

# Basis (BC)



HELP.CAARCB

**Release 4.6C**



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## Icons

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## Basis (BC)

The following table shows the archiving objects that are available within Basis:

Basis objects	Archiving object
User changes	<a href="#">US_USER [Page 7]</a>
Authorization changes	<a href="#">US_AUTH [Page 9]</a>
Profile changes	<a href="#">US_PROF [Page 11]</a>
Work items	<a href="#">WORKITEM [Page 13]</a>
IDocs	<a href="#">IDOC [Page 16]</a>
Table changes	<a href="#">BC_DBLOGS [Page 21]</a>
SAP ArchiveLink link entries	<a href="#">ARCHIVELNK [Page 26]</a>
Archive administration data	<a href="#">BC_ARCHIVE [Page 29]</a>

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**Archiving User and Authorization Changes (BC-ADM-SEC)**

## Archiving User and Authorization Changes (BC-ADM-SEC)

You can archive change documents of the following types that are generated in the course of user and authorization maintenance:

- **Users:** Changes in assigned authorizations and other characteristics; changes in passwords  
In transaction SU01 (User maintenance), choose *Environment* → *Archive. and read.*
- **Profiles:** All changes  
In transaction SU02 (Profile maintenance), choose *Utilities* → *Archive and read.*
- **Authorizations:** All changes  
In transaction SU03 (Authorization maintenance), choose *Utilities* → *Archive and read*

## Archiving User Change Records (BC-ADM-SEC)

You can archive change records for the following changes to user master records:

- Authorization changes and changes to other user characteristics
- Changes to user passwords

### Object Definition

The archiving object **US\_USER** is used to archive password change records from table USRH04.

The object **US\_PASS** archives records of changes to user master records other than password changes.

For example, authorization changes are recorded in a user master record. These recordings are stored in the USRH02 table.

### Technical Information

Unless you are archiving very many change records, an archiving run should have no significant effect on the performance of your system. The user change records require the following memory space (uncompressed):

- **US\_PASS** password change records: 300 bytes
- **US\_USER** user change records: 100 bytes

### Dependencies

When you archive user change records, it does not have any effect on other archivable data. There are no particular dependencies or relationships between user change records and other archivable data.

### Archiving Criterion and Retention Requirements

SAP recommends a retention period of 10 years for all user and authorization change records.

Change records are archived according to the date that you specify. All records older than the date specified are archived. Old archives are not automatically deleted.

### Log

The log files generated by archiving and deleting records are stored in the SAP spool system. The archiving log records the number of change records archived. The delete log lists the change records that were deleted after the archiving session.

### Creating an Archive File

Choose *Tools* → *Administration* → *User maintenance*. Then choose *Users* → *Environment* → *Archive and read* and then the required archiving function.

The archiving function calls the standard archiving interface, where the correct archiving object is already specified.

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### Archiving User Change Records (BC-ADM-SEC)

You need only specify (or create) an appropriate report variant, specify the start time and printing specifications for the background processing of the report, and schedule the report with *Create job*.

See also the documentation on the archiving procedure in general. You will find this documentation in the first section of this document.

### Executing the Deletion Program

You must explicitly delete archived records after an archiving session has been successfully completed. Be sure to check the archiving log to be sure that the archiving session has been completed successfully. Also, be sure that you specify the same date for the deletion program. Otherwise, too many or too few change records will be deleted.



## Archiving Authorization Change Records (BC-ADM-SEC)

You can archive change records for all changes to authorizations.

### Object Definition

The archiving object **US\_AUTH** is used to archive change records for changes to authorizations from table USRH12.

### Technical Information

Unless you are archiving very many change records, an archiving run should have no significant effect on the performance of your system. An authorization change record requires about 100 bytes (uncompressed).

### Dependencies

Archiving authorization change records does not have any effect on other archivable data. There are no particular dependencies or relationships between authorization change records and other archivable data.

### Archiving Criterion and Retention Requirements

SAP recommends a retention period of 10 years for all user and authorization change records.

Change records are archived according to the date that you specify. All records older than the date specified are archived. Old archives are not automatically deleted.

