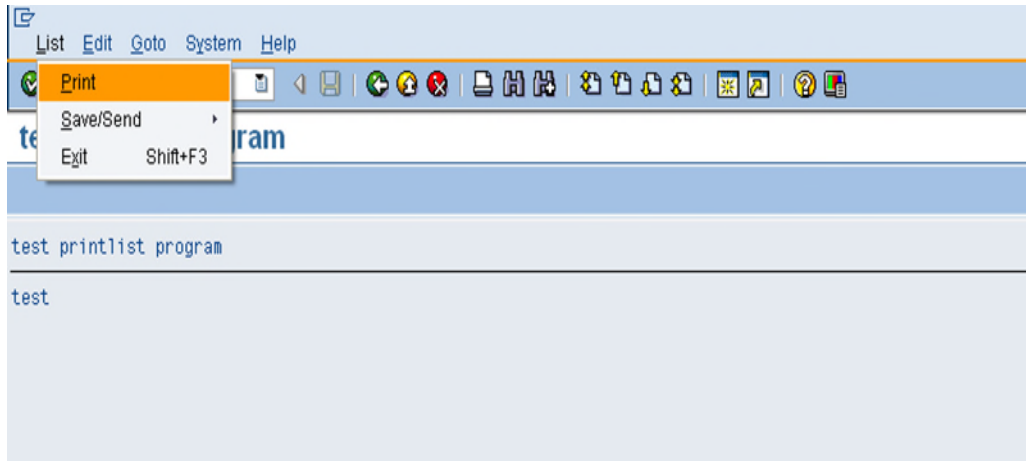
Print lists are the result of report runs in the SAP System. For example, cumulative audit trails, batch where-used lists, object service specifications, balance sheet valuations, and cost center reports are examples of Print Lists.

Storing print lists has the following advantages:

- More compact storage compared to voluminous paper output.
- Simultaneous access from different workplaces.
- Index or free text search to target specific information.

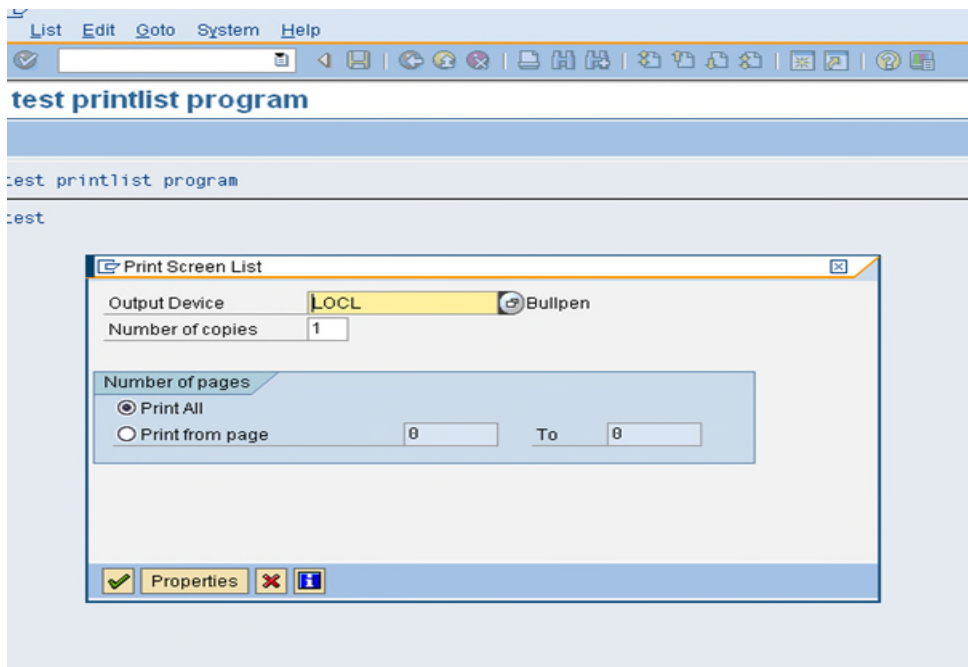
Procedure for storing print lists:

- In the report output, print the output to the spool request as shown in the figure below.


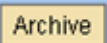


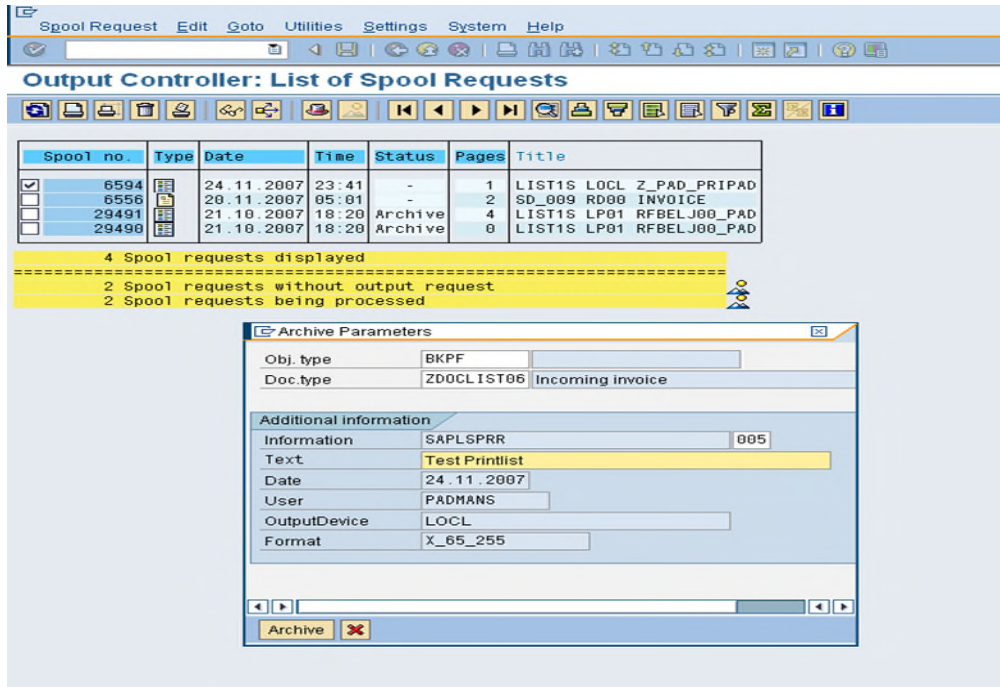
Print Output

Once the Print Output screen comes up, you then are presented with the screen below, which allows you to print to a local device.



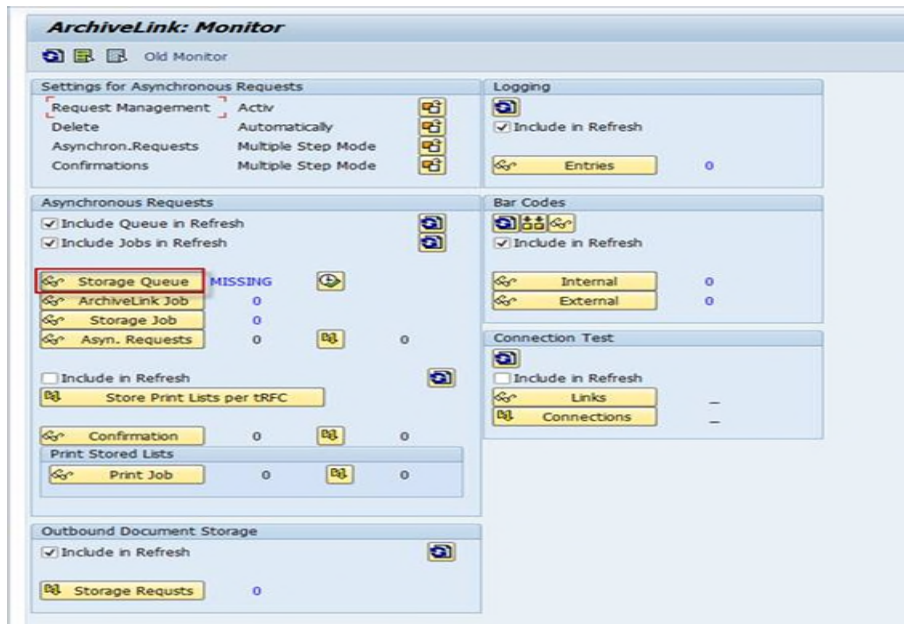
Print to Local Device

- b. For the above scenario to occur, you must first select the particular spool from the spool request and click on the 'Print with the change parameters' button () and mention the archiving parameters () as shown below.



