Cross-Application Components (CA)

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SAP™

Copyright

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Cross-Application Components (CA)

The following table shows the archiving objects provided:

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CATT logs	**CATPROARCH [Page 21]**
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Archiving Document Info Records (CA-DMS)

Definition

Archiving object *CV_DVS* for archiving document info records (DIRs) in component *Cross-Application Components* (CA).

Use

You can set a deletion flag for document info records that you no longer require for managing documents and their original application files. Archiving object **CV_DVS** enables you to archive these document info records. After the archiving run, you can delete the archived document info records.

The document info records that you archive and delete with archiving object **CV_DVS** are identified by the following data:

- *Document*
- *Document type*
- *Document part*
- *Version*

Structure

When you use archiving object CV_DVS, you archive data from the following tables:

Table	Description
DRAD	Link between document and object
DRAO	Originals for document
DRAOZ	Additional files for original for document
DRAP	Document log file
DRAT	Document descriptions
DRAW	Document info record
DRAZ	Table for additional files for original

The following table shows the functions that you can use for archiving object CV_DVS.

Function	Report Program
Archive	DVSARCH1
Delete	DVSARCH2 (technical view of archive: list of archived documents that you can detail down to the level of the individual table fields in documents)
Manage	DVSARCH3

To call the archiving functions for document info records from the standard R/3 menu, choose
Logistics → Central functions → Document management → Environment → Archiving.

Variant Settings for Archiving (CA-DMS)

Use

For archiving object document info record, you can enter the selection criteria in the variant for the archiving run.

Features

When you define a variant for archiving document info records, you can:

- Enter an range of document types to be archived

- Use the deletion flag as a selection criterion

  You can delete document info records that do not have a deletion flag, if you require.

- Start the archiving functions are a test run or an archiving run

Dependencies (CA-DMS)

When you delete documents, the program checks whether the documents are in use.

You **cannot** delete a document if it is used for the following purposes:

- Quality agreement or technical delivery condition

- Production resource/tool in order or task list

- Document item in bill of material

Residence Time / Retention Period for Data in the System (CA-DMS)

There is no residence time for documents. If a document matches the selection criteria for archiving, you can delete the document from the database without any residence time.

Authorizations (CA-DMS)

Definition

Authorization object **C_DRAW_TCD** controls the authorization to archive and delete document info records.

Use

The authorization object ensures that only certain users can delete selected documents.

Structure

Authorization object C_DRAW_TCD (activities for documents) checks your authorization for archiving activity **06 –** Set deletion flag.

Archiving MM Subsequent Posting Data (CA)

Definition

The archiving object MM_ACCTIT is used to archive, delete and reload Materials Management (MM) subsequent posting data.

Use

Postings made in the *Inventory Management* (MM-IM) and *Invoice Verification* (MM-IV) application components update information relevant to accounting in tables ACCTHD, ACCTIT and ACCTCR.

> ▪●>€
>
> The tables ACCTHD, ACCTIT and ACCTCR are not converted during a local currency changeover.

Notes to Local Currency Changeover

Before you can proceed with a local currency changeover you must carry out the following steps:

1. Use the RGUREC30 program to make subsequent postings of MM data (to the CO. EC-PCA and FI-SL application components), if required.

2. After the data has been posted subsequently from the tables ACCTHD, ACCTIT and ACCTCR, you have two options:

- Archive and delete (see notes 48009 and 83076)

- Delete

> ▪●>€
>
> Once the local currency changeover has taken place, you cannot post any MM data subsequently using the RGUREC30 program that had been posted **before** the local currency changeover, as the tables are not converted.

Structure

Description of the Tables ACCTHD, ACCTIT and ACCTCR

Table	Description
ACCTHD	Header information relevant to accounting from MM postings
ACCTIT	Line item information relevant to accounting from MM postings
ACCTCR	Currency information relevant to accounting for each MM line item

The system accesses the data stored in the tables ACCTHD, ACCTIT and ACCTCR when MM data is transferred (via subsequent postings) to the following application components:

- Special Purpose Ledger (FI-SL)

- Archiving in Profit Center Accounting (EC-PCA)

- Controlling (CO)

The above applications require the data stored in these tables (only for subsequent postings of MM data) to access detailed line item information that is not available in the source application.