### Log

The log files generated by archiving and deleting records are stored in the SAP spool system. The archiving log records the number of change records archived. The delete log lists the change records that were deleted after the archiving session.

### Creating an Archive File

Choose *Tools* → *Administration* → *User maintenance*. and then *Manual maintenance* → *Edit authorizations manually* (transaction SU03), then *Utilities* → *Archive and read*, and select the archive function.

The archiving function calls the standard archiving interface, where the correct archiving object is already specified.

You need only specify (or create) an appropriate report variant, specify the start time and printing specifications for the background processing of the report, and schedule the report with *Create job*.

See also the documentation on the archiving procedure in general. You will find this documentation in the first section of this document.

### Executing the Deletion Program

You must explicitly delete archived records after an archiving session has been successfully completed. Be sure to check the archiving log to be sure that the archiving session has been

**Archiving Authorization Change Records (BC-ADM-SEC)**

completed successfully. Also, be sure that you specify the same date for the deletion program. Otherwise, too many or too few change records will be deleted.

## Archiving Profile Change Records (BC-ADM-SEC)

You can archive change records for all changes to profiles.

### Object Definition

The archiving object US\_PROF is used to archive change records for changes to authorization profiles from table USRH10.

### Technical Information

Unless you are archiving very many change records, an archiving run should have no significant effect on the performance of your system. A profile change record requires between 0.5 and 1 KB (uncompressed).

### Dependencies

Archiving profile change records does not have any effect on other archivable data. There are no particular dependencies or relationships between profile change records and other archivable data.

### Archiving Criterion and Retention Requirements

SAP recommends a retention period of 10 years for all user and authorization change records.

Change records are archived according to the date that you specify. All records older than the date specified are archived. Old archives are not automatically deleted.

### Log

The log files generated by archiving and deleting records are stored in the SAP spool system. The archiving log records the number of change records archived. The delete log lists the change records that were deleted after the archiving session.

### Creating an Archive File

Choose *Tools* → *Administration* → *User maintenance*. and then *Manual maintenance* → *Edit authorizations manually* (transaction SU03), then *Utilities* → *Archive and read*, and select the archive function.

The archiving function calls the standard archiving interface, where the correct archiving object is already specified.

You need only specify (or create) an appropriate report variant, specify the start time and printing specifications for the background processing of the report, and schedule the report with *Create job*.

See also the documentation on the archiving procedure in general. You will find this documentation in the first section of this document.

### Executing the Deletion Program

You must explicitly delete archived records after an archiving session has been successfully completed. Be sure to check the archiving log to be sure that the archiving session has been

**Archiving Profile Change Records (BC-ADM-SEC)**

completed successfully. Also, be sure that you specify the same date for the deletion program. Otherwise, too many or too few change records will be deleted.

## Archiving Work Items (BC-BMT-WFM)

### Definition

The archiving object `WORKITEM` is used to archive and delete [work items \[Ext.\]](#).

### Use

#### Archiving Work Items

The system archives all data that belongs to a work item and that is not purely runtime data.

You can only archive completed workflow work items. All work items dependent on this workflow work item are also archived. A work item that is dependent on higher-level work items cannot be archived on its own.

The log data, workflow manager data and dependent work item is archived.

The objects in the container of a work item are archived as references only. The same applies to the work item attachments. The attachments themselves are not archived because attachments can be objects outside R/3, such as Microsoft Word files. Archiving is not currently supported for such data.



When the archived work items are deleted, the attachments (not archived) are also deleted.

#### Criteria for the Permissibility of Archiving

You can only archive work items that have one of the following statuses:

- *Completed*  
Execution of the work item has been completed.
- *Logically deleted (canceled)*  
Execution of the work item is no longer necessary or practical in terms of the flow logic.

### Structure

#### Archiving work items

Choose *Tools* → *Business Workflow* → *Development* → *Administration* → *Workflow Runtime* → *Reorganization* → *Archive Work Item*. For further information on archiving see [The Archiving Procedure \[Ext.\]](#).