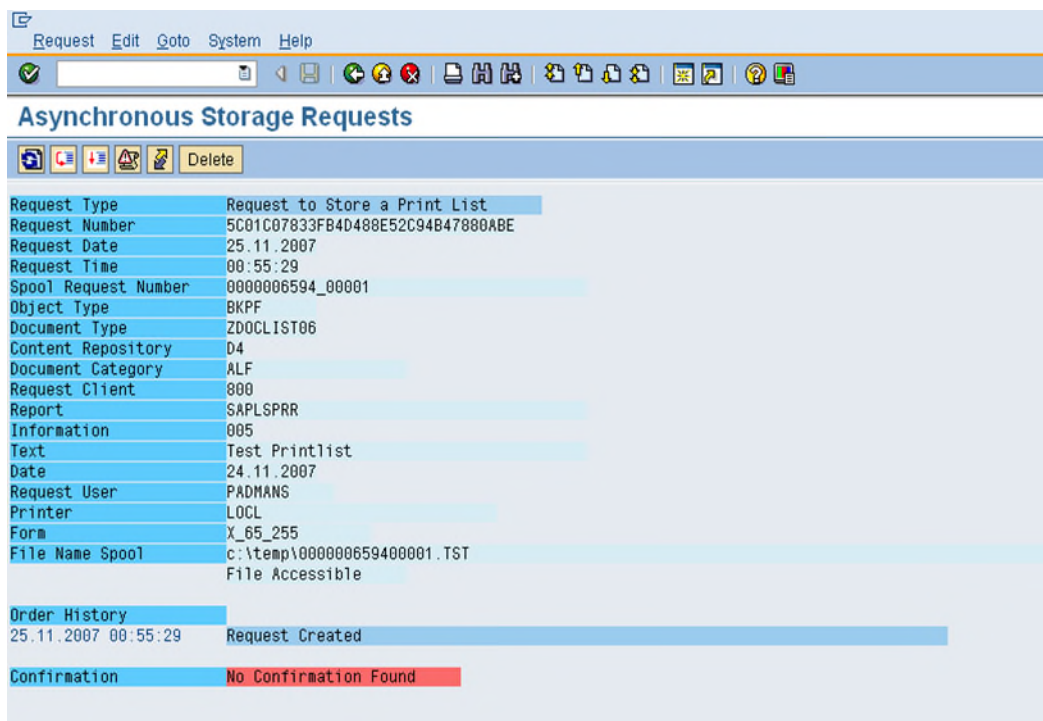
Print from Archive

- c. Go to the ArchiveLink monitoring screen (below) using transaction code OAM1 and click on the Storage Queue button (Storage Queue). Select the required printlist from the queue, see the details and execute (). When finished executing from the Storage Queue, click on Storage Requests (Storage Requests) to confirm the sending of the printlist to Content Manager.



ArchiveLink Monitoring Screen

- d. Select the request from the Request Queue and confirm () as shown in the figure below.



Archive Request Confirm

- e. The data file and the description file is now stored in Content Manager as shown below.

| SAP_DOCID | SAP_COMPID | SAP_COMPDATEC | SAP_COMPDATEM | SAP_CONTENTTYPE |
|----------------------------------|------------|---------------------|---------------------|-----------------|
| 029D16A10968FE4780B707FBC929E4B9 | data | 2007-11-25 00:07:42 | 2007-11-25 00:07:42 | . |
| 029D16A10968FE4780B707FBC929E4B9 | descr | 2007-11-25 00:07:42 | 2007-11-25 00:07:42 | . |

Listed in Content Manager

Storing Supplemental Documents

For storing supplemental documents, the required parameter like Object Key, Document Type, etc., the supplemental document must be entered in the ascent and the image will be linked to the SAP transaction by calling the RFC 'ARCHIV_CONNECTION_INSERT.'

ArchiveLink Router Configuration

The ArchiveLink configuration application can be launched from the Tungsten ArchiveLink Program Group.

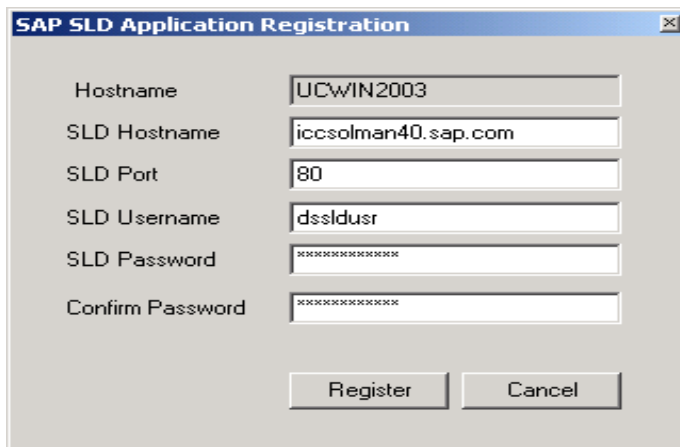
ArchiveLink Configuration

This section explains how to install and configure the Tungsten ArchiveLink software.

Note: The ArchiveLink configuration application is titled “Tungsten Network ArchiveLink Configuration,” but in reality the configuration application configures both HTTP and Router interfaces.

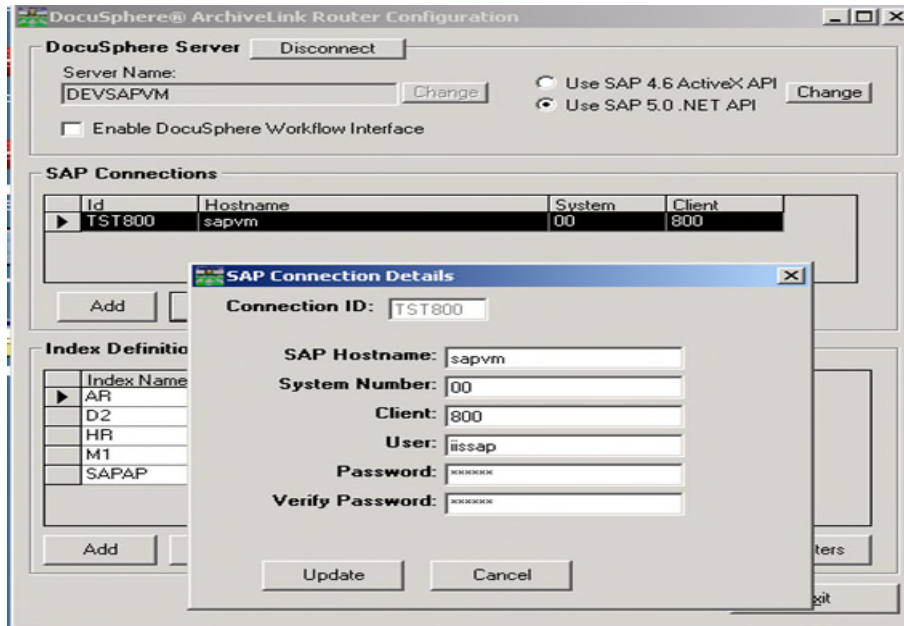
To accomplish this:

- a. Run setup.exe to install ArchiveLink onto the Workflow server.
- b. Start the ArchiveLink Configuration application. When the application starts for the first time it will launch the SLD (System Landscape Directory) registration form as shown below. SLD registration is part of the SAP support infrastructure that they ask all certified vendors and their products to adhere to. The ArchiveLink application will register itself into this infrastructure upon completing the configuration on this form for SAP implementations ECC 6.0 or higher. This registration and procedure will allow SAP support to see what components (both SAP and third-party certified components) that are installed at your site, as well as access to the Workflow log and configuration files. If SAP support is called for an ArchiveLink issue, they will have all the information they need about Workflow and our certified solution. If you don’t have the necessary information to complete the SLD registration at this time, it can be cancelled and performed later by using the SLD registration button on the main configuration page.



SLD Registration

- c. Using the ArchiveLink Router Configuration application, define the SAP servers and their logon details (server name, client, system number, etc.) as shown below.



ArchiveLink Router Configuration

- d. Configure the index definition that is required to setup in ArchiveLink as shown in the figure below.
- e. Define the Connection ID that is created above.
- f. Define the content repository that is going to be used.
- g. Define the 'Doc. Protection' as always 'CRUD' i.e. Create, Read, Update and Delete.
- h. Define the 'SAP ArchiveLink Index Keys' like 'SAP Process flag', 'ArchiveLink Doc ID'.
- i. Also map the 'SAP Object ID Index Key'.

IMPORTANT: Please reference the *Workflow Administration Guide* for information on creating Content Manager index definitions and their defined index keys (i.e., metadata). Index definitions should be created to specification before running the ArchiveLink Configuration program. If index keys move around after creation, this can cause issues with the ArchiveLink field mappings.

