

BOPF Archiving

SAP AG, 2012

The SAP logo is located in the bottom left corner of the slide. It consists of the letters 'SAP' in a bold, white, sans-serif font, set against a blue rectangular background that has a slight gradient and a white border.

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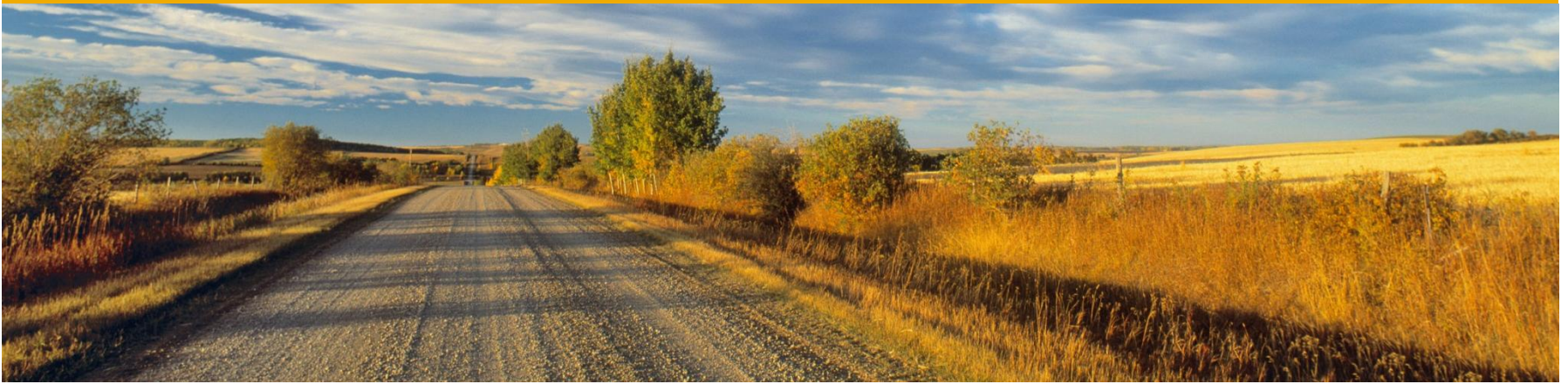
Agenda