You can use the following selection criteria for defining the variant required. You use it to control which work items are to be archived:

- Work item ID (work item number)
- Task ID
- Current agent of the work item

## Archiving Work Items (BC-BMT-WFM)

- Creation date of the work item
- Completion date of the work item

You can execute direct archiving with the report `RSWWARCA`.



If you later want to display archived work items for an object, you should use the [Archive Information System \(SAP AS\) \[Ext.\]](#). Also activate the archive information structure `SAP_BO_2_WI_001`. For more information see [Using the Archive Information System \[Ext.\]](#).

## Deleting Archived Work Items

Choose *Tools* → *Business Workflow* → *Development* → *Administration* → *Workflow Runtime* → *Reorganization* → *Archive Work Item*. For further information on archiving see [The Archiving Procedure \[Ext.\]](#).

You can specify whether the deletion program started after archiving is to be run in test mode. You specify whether or not the deletion program is started in general [Archive Customizing \[Ext.\]](#).

Archived work items can also be directly deleted with the report `RSWWARCD`. For direct [Deletion of Work Items \[Ext.\]](#) that have not been archived, choose *Tools* → *Business Workflow* → *Administration* → *Workflow Runtime* → *Reorganization* → *Delete Work Item*. The report `RSWWCIDE` should be used for the container linkage item (type C work item) for performance reasons



If you want to delete work items that do actually meet the archiving criteria but should not be archived, you should still execute archiving for performance reasons. The deletion then made possible by using the archiving program performs better than a single deletion. You can subsequently manually delete the archiving file with the archived work items in your file system.

## Displaying Archived Work Items

Choose *Tools* → *Business Workflow* → *Development* → *Administration* → *Workflow Runtime* → *Reorganization* → *Archive Work Item*. For further information on archiving see [The Archiving Procedure \[Ext.\]](#).

If you select *Analyzing*, the report `RSWWARCR` is used for reading and displaying archived work items.



This report is only intended as a template for an individual customer specific report, as the data selection from the archive and the following data formatting are generally customer-specific. The customer-specific adjustments begin after the function module `SWW_WI_LIST_ARCHIVED_READ` is called.

Archived work items cannot be reloaded in the production system.

## Displaying Archived Work Items for Object

Choose *Tools* → *Business Workflow* → *Development* → *Administration* → *Workflow Runtime* → *Reorganization* → *Display Workflows From Archive*. You can determine the archived workflows for a given object. When you have activated the archive information system, the system automatically determines the archive that contains the archived data. Otherwise, you must know the archive.

Display takes place in the form of a workflow log without the display of detailed data.



You can determine the workflow with which a specific document was released from the archive.

## Integration

You specify technical values for the archiving run (such as name, path and maximum size of the archive file) and settings for the deletion program in [Customizing for Archiving \[Ext.\]](#).

## Archiving IDocs (BC-SRV-EDI)

## Archiving IDocs (BC-SRV-EDI)

### Definition

The archiving object IDOC serves for archiving IDocs. It consists of the IDoc **data base tables**:

Table	Description
EDIDC	contains the IDoc control record
EDID4	contains the IDoc data records
EDIDS	contains the IDoc status records

and the **archiving class** IDOC as part of the function group EDIA.



## Customizing IDOC (BC-SRV-EDI)

### Use

There are no special customizing activities necessary for the archiving object IDOC. You define the general activities (e.g. name and path of the archive file), in [Customizing \[Ext.\]](#).

IDOC Authorizations (BC-SRV-EDI)

## IDOC Authorizations (BC-SRV-EDI)

### Use

Only the [User Authorization Checks \[Ext.\]](#) is needed.

## Deletion Criteria for IDOC (BC-SRV-EDI)

### Use

The IDoc's **current** status must be archivable; only then can it be archived and, subsequently, deleted from the database. The current status is part of the IDoc's control record. Control records are stored in the database table EDIDC.

Certain IDoc statuses are supplied as archivable, others not. You can display or change this assignment.