DocuSphere ArchiveLink - Index Definition Configuration

Index Definition: **SAPAP** | **SAP ACCOUNTS PAYABLE**

Repository Settings

SAP Connection ID: **TST800**

SAP Repository ID: **D4**

Doc. Protection: **CRUD**

Active: ☒

SAP ArchiveLink Index Keys

Process Flag: **UK9**

ArchiveLink Doc. Type: **UK11**

ArchiveLink Route Id: **UK7**

ArchiveLink Doc. Id: **UK1**

ArchiveLink Comp. Id: **UK2**

Comp. Create Date: **UK3**

Comp. Modify Date: **UK4**

SAP Object ID Index Key

Object ID: **UK27**

Note: Used during backscanning when SAP_PROCESSFLAG = L (Route ID="Scan Key")

☐ Fire update trigger when field changes (DSCM on Oracle DB only)

Available Index Keys (Field - Description)

- UK1 - SAP_DOCID
- UK2 - SAP_COMPID
- UK3 - SAP_COMPDATEC
- UK4 - SAP_COMPDATEM
- UK5 - SAP_CONTENTTYPE
- UK6 - SAP_CONTENTLEN
- UK7 - SAP_BARCODE
- UK8 - SAP_BARCODESTS
- UK9 - SAP_PROCESSFLAG
- UK10 - SAP_STATUS
- UK11 - SAP_DOCTYPE
- UK12 - SAP_ERRORFLAG
- UK13 - DOCUMENT NUMBER
- UK14 - OBJECT ID
- UK15 - VENDOR NAME
- UK16 - COMPANY CODE
- UK17 - COMPANY CURRENCY
- UK18 - REFERENCE
- UK19 - INVOICE DATE
- UK20 - BANK ACCOUNT
- UK21 - INVOICE AMT
- UK22 - COST CENTER
- UK23 - COMPANY NAME
- UK24 - PROCESS FLAG
- UK25 - WORKFLOW PROCESS NAME
- UK26 - SAP_OBJTYP

Update Cancel

ArchiveLink Mapping

- j. Configure the ArchiveLink HTTP interface for updating Content Manager indices with SAP metadata. To update Content Manager with SAP metadata, select the index definition row and click on the 'Index Key Mapping' button as shown in the figure below. Enter the Content Manager field and the corresponding field in SAP. (These fields are part of the container element of RFC function module for indexing.)

DocuSphere® ArchiveLink Router Configuration

DocuSphere Server Disconnect

Server Name: **DEVSAPVM** Change

☐ Enable DocuSphere Workflow Interface

☐ Use SAP 4.6 ActiveX API Change

☒ Use SAP 5.0 .NET API

SAP Connections

| Id | Hostname |
|--------|----------|
| TST800 | sapvm |

Add Edit Delete

Index Definitions

| Index Name | Content Rep. | SAP Conn. |
|------------|--------------|-----------|
| AR | D7 | TST800 |
| D2 | D2 | TST800 |
| HR | D1 | TST800 |
| M1 | M1 | TST800 |
| SAPAP | D4 | TST800 |

Add Edit Delete Index

Index Definition Key Mapping

SAPAP | SAP ACCOUNTS PAYABLE

Index Key Mapping

| Index Key | SAP Field |
|-----------|-----------------|
| UK13 | DOCUMENT_NUMBER |
| UK14 | SAP_OBJECTID |
| UK15 | VENDOR_NAME |
| UK16 | COMPANY_CODE |
| UK17 | COMPANY_CURR |
| UK18 | REFERENCE |
| UK19 | INVOICE_DATE |
| UK20 | BANK_ACCOUNT |
| UK21 | INV_AMOUNT |

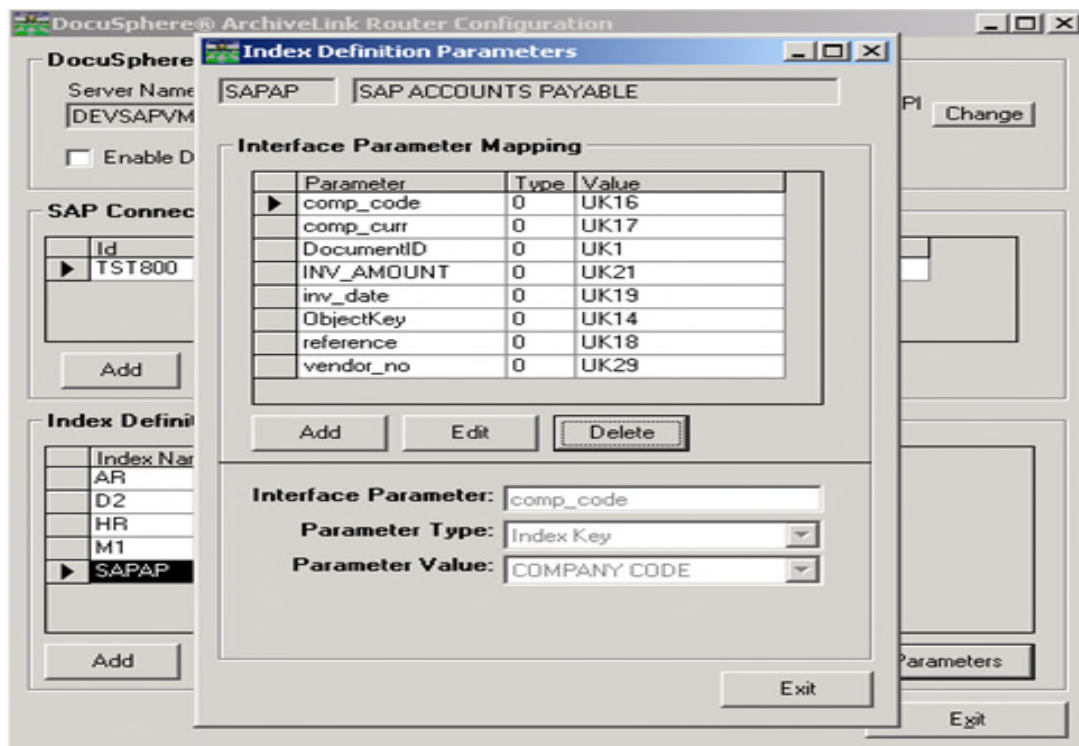
Add Edit Delete

Index Key: **DOCUMENT NUMBER**

SAP Field: **DOCUMENT_NUMBER**

Content Manager/SAP XRef Mapping

- k. Configure the Router Interface for uploading SAPWF Container Data. Define the workflow container elements that the ArchiveLink Router will pass to the SAP workflow that is going to be triggered as shown below.

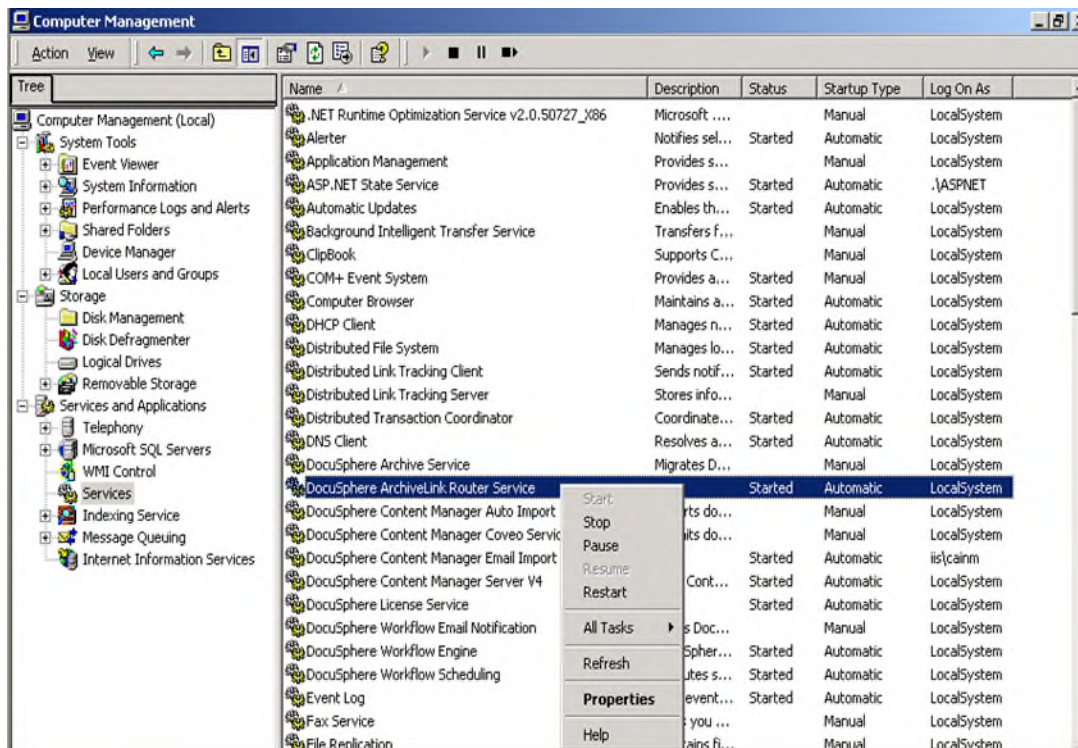


ArchiveLink Router Mapping

ArchiveLink Router Service

The Tungsten ArchiveLink Windows service must be running. The service is set to start manually by default and can be changed to automatic startup after configured and tested.