Introduction

Archiving Overview

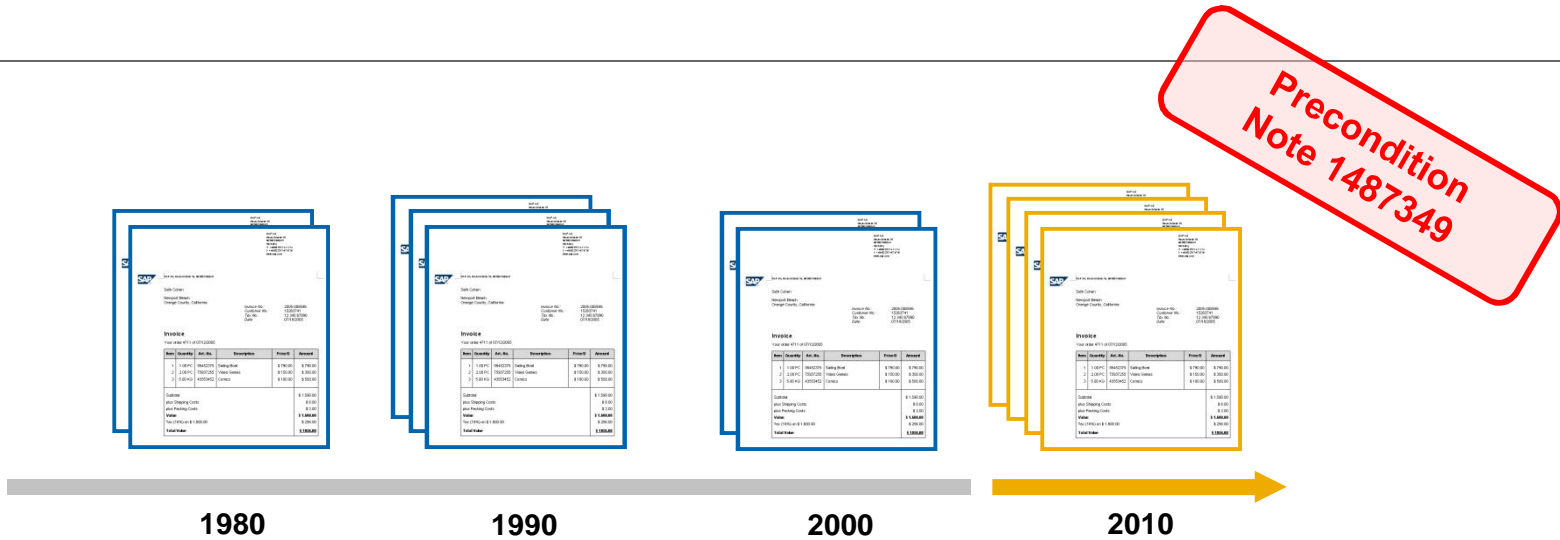
How to Use Archiving

Further Documentation



Introduction

Introduction

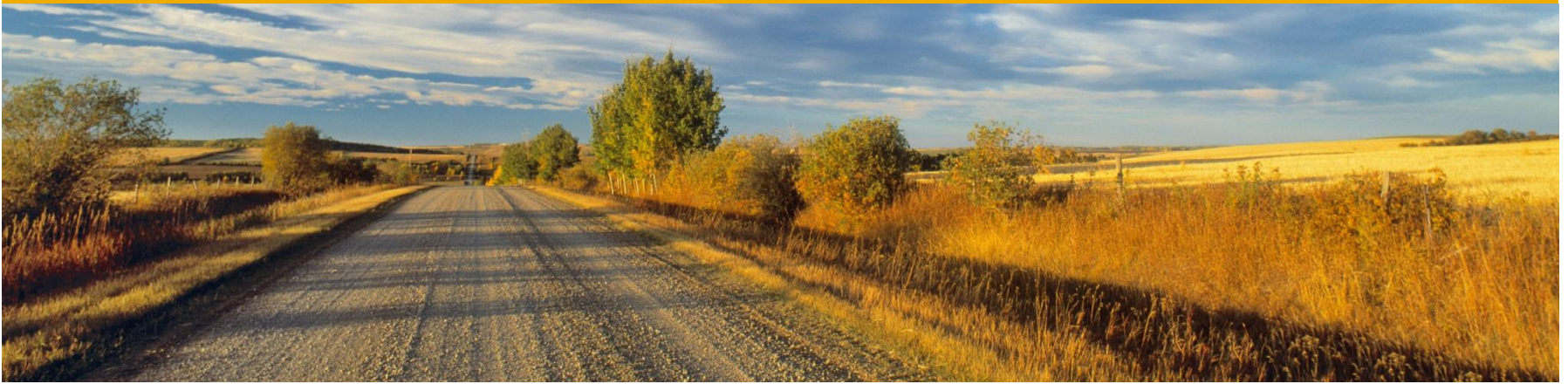


Old customer invoices are no longer of interest, but they...

- ...still require database storage
- ...slow down functions operating on the whole database table