For more information, see

[Displaying or Changing Archivable Status \[Ext.\]](#)

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## Single Display Using SAP AS (BC-SRV-EDI)

# Single Display Using SAP AS (BC-SRV-EDI)

## Use

You can display all archived IDocs by choosing the archive information system (SAP AS). There are two differences for IDoc search in the archive:

- The SAP AS displays all IDoc records, that is, the status records as well as the control and data records.
- You cannot use SAP AS to search for character strings in data records.

## Prerequisites

The archive files are available in the system and are not stored using the Content Management Service (CMS).

The archive info structure is active and set up (see "activities")

## Features

You use the archive info structure SAP\_IDOC\_001 in the standard system to search, for example, for

- Time (creation and last change)
- Partner
- Message
- IDoc number

You can also define your own structures. The field catalog containing the fields is called SAP\_IDOC\_001. It contains the fields from the IDoc control record EDI\_DC, with the exception of client, ALE serialization and record type.

## Authorizations

For single display, only the [General Archiving Authorization \[Ext.\]](#) is needed.

## Activities

[If necessary, you must activate the archive info structure \[Ext.\]](#). You can display the initial screen from the [central archiving transaction \[Ext.\]](#) by choosing *Information system* → *Customizing*.

[If necessary, you must construct the archive info structure \[Ext.\]](#). You can display the initial screen from the central archiving transaction by choosing *Information system* → *Status*.

For single display [you must evaluate the archive info structure \[Ext.\]](#). You can display the initial screen from the central archiving transaction by choosing *Information system* → *Archive Explorer*.

## Archiving Table Change Logs (BC-DWB-CUS)

### Definition

The archiving object BC\_DBLOGS is used for archiving customizing table change logs. The R/3 System logs customizing table changes if:

1. the *Log data changes* flag is set in the technical settings for the table.
2. logging is active.



Logging can be activated and deactivated for a particular client using the profile parameter `rec/client`.

### Use

It is recommended that you archive the change logs periodically, for example, quarterly or annually.

### Structure

The logs are saved in the table DBTABLOG. The archiving object archives this table only.

BC\_DBLOGS has the following functions:

#### Function/report assignment

Function	Report
Archive	RSLDARCH01
Delete	RSLDARCH02
Analyze	RSLDARCH03 (for the entire archiving session)
Restore	RSLDARCH04 (for the entire archiving session)



The analysis prints out the archive contents.



Archiving automatically generates a comment in the archiving session management entry. This comment contains the time period that was archived. **The text should not be deleted.**

### Integration

This archiving object does not depend on any other archiving objects.

Log entries are archived independently of the client.

Archiving Table Change Logs (BC-DWB-CUS)

## Technical Data (BC-BEW-CTL)

An internal run-time analysis run in a highly-loaded development system showed that ca 100.000 log entries are archived in an hour.

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**Variant Settings for Archiving (BC-DWB-CUS)**

## Variant Settings for Archiving (BC-DWB-CUS)

### Use

[Archiving Procedure \[Ext.\]](#)

### Features

In the change logs, you specify which time interval is archived. You must specify the date and time of the beginning and end of the time interval.

You also specify whether the archiving is a test run.



## Archiving Object-Specific Customizing (BC-DWB-CUS)

### Use

[Archiving Object-Specific Customizing \[Ext.\]](#)

### Activities

A **data object** is defined as **1.000 table entries** for the object **BC\_DBLOGS** for the input field *Maximum no. of data objects* in the group box *Archive file size*.

By contrast, the *Commit counter* in the group box *Deletion program settings* refers to table entries not data objects.

## Archiving Link Entries (BC-SRV-ARL)

## Archiving Link Entries (BC-SRV-ARL)

### Definition

The archiving object ARCHIVELNK is used to archive SAP ArchiveLink link entries.

### Use

A **link entry** is a unique reference from a document stored in an external storage system (using SAP ArchiveLink) to a business object generated in the R/3 application component.

To create the link between the business objects in the R/3 application and the documents in the storage system, you must carry out the following administrative tasks in the R/3 System:

- Define the document types
- Define the storage systems
- Assign
- document types and object types  
to
- storage systems and link tables

The business object is assigned to the corresponding stored document in the link table in the database.