To start the ArchiveLink router service, go to 'My Computer' and 'Manage'. Click on 'Services' and start the 'ArchiveLink Router Service' as shown below.

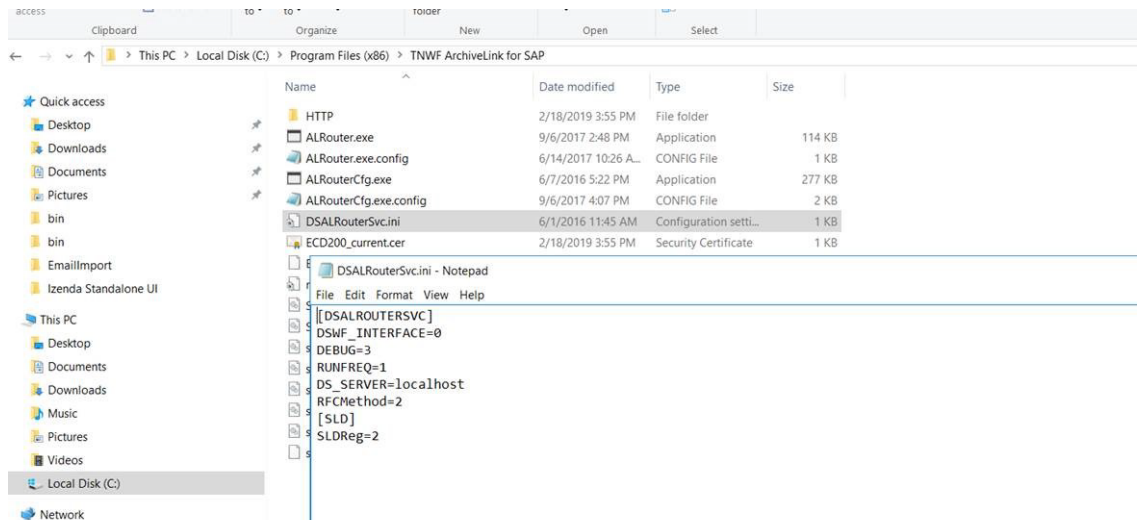


Start Services

Debugging in ArchiveLink router

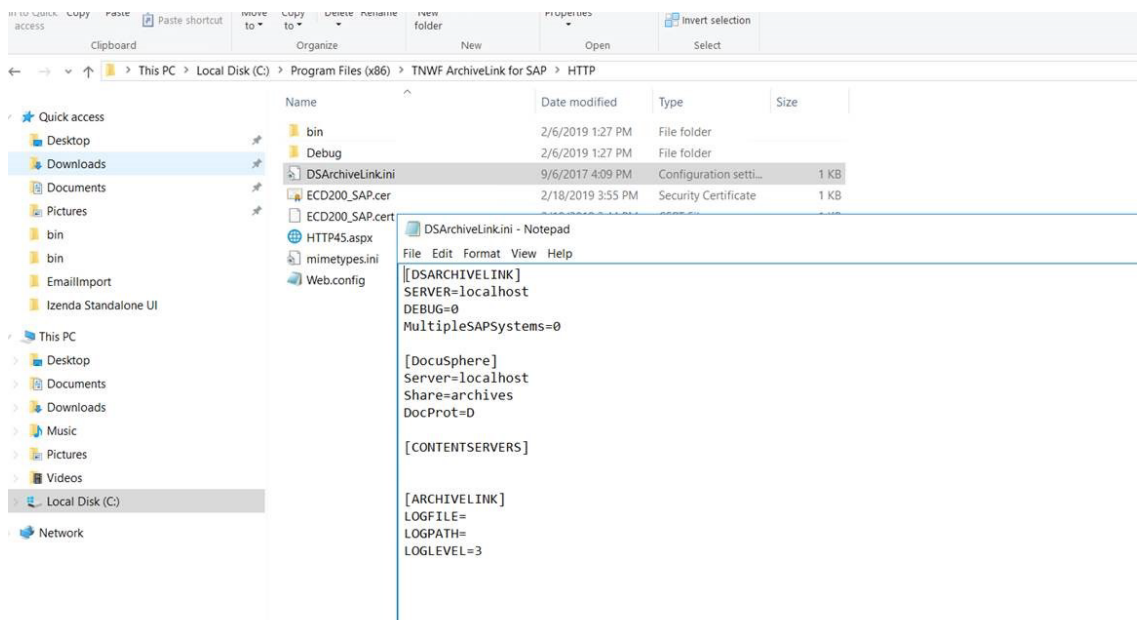
To debug the ArchiveLink router, go to the ArchiveLink folder present in the Tungsten ArchiveLink router. The path is: 'TNAL Installation Folder]\Router'. Then, open the 'DSALROUTERSVC.INI' file as shown in the figure below and make the debug option to '1' (DEBUG = '1').

Once debugging is turned ON, a text log file will be generated in the ArchiveLink installation or HTTP folders respectively.



Starting Debug

To debug the HTTP Interface, go to the folder '[TNAL Installation Folder]\Http' as shown below and make the debugging flag of the file 'TNArchiveLink.ini' to '1' (DEBUG = 1).



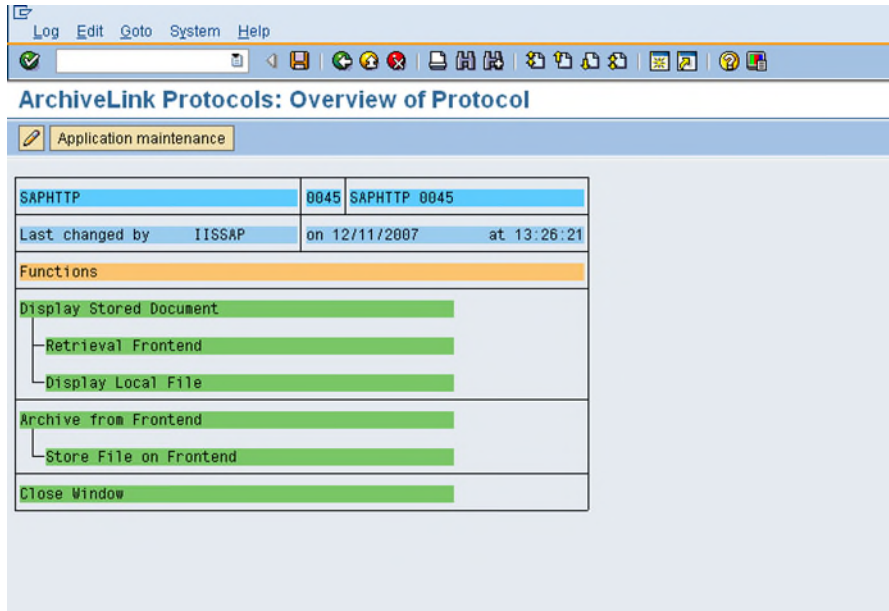
DS ArchiveLink Debug

Using the Workflow Workstation Client Viewer (OLE/COM)

For viewing images and content from SAP, the Tungsten Zero Footprint Viewer can be used.

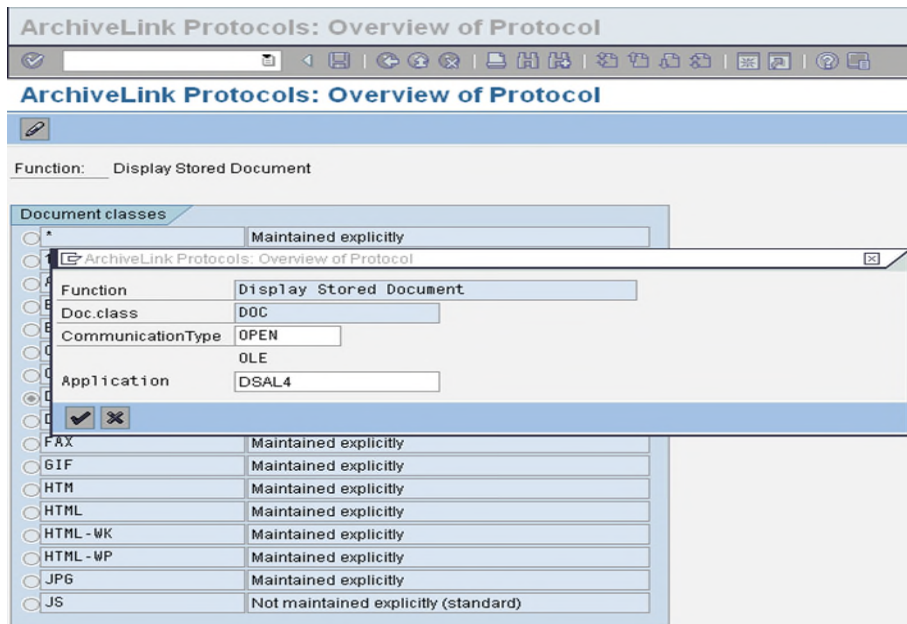
Maintain OLE Option for each Document Type

Using transaction code OAA3, open the HTTP protocol as shown below. Open the 'Display Stored Document' option and maintain the OLE settings for each document type.