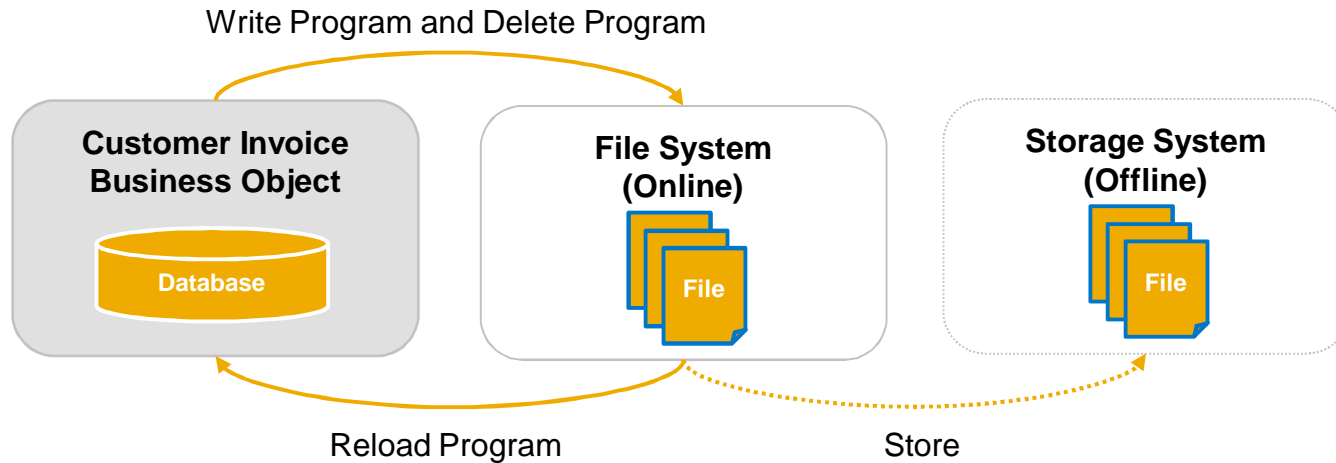
BOPF uses SAP NetWeaver's Archive Development Kit (ADK) for archiving these instances:

- Automatic compression of archived instances (up to factor 5)
- Archived instances are still readable at runtime
- Operation tools for scheduling and management (SARA)