You can specify an expiry date for each link entry. When the expiry date is reached, you can archive the link entry/entries and delete them from the database using the ADK archiving transaction.

### Structure

When you use the archiving object ARCHIVELNK, data from the various SAP ArchiveLink link tables is archived. For information on table names and the number and names of link entries, choose *Tools* → *Business Documents*, *Others* → *Stored documents*, *Stored documents* → *Expiry date* → *Display* or *Analyze*.

The following functions are available for ARCHIVELNK:

Action	Report
Archiving	oaarch04
Deleting	oaarch06
Reading	oaarch05

To call the transaction for archiving link entries, choose *Tools* → *Administration* → *Administration* → *Data archiving*.

## Application Customizing (BC-SRV-ARL)

### Use

As well as basic Customizing for archiving, you must make settings in SAP ArchiveLink basic Customizing for the generation of link entries:

- Maintain document types and classes
- Maintain content servers
- Maintain links and link tables

You must also define retention times for the link entries.

### Features

#### SAP ArchiveLink Basic Customizing

For information about SAP ArchiveLink Customizing, see [Customizing \[Ext.\]](#). Customizing activities for SAP ArchiveLink can be found in the Implementation Guide (IMG) under *Basis* → *Basis Services* → *SAP ArchiveLink* → *Basic Settings* and under [Basic Settings \[Ext.\]](#).

#### Retention Times for Link Entries

You should maintain retention times when you maintain the links. The retention period is the number of months after which a link entry for a stored document can be removed from the link table.

### Activities

To set or change retention periods, proceed as follows: [Setting Retention Periods \(BC-SRV-ARL\) \[Page 28\]](#)

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**Setting Retention Periods (BC-SRV-ARL)**

## Setting Retention Periods (BC-SRV-ARL)

### Procedure

1. Execute the function [Links \[Ext.\]](#) and specify the required retention period (in months) in the field *Retention period*.
2. Choose *Tools* → Business Documents, *Others* → *Stored documents*, *Stored documents Change expiry date*.
  - a) Enter the required business object.
  - b) Enter the corresponding document type.
  - c) Specify whether or not it is a test run.

If it is a test run, a list of all the link entries with the newly calculated expiry date is displayed.



To change the expiry date, you need administration authorization for SAP ArchiveLink (see [Authorizations \[Ext.\]](#)).

3. Choose *Program* → *Execute*.

A message confirming that the deletion date has been re-calculated is displayed.

## Archiving Archive Administration Data (BC-CCM-ADK)

### Definition

Archiving object *BC\_ARCHIVE* for archiving archive administration data.

### Use

You can use this archiving object to store information about archiving runs that was selected for archiving in the management of archiving objects.

### Features

You can select the following options using the check boxes in the archiving program variant:

- Deletion program as test run
- Generate archive files

### Procedure

1. Choose transaction **SARA** with the required archiving object and display the administration data.
2. Double-click on the required archiving run and switch to change mode when the relevant dialog appears.
3. Select *Select for archiving*. The runs selected are then listed in Administration under *Archiving runs selected for archiving*.
4. Choose transaction **SARA** with archiving object *BC\_ARCHIVE*. The archiving run started writes the selected information on runs to a common archive and deletes it from the database, if necessary (depending on Customizing for the deletion program automatic start and the selected variant). The new archiving run can then be found in the *BC\_ARCHIVE* administration.



So that the administration data to be archived is actually deleted, no entries must exist for the selected runs in the job overview of the relevant archiving object.

### Structure

The archiving object *BC\_ARCHIVE* consists of the following tables, from which data is archived and deleted:

Table	Description
<i>ADMI_RUN</i>	Header data for archiving runs
<i>ADMI_FILES</i>	Archive files for archiving runs
<i>ADMI_VARIA</i>	Content of archiving program variant
<i>ADMI_SKIP</i>	Address of data objects that should be skipped
<Info-Tab>	Archive file info table for an archiving object

**Archiving Archive Administration Data (BC-CCM-ADK)**

The archiving class *TEXT* is also used. For more information, see [Tables for Archiving Class TEXT \[Ext.\]](#).