OAA3 OLE settings

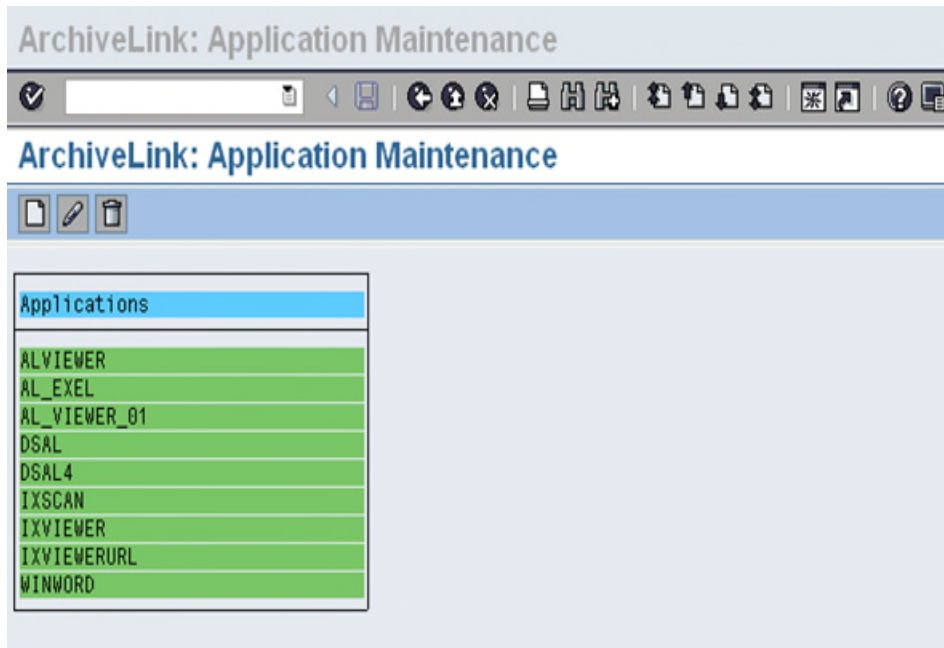
Note: Create the application first as shown in the figure below; here it is 'DSAL4'. Creation of application is mentioned in the next section.



OLE Settings for each Document Type

Maintain the Application

- a. Create the ArchiveLink Application as shown below; in this case it will be 'DSAL4'.



Create DSAL4 Application

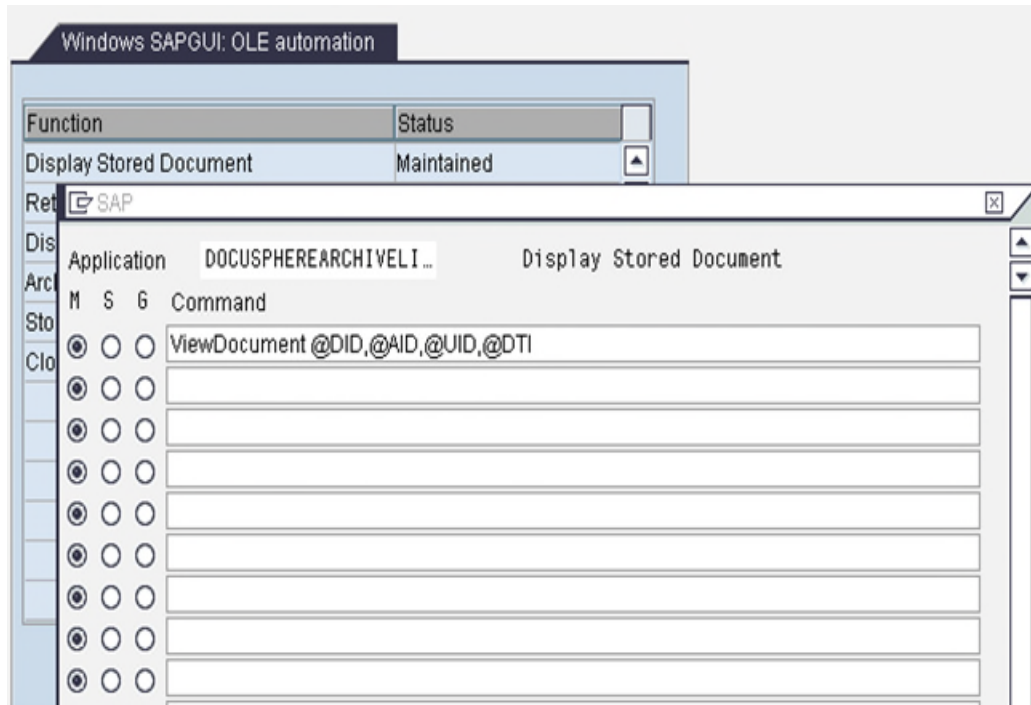
- b. Open the application as shown below and click on 'Display Stored Document'. Define the OLE/COM method to be used for display.

ArchiveLink Viewer COM ProgramID.Class:

DOCUSPHEREARCHIVELINK4.ALVIEWER

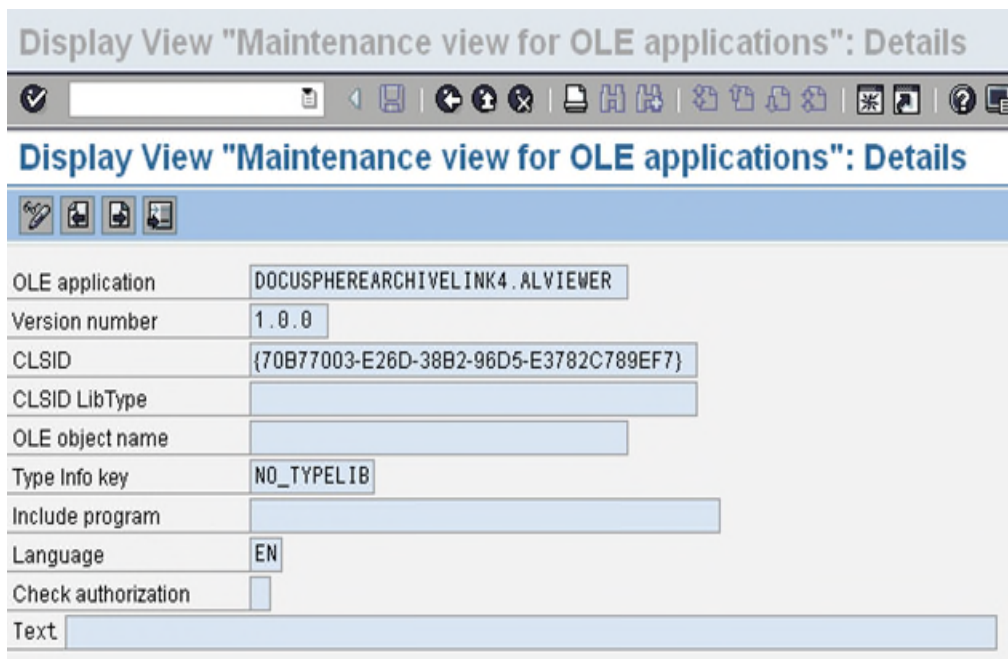
ArchiveLink Viewer COM method (M) for display with required parameters:

ViewDocument @DID,@AID,@UID,@DTI



SAP View Document

- c. Maintain the registry key of the COM DLL in SOLE transaction of SAP as shown in the figure below.



SOLE Maintain Registry Key

Debugging

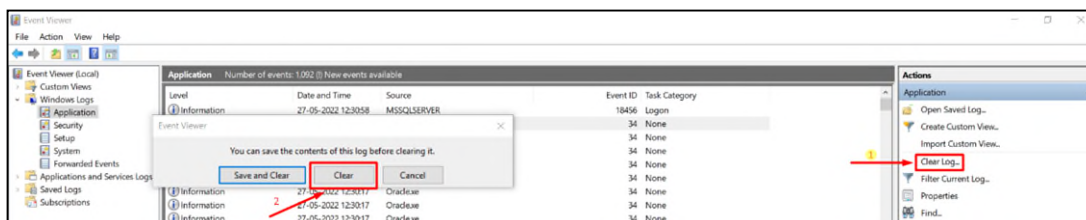
Collecting event logs and debugging using SAP

Debugging is an integral part of troubleshooting an issue. This section will discuss how to collect SAP Web Service logs, fetch the input parameters from the logs, and how to read them for further debugging.