Archiving Overview

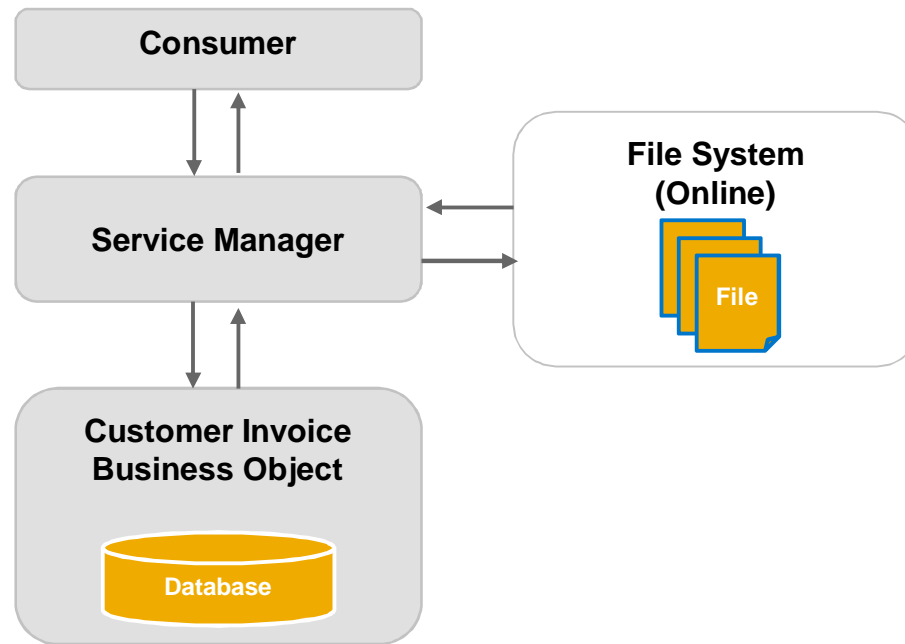
Archiving Process



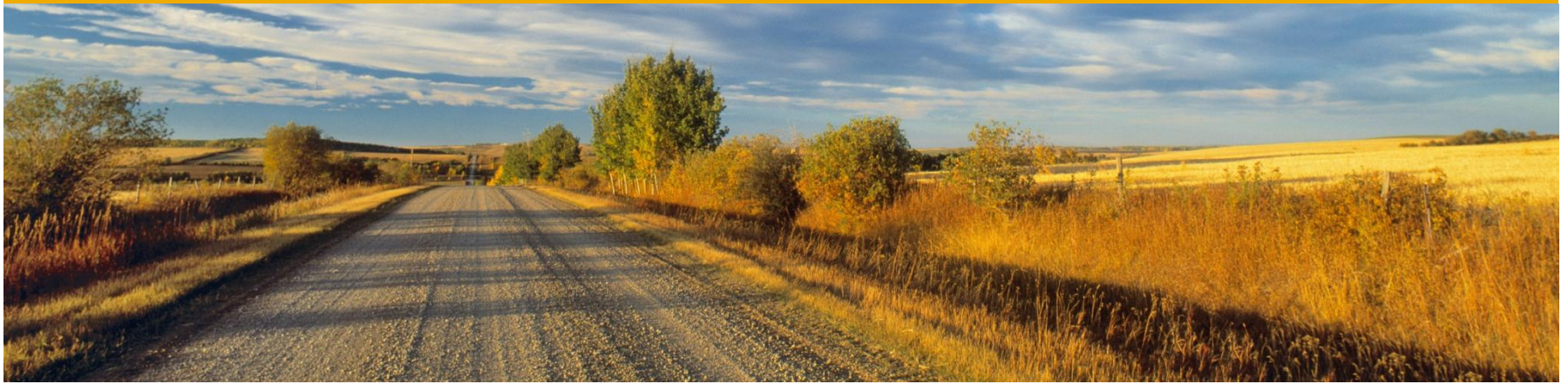
Archiving Subprocesses:

- **Preproc Program**: Check which business object instances must be archived and set their archiving status to “Archivable”.
- **Write Program**: Create archive files and write archivable instances to files.
- **Delete Program**: Read the instances from the archive files. If reading was successful, set status in database to “Archived”.
- **Postproc Program**: Delete all instances in the state “Archived”.
- **Reload Program**: Move archived instances back into the business object’s database.

Archiving Runtime



During core services RETRIEVE, RETRIEVE_PROPERTY, and CONVERT_ALTERN_KEY, BOPF includes archived files automatically.



How to Use Archiving

How to Use Archiving

Create Programs

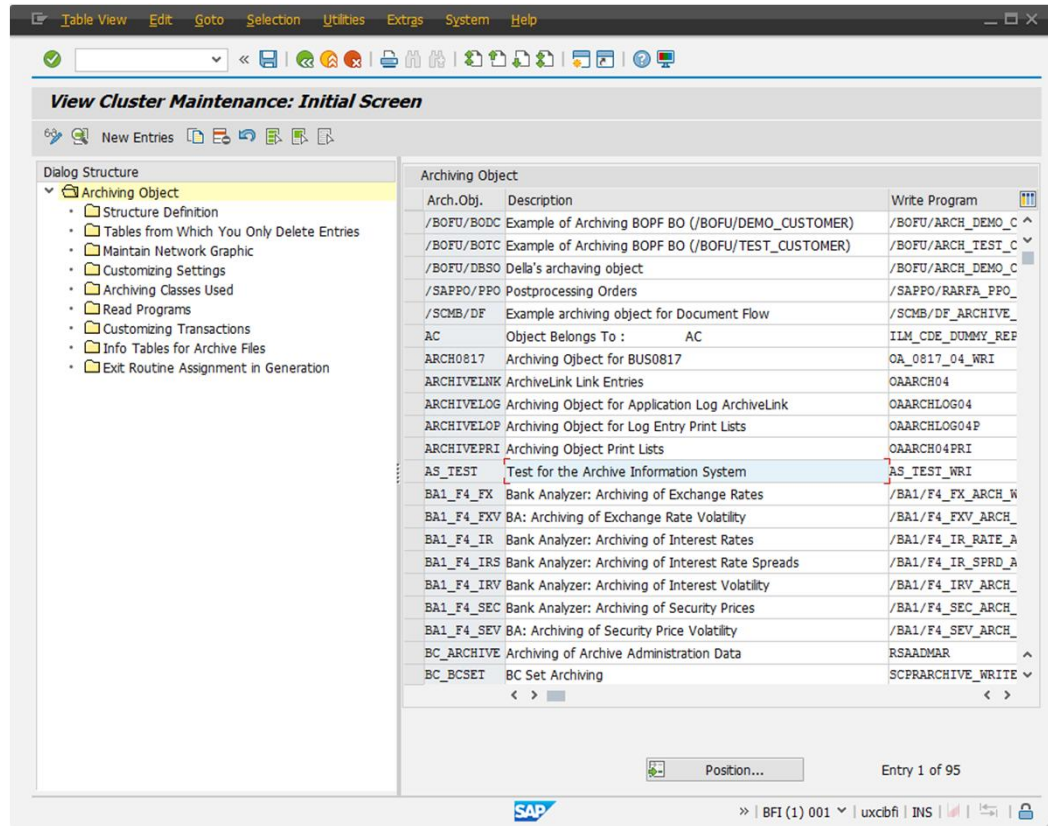
Copy the following reports:

- /BOFU/ARCH_TEST_CUSTOMER_PRE
- /BOFU/ARCH_TEST_CUSTOMER_WRI
- /BOFU/ARCH_TEST_CUSTOMER_DEL

Modify the name of your business object (`gs_bo-bo_name`) in the copies.

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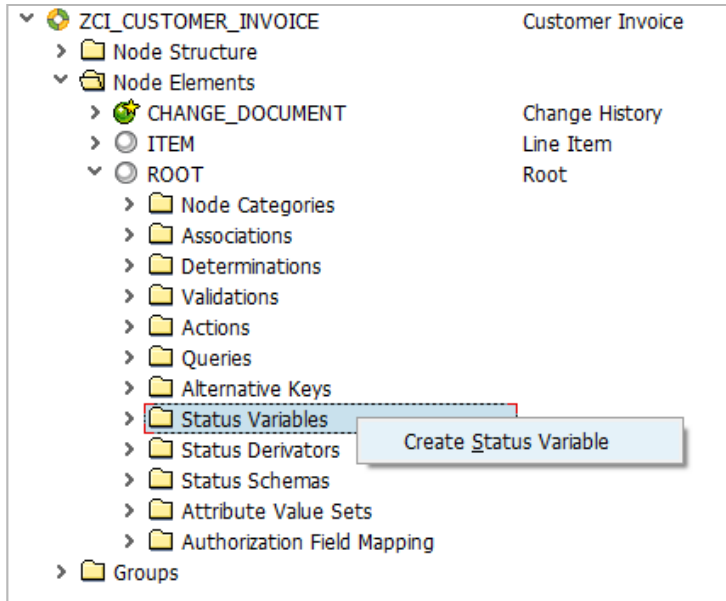
Create an Archiving Object



- Start transaction **AOBJ** (View Cluster), click on “New Entries”.
- Define all DB tables of the BO in “Structure Definition”.

How to Use Archiving

Add an Archiving Status



The screenshot shows the 'Status Variable' configuration form. The 'Status Variable Name' is 'ARCHIVING_STATUS'. The 'Description' field is empty. The 'Status Variable Settings' table is as follows:

Status Variable Settings	
Node	ROOT
Status Var. categ.	Standard Status
Related Attrib. Name	ARCHIVING_STATUS

- Create a status variable on the ROOT node indicating the archiving status of an instance. As soon as a BO instance is written to the archive, its status is set to “Archived”.
- Open your business object in transaction /BOBF/CONF_UI, go to the ROOT node, and add a new element, ARCHIVING_STATUS, of type /BOFU/ARCHIVING_STATUS_CODE.
- Add a status variable related to this new element.