Since tables ACCTHD, ACCTIT and ACCTCR use a lot of storage space, you should use the archiving object MM_ACCTIT to archive the data stored in these tables. This will free extra storage space in your database. If the applications in question are not active or data transfer from MM is not planned, you can also deactivate the updating of these tables. For more information, see note 48009.

To archive MM subsequent posting data, from the *SAP R/3 System* screen choose *Tools →* *Administration* and then *Administration → Archiving.* In the *Object name* field, enter *MM_ACCTIT.* The archiving object determines which archiving functions can be performed from archive management.

Displaying Individual Objects Using SAP AS

To display individual objects for the archiving object MM_ACCTIT using SAP AS [Ext.] you require an information structure that has been created based on the standard field catalog SAP_MM_ACCTIT01 delivered by SAP. The information structure must be activated and set up.

Recommendation

- Use the standard information structure SAP_MM_ACCTIT.

For more information about information structures, see also using the archive information system [Ext.].

You will find more information about the archive information system in the SAP Library under *Cross-Application Components → CA Application Data Archiving → Introduction → Archive Information System (SAP AS).*

See also:

The Archiving Object [Ext.]

Variant Settings for Archiving (CA) [Page 17]

Create Archive Files [Ext.]

Application Customizing (CA)

Use

Before you start the archiving programs, you must maintain various settings for archiving, including the size of the archive file and variants for the test and production runs of the delete program.

For further information, see Customizing [Ext.].

Features

Archive Files

We recommend that you enter between 50 and 100 megabyte for the archive file.

Variants for the Deletion Program

You must ensure that the *Test run* indicator is **not** selected in the production run variant for the deletion program. If the *Test run* indicator is selected, the records that have been archived will **not** be deleted from the database after they have been written to the archive files.

You must also ensure that the *Test run* indicator **is** selected in the test run variant for the deletion program.

Commit Counter

We recommend that you enter between 1 and 10 as the commit counter.

Index

If you want to create an index for an archive file, set the indicator to *Build index.* The delete program will then build the index when reading the archive file and the index is saved in the database.

> You do **not** have to create the index when using the delete program. You can also create indexes **after** you have archived the data and it has been deleted from the database using the index creation program. For further information, see Creating Indexes [Ext.].
>
> It is not advisable to create indexes using the SARA transaction, as this is not currently in use. We recommend that you use the archive information system for the archiving object MM_ACCTIT only. You can call this up using the transaction SARI. The archiving object MM_ACCTIT is connected to the archive information system as a field catalog and corresponding information structure, that can be activated as required.
>
> You can also remove archive indexes that you no longer need using the index deletion program. For further information, see Removing Indexes [Ext.].

Activities

To access the Customizing settings for the MM_ACCTIT archiving object from the *Archive Management: Initial Screen*, choose *Goto → Customizing*. In the following dialog box, under *Archiving object-specific Customizing* choose *Technical settings*.

Archiving Authorizations (CA)

The authorization objects G_ADMI_CUS with the activity 03 (archiving) and S_ARCHIVE control the authorizations for archiving, creating, reloading, deleting and reading archive files.

The authorization objects ensure that only a selected user community can carry out the above-mentioned activities.

To archive data in the ACCTHD, ACCTIT and ACCTCR tables, you must have authorizations for:

- Archiving in general

    For more information, see user authorization checks [Ext.].

- Authorization object G_ADMI_CUS with activity 03 (archiving)

- Authorization object S_ARCHIVE with the following values:

- Activity: 01 (creating, reloading, deleting, and reading archive files)

- Application area: XF (cross-application: Financials)

- Archiving object: MM_ACCTIT

- Authorization object S_TCODE

Variant Settings for Archiving (CA)

Use

When creating an archive file, you must enter an existing variant or create a new one. The variant contains the selection criteria for the Materials Management (MM) subsequent posting data that you want to archive.

Features

General Selection Criteria

The selection criteria for the data that you want to archive are the company code, fiscal year, and period.

➡

> You can enter either single values or value intervals as selection criteria.

The system only archives data records that meet the selection criteria you enter in the variant.