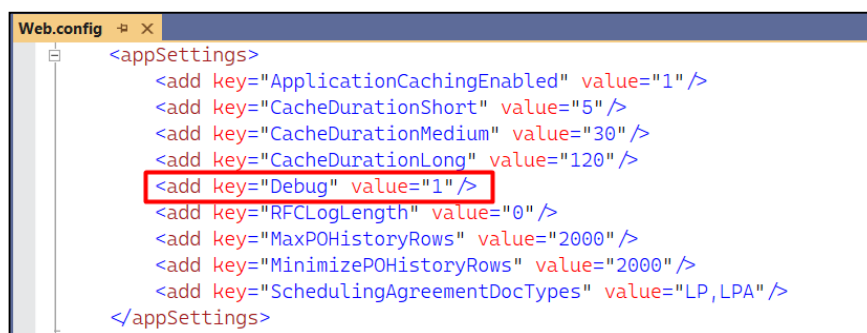
Collecting event logs

Before you start reproducing any erroneous scenario, make sure you perform the following two steps:

1. Clear the Windows event viewer so the event viewer contains related logs only.



2. Turn "ON" debug mode in the agent/plugin and the SAP Web Service.
 - a. For the agent/plugin, make sure the Debug setting is configured as "True" or "Y".
 - b. For SAP Web Service, the "Debug" key in the web.config file should be configured as "1".

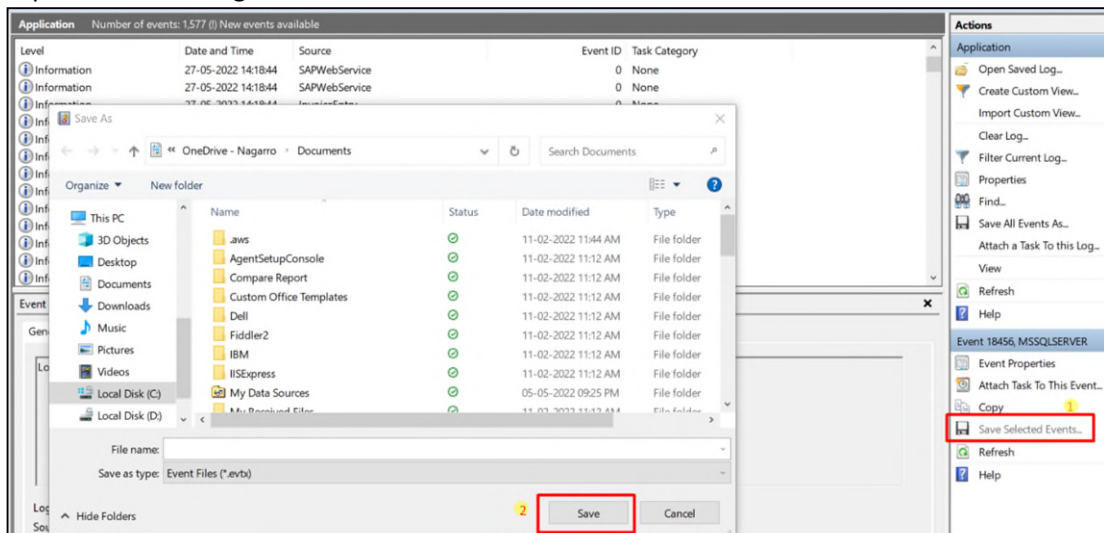


Once the above steps are done, reproduce the scenario and collect the logs as follows:

1. Get all text from “Debug Data” on the plugin screen.

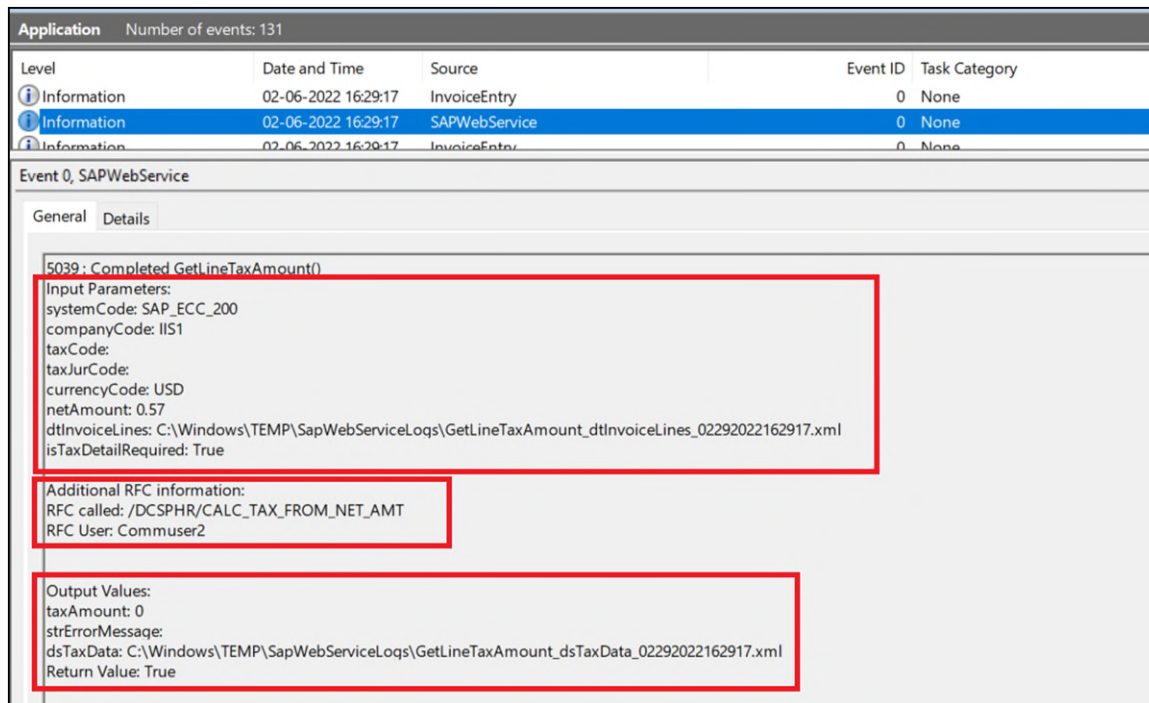


2. Export the event log.



Viewing/Reading the logs

To view the SAP service logs, see/filter the logs in the event viewer with source ‘**SAPWebService**’. Here we can find the sequence of web method and RFC calls and the log corresponding to it as below.



The SAP service event log contains three sections:

1. **Input Parameters:** Lists all the input parameters being passed to the method. Values for all primitive types are in the event log itself whereas complex types are logged in an external XML file whose path is mentioned in the event log (shown in the above screenshot “*dtInvoiceLines*”).
2. **Additional RFC Information:** Includes the name of the RFC being called along with the username used to connect to the RFC.
3. **Output Values:** Similar to input parameters, logs all the output parameters (i.e., either ByRef or Return Parameter if present). Here also primitive types are logged in the event log itself whereas complex types are logged as an XML file with the corresponding file path listed in the log.

Reading the XML File

The input XML file could be as simple as below with just two values, e.g., GL_ACCOUNT & COMPANY_CODE

```
<?xml version="1.0" standalone="yes"?>
<NewDataSet>
  <dtNonPoTable>
    <GL_ACCOUNT>111000</GL_ACCOUNT>
    <COMPANY_CODE>IIS1</COMPANY_CODE>
  </dtNonPoTable>
</NewDataSet>
```

Or it could be as complex as below with a table with three rows as an input parameter.

```

<?xml version="1.0" standalone="yes"?>
<NewDataSet>
  <Table1>
    <GL_Account>111000</GL_Account>
    <Company_Code>IIS1</Company_Code>
    <Fiscal_Year>2020</Fiscal_Year>
    <Tax_Code />
    <TaxJurCode />
    <Assignment_Number />
    <Doc_Curr_Amount>100</Doc_Curr_Amount>
    <Debit_Credit_Indicator>S</Debit_Credit_Indicator>
    <Acc_Doc_LineItem>0000000001</Acc_Doc_LineItem>
    <Posting_Date>11/16/2020</Posting_Date>
  </Table1>
  <Table1>
    <GL_Account>111000</GL_Account>
    <Company_Code>IIS1</Company_Code>
    <Fiscal_Year>2020</Fiscal_Year>
    <Tax_Code />
    <TaxJurCode />
    <Assignment_Number />
    <Doc_Curr_Amount>100</Doc_Curr_Amount>
    <Debit_Credit_Indicator>S</Debit_Credit_Indicator>
    <Acc_Doc_LineItem>0000000002</Acc_Doc_LineItem>
    <Posting_Date>11/16/2020</Posting_Date>
  </Table1>
  <Table1>
    <GL_Account>111000</GL_Account>
    <Company_Code>IIS1</Company_Code>
    <Fiscal_Year>2020</Fiscal_Year>
    <Tax_Code />
    <TaxJurCode />
    <Assignment_Number />
    <Doc_Curr_Amount>0,57</Doc_Curr_Amount>
    <Debit_Credit_Indicator>S</Debit_Credit_Indicator>
    <Acc_Doc_LineItem>0000000003</Acc_Doc_LineItem>
    <Posting_Date>11/16/2020</Posting_Date>
  </Table1>
</NewDataSet>

```

The user will need to pick each value corresponding to each node and place it in SAP for further debug.