How to Use Archiving

Add Action “Archivability Check”

The screenshot shows the SAP Action Configuration Wizard for the action 'CHECK_ARCHIVABILITY'. The wizard is divided into several tabs: 'Action', 'Read & Write Nodes', 'Node Category Assignment', and 'Property Change Trigger'. The 'Action' tab is currently selected. The 'Action Name' field is set to 'CHECK_ARCHIVABILITY' and is highlighted with a red box. The 'Description' field is set to 'Check Archivability'. Below the description, there is a section for 'Action Settings' with the following values: 'Node' is 'ROOT', 'Action Category' is 'Object-Specific Action', 'Action Cardinality' is 'Multiple Node Instances', and 'Change mode' is 'Exclusive Write Mode'. There is a checkbox for 'Execute Action only if it can be executed for all NodeIDs' which is currently unchecked. Below the settings, there is a section for 'Implementation' with the following values: 'Class/Interface' is 'ZCL_CI_A_CHECK_ARCHIVABILITY', 'Prepare method implemented' is checked, and 'Parameter Structure' is empty.

- To determine the business object instances that must be archived, an action on the ROOT node called CHECK_ARCHIVABILITY must be created.
- In its implementation, you might implement a time difference check to identify old customer invoices. If an instance must be archived, set its status to “02 Archiving in Progress”.
- See /BOFU/CL_A_DMEO_CUSTOMER as an example implementation.

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Add Archiving Query

Create a query on the ROOT node to select the instances with the status “ Marked for Archiving”, e.g. /BOFU/DEMO_CUSTOMER, query QU_FOR_CHECK_ARCHIVABILITY.

Create a program to generate a selection screen for the query mentioned above, e.g. report /BOFU/ARCH_DEMO_CUSTOMER_SEL.

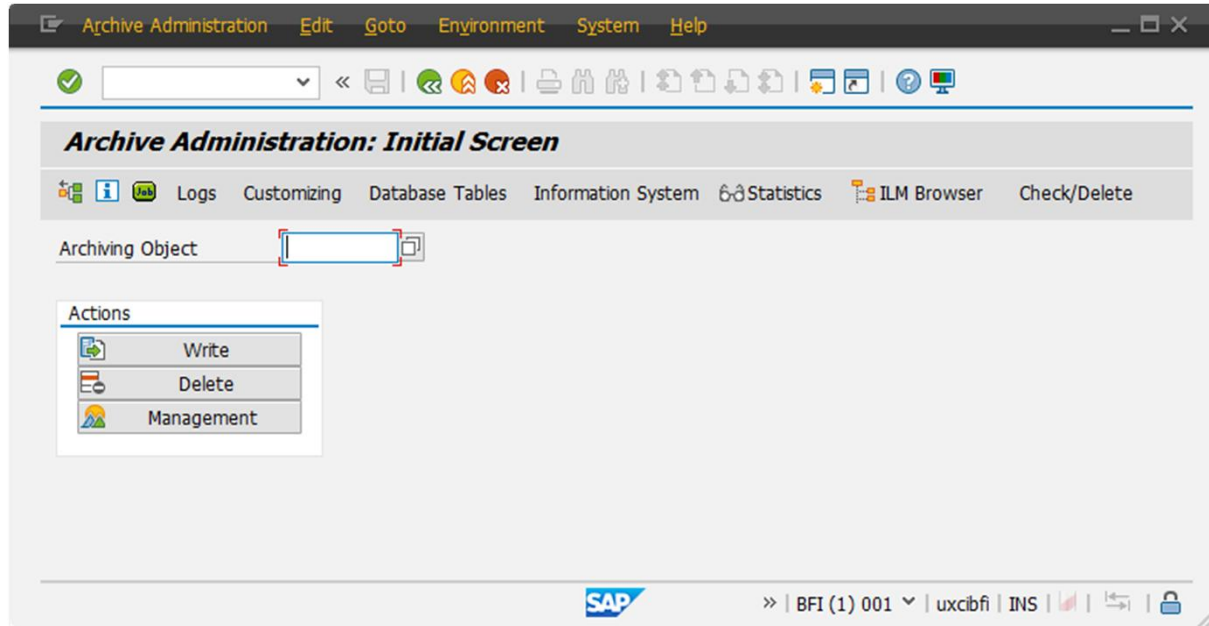
```
TABLES /bofu/s_demo_customer_hdr_1.
```

```
SELECTION-SCREEN BEGIN OF BLOCK object WITH FRAME TITLE ft_obj.  
SELECT-OPTIONS custid FOR /bofu/s_demo_customer_hdr_1-customer_id.  
SELECT-OPTIONS slsorg FOR /bofu/s_demo_customer_hdr_1-SALES_ORG.  
SELECT-OPTIONS ccurr FOR /bofu/s_demo_customer_hdr_1-CUST_CURR.  
SELECTION-SCREEN END OF BLOCK object.
```

```
SELECTION-SCREEN BEGIN OF BLOCK further_sel_crit WITH FRAME TITLE gv_fselc.  
SELECT-OPTIONS datet_ch FOR /bofu/s_demo_customer_hdr_1-changed_on.  
SELECTION-SCREEN END OF BLOCK further_sel_crit.
```