External debugging of an RFC

When to use external debugging?

External debugging makes it possible for you to stop and debug function modules, BAPIs and any ABAP programs that are running in the context of another user's session by setting break points. When there is an issue in any function module or BAPI, external debugging can be used to identify and understand the logic behind that. External debugging is specially intended for debugging ABAP programs that process the following request types:

- RFC requests
- HTTP requests

In DOCSPPHER, RFC requests are used for the communication between SAP and .NET front end.

Can we do external debugging in a production environment?

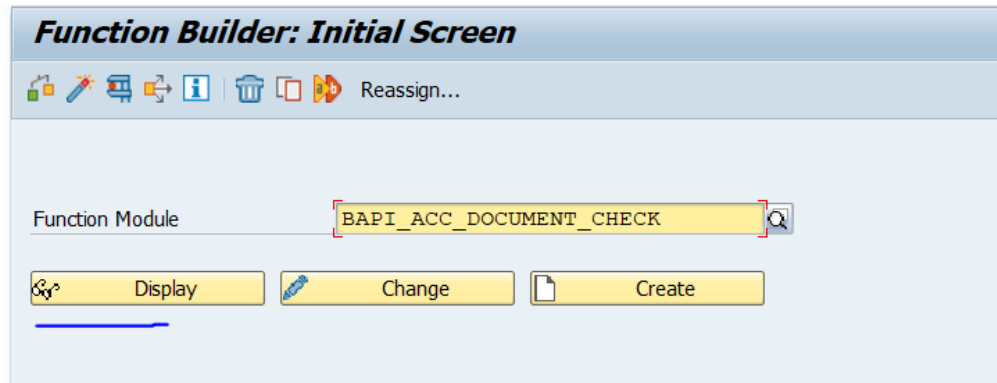
External debugging can be done in any environment (Dev, QA, Prod). **However, it is NOT recommended to debug in the Production environment since it will stop the processing of RFCs due to the debug point in the code.** Best practise is to replicate the issue in a non-production environment and do the external debugging.

Who is responsible for doing external debugging?

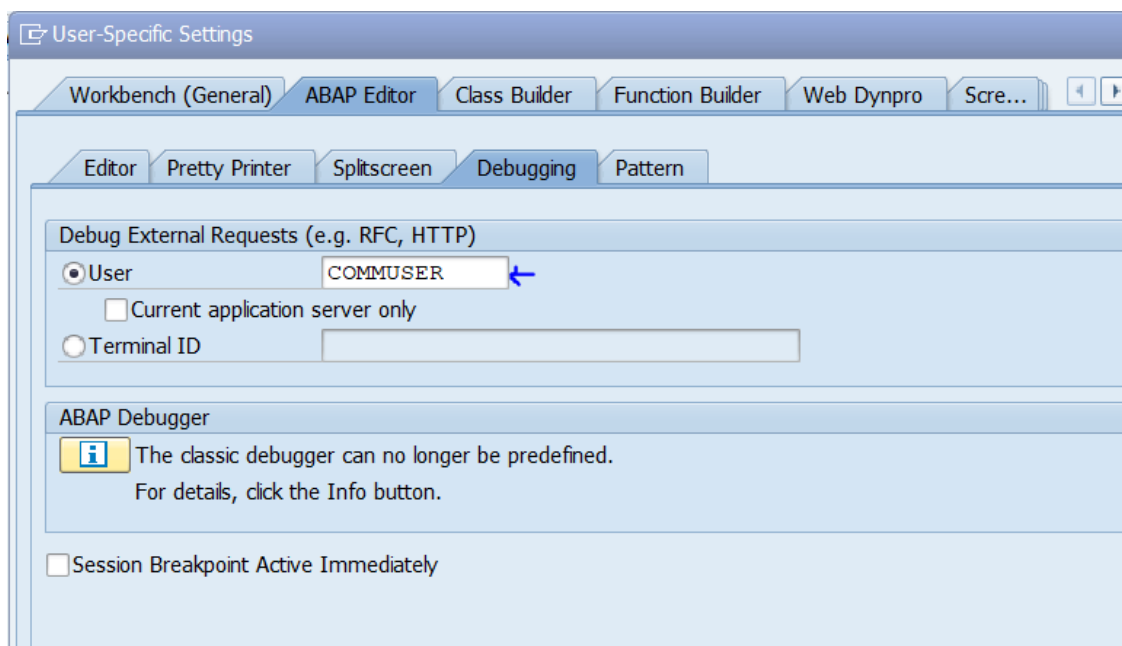
ABAP consultants / Basis consultants

How to do external debugging?

1. Identify which RFC needs to be debugged.
2. Go to SE37 transaction and open the code.



3. Select from the menu bar Utilities > Settings > ABAP Editor > Debugging. Enter 'COMMUSER' (communication user between SAP and .NET) as the User. 'COMMUSER' should have SAP_ALL or S_DEVELOP authorization assigned.



4. Select the line on which you need to stop the processing and click the External Debugging icon.

Function Builder: Display BAPI_ACC_DOCUMENT_CHECK

Function module: BAPI_ACC_DOCUMENT_CHECK Active

Attributes Import Export Changing Tables Exceptions Source code

```

14  ** ACCOUNTTX STRUCTURE BAPIACTX09 OPTIONAL
15  ** CURRENCYAMOUNT STRUCTURE BAPIACCR09 OPTIONAL
16  ** CRITERIA STRUCTURE BAPIACKEC9 OPTIONAL
17  ** VALUEFIELD STRUCTURE BAPIACKEV9 OPTIONAL
18  ** EXTENSION1 STRUCTURE BAPIACEXTC OPTIONAL
19  ** RETURN STRUCTURE BAPIRET2
20  ** PAYMENTCARD STRUCTURE BAPIACPC09 OPTIONAL
21  ** CONTRACTITEM STRUCTURE BAPIACCAIT OPTIONAL
22  ** EXTENSION2 STRUCTURE BAPIFAEX OPTIONAL
23  ** REALESTATE STRUCTURE BAPIACRE09 OPTIONAL
24  ** ACCOUNTWT STRUCTURE BAPIACWT09 OPTIONAL
25  **
26
27  DATA ld_currency.
28
29  * generate test data record
30  fbgenmac 'BAPI_ACC_DOCUMENT_CHECK'.          "note 2266603
31
32  * AFLE INBOUND MAPPING
33  DATA: ls_return LIKE LINE OF return.
34  "accountpayable
35  DATA(it_accountpayable) = accountpayable[].
36  DATA(it_fnames_ap) = VALUE cl_afle_chk_mapper=>tt_amt_bapi_fname(
37    ( short = 'PYMT_AMT' long = 'PYMT_AMT_LONG' comp_length = 13) curr = 'PYMT_CUR' curr_iso = 'PYMT_C'
38    ).
39
40  LOOP AT it_accountpayable ASSIGNING FIELD-SYMBOL(<fs_ap>).
41    CLEAR ls_return.
42    cl_afle_chk_mapper=>bapi_struct_inbound( EXPORTING it_fnames = it_fnames_ap
43                                              IMPORTING return = ls_return
44                                              CHANGING cs_amt_ext = <fs_ap> ).
45  IF ls_return-type = 'E'.

```

The below message should be visible, if the above steps were followed correctly.

Function module: BAPI_ACC_DOCUMENT_CHECK Active

Attributes Import Export Changing Tables Exceptions Source code

```

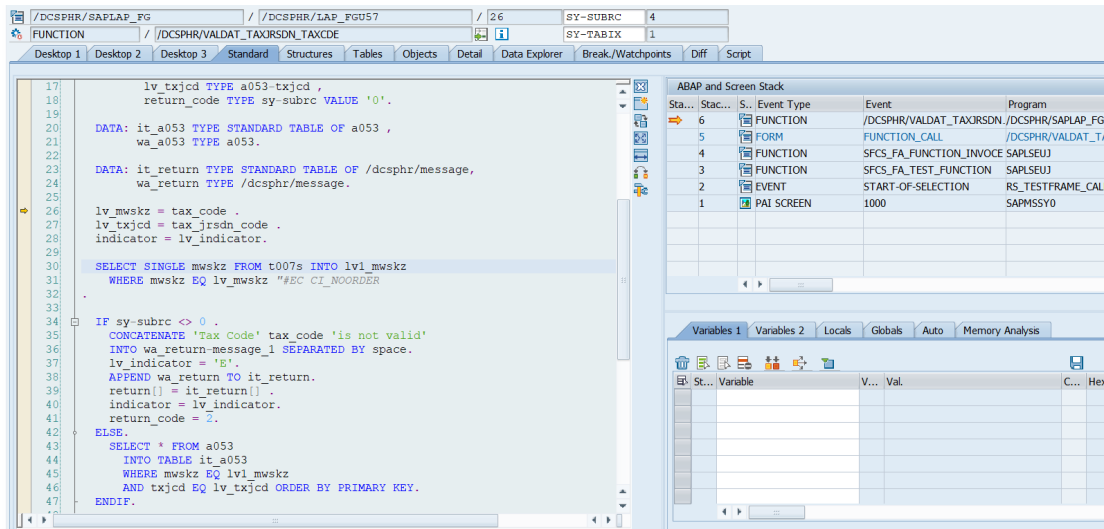
14  ** ACCOUNTTX STRUCTURE BAPIACTX09 OPTIONAL
15  ** CURRENCYAMOUNT STRUCTURE BAPIACCR09 OPTIONAL
16  ** CRITERIA STRUCTURE BAPIACKEC9 OPTIONAL
17  ** VALUEFIELD STRUCTURE BAPIACKEV9 OPTIONAL
18  ** EXTENSION1 STRUCTURE BAPIACEXTC OPTIONAL
19  ** RETURN STRUCTURE BAPIRET2
20  ** PAYMENTCARD STRUCTURE BAPIACPC09 OPTIONAL
21  ** CONTRACTITEM STRUCTURE BAPIACCAIT OPTIONAL
22  ** EXTENSION2 STRUCTURE BAPIFAEX OPTIONAL
23  ** REALESTATE STRUCTURE BAPIACRE09 OPTIONAL
24  ** ACCOUNTWT STRUCTURE BAPIACWT09 OPTIONAL
25  **
26
27  DATA ld_currency.
28
29  * generate test data record
30  fbgenmac 'BAPI_ACC_DOCUMENT_CHECK'.          "note 2266603
31
32  * AFLE INBOUND MAPPING
33  DATA: ls_return LIKE LINE OF return.
34  "accountpayable
35  DATA(it_accountpayable) = accountpayable[].
36  DATA(it_fnames_ap) = VALUE cl_afle_chk_mapper=>tt_amt_bapi_fname(
37    ( short = 'PYMT_AMT' long = 'PYMT_AMT_LONG' comp_length = 13) curr = 'PYMT_CUR' curr_iso = 'PYMT_C'
38    ).
39
40  LOOP AT it_accountpayable ASSIGNING FIELD-SYMBOL(<fs_ap>).
41    CLEAR ls_return.
42    cl_afle_chk_mapper=>bapi_struct_inbound( EXPORTING it_fnames = it_fnames_ap
43                                              IMPORTING return = ls_return
44                                              CHANGING cs_amt_ext = <fs_ap> ).
45  IF ls_return-type = 'E'.
46    APPEND ls_return TO return.
47  ENDFOR

```

Scope: FUNCTION BAPI_ACC_DOCUMENT_CHECK LOOP

☒ Breakpoint was set for external debugging (System-wide, user: COMMUSER, Validity: 2 Hours)

5. Trigger the RFC from .NET front end and the program will make a hard stop there.

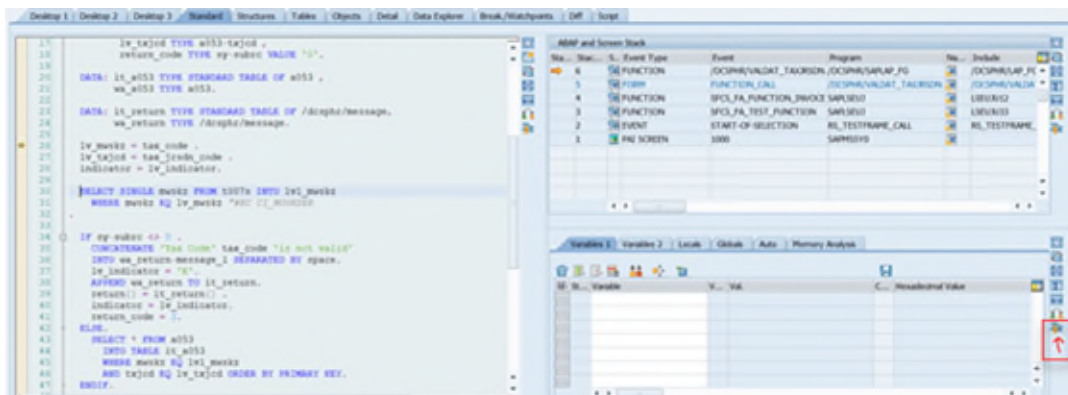


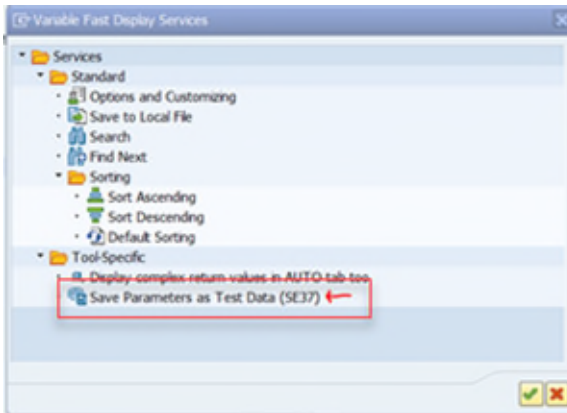
Use the F5 key to process line by line. Use the F6 key to process subroutines directly (without going inside the subroutine). The right side view is available to check the values inside each variable, parameter or table used inside the program. Use the F8 key to execute the RFC at once.

Save Parameters as Test Data

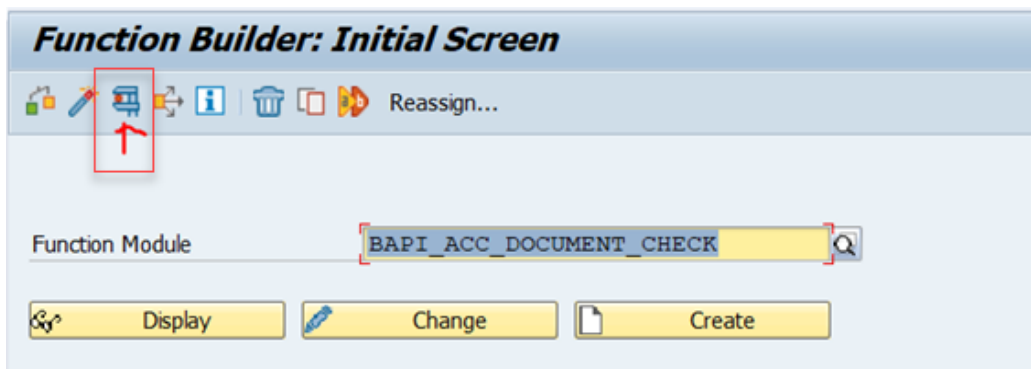
Import tables and parameters can be saved directly inside the RFC as a test variant; if you need to reprocess the same RFC this method can be used.

1. Press the button at the bottom right corner and select Save Parameters as Test Data (SE37).

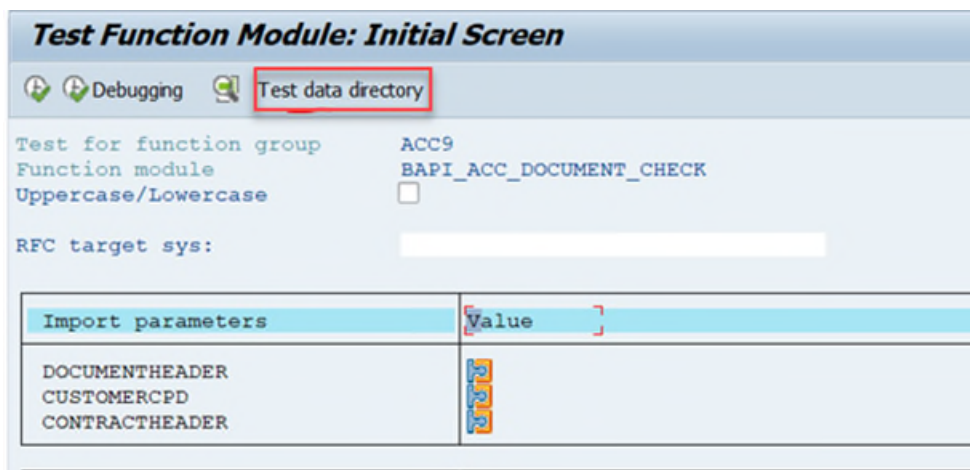




2. Provide a name for the test variant and it will be automatically saved in SE37 under that RFC name with all the import parameters and tables. This is helpful while doing the reprocessing of the RFC in SE37.
3. The saved variant can be accessed through the SE37 transaction by pressing the execute option (F8).



4. From the next screen, select Test Data Directory. You'll find the already saved variant inside with all the tables and input parameters.



Agents and Plug-ins

See the ***SAP Agents and Plug-ins Guide*** for information about configuring SAP agents/plugin-ins and using SAP plug-ins, and ***Workflow Agents and Plug-ins Guide*** for more information about registering agents and plug-ins and assigning them to workflow activities.