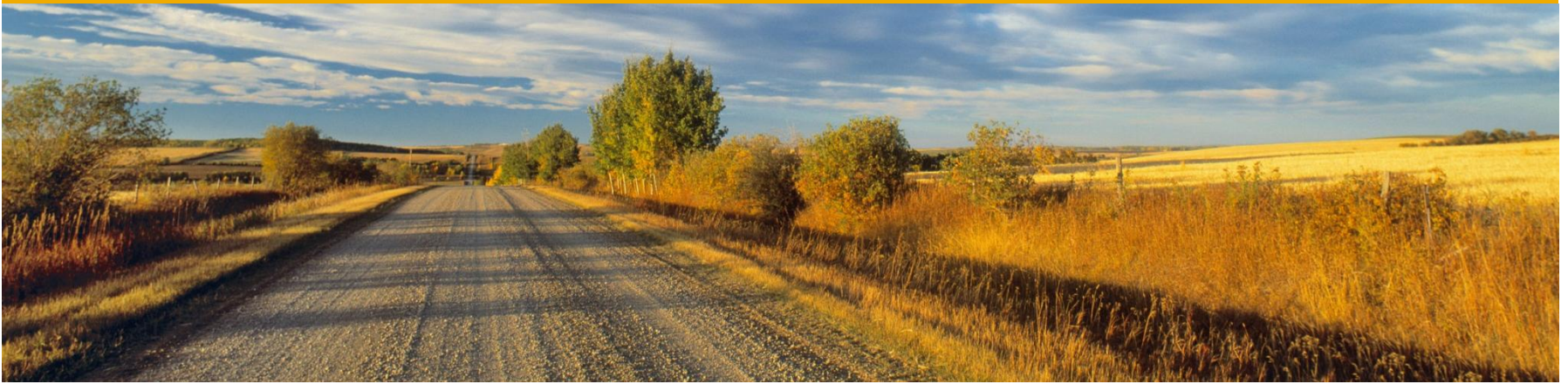
How to Use Archiving

Define Archiving Job



Use transaction **SARA**:

- Schedule jobs and check logs
- Execute single archiving subprocess (PreProc, Write, Delete, PostProc)
- Check archive file details (size)



Further Documentation

Further Documentation

More details about SARA:

http://help.sap.com/saphelp_nw04/helpdata/en/6a/83bf3ab169cb17e10000000a11402f/frameset.htm



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