Enter as many selection criteria as possible to reduce the processing time of the archiving program. We recommend that you always enter the fiscal year.

Document Selection Criteria

You should enter document selection criteria if you want to subdivide your archives according to the document origin, document number or posting date.

➡

> You can enter either individual values or value intervals as document selection criteria.

Processing Options

- To start the archiving program in test mode, set the *Test run* indicator. The system displays the number of data records found for the selection criteria you enter. The system reads the transaction data, but does not create an archive file or delete data from the database.

    > To perform a complete archiving run, set the *Test run w/ archive creation* indicator. The system creates one or more archive files for the selection criteria you enter. The system starts the deletion program using the **test run** variant (defined in Customizing). Data is **not** deleted from the database. You can delete the data afterwards in a separate step using the production run variant of the deletion program.

    > Always deactivate the *Build index* indicator and use the archive information system (SAP AS) [Ext.].

    If the *Build index* indicator is set in Customizing (Transaction *AOBJ* in the *Archiving Object* view), the system also creates an archive index.

Variant Settings for Archiving (CA)

- To start the archiving program and create one or more archive files for the selection criteria you enter, set the *Production run* indicator. Archived data is deleted from the database using the **production run** variant (defined in Customizing).

    Always deactivate the *Build index* indicator and use the archive information system (SAP AS) [Ext.].

    If the *Build index* indicator is set in Customizing (Transaction *AOBJ* in the *Archiving Object* view), the system also creates an archive index.

Technical Settings

You can change the package size for the records that are archived (by choosing *Access parameters*). The package size determines the number of records that are read for each database access.

The default package size is 10, we have experienced good results with this. You can change the package size to meet your own requirements.

See also:

Create Archive Files [Ext.]

Deleting Archived Data (CA)

Prerequisites

Archived data is normally deleted automatically by the system. However, if you decide to run the archive and delete programs in two separate steps, you can start the delete program manually.

Before you start the delete program, you should ensure that you have maintained a variant for the test and production runs of the delete program. You maintain the variants in Customizing by choosing *Goto → Customizing*.

You can also use the delete program to delete data that you have already archived using the *Archive* option in the archive variant.

Procedure

For more information, see Deleting Archived Data from the Database [Ext.].

Runtime Example (CA)

The MM_ACCTIT archiving object was used to archive data records in tables ACCTHD, ACCTIT, and ACCTCR in a test run. The archive and delete programs were carried out in two separate steps.

The test produced the following results:

Number of records to be archived:

ACCTHD:　　　　365 429

ACCTIT:　　　4 904 517

ACCTCR:　　　9 809 206

Required storage space in megabytes:

ACCTHD:　　　　29 MB

ACCTIT:　　　2400 MB

ACCTCR:　　　593 MB

Production run without deletion:

Runtime for archive program with package size 1000:　　　　　　　　6 hours 50 minutes

Archive file on UNIX machine:　　　　　　　　390 MB

Deletion run only:

Runtime for delete program:　　15 hours

Archiving CATT logs (CA-CAT-TOL)

Definition

Archiving object *CATPROARCH* for archiving CATT test logs. Test logs are created every time a CATT test object runs.

⚠️

Only logs with the CATT test status flag are flagged for archiving. This test status flag can be set in the tester's user defaults or manually.

Use

You should archive the test logs periodically, e.g. every two weeks. The period will depend on the amount of testing in the System.

Structure

The archiving object CATPROARCH archives data from the following tables, when the expiry date is at least 14 dags ago:

- CATK   Test data log

- CATL   Procedure data log

- CATM   Function data log

- CATN   Parameter data log

- CATF   Static function data

The archiving object CATPROARCH has the following functions:

Function/Report assignment

Function	Report Program
Preparation	All logs are deleted which are not flagged for archiving and whose expiry date is 14 days ago.
Archiving	Logs flagged for archiving are archived if the expiry date is 14 days ago.
Post-processing	All logs are deleted which are not flagged for archiving and whose expiry date is 14 days ago.
Analyze	The logs are displayed as in CATT.
Index	You can create or remove an index for quicker access to archived logs.
Analyze	Analyze the results of archiving sessions

Integration

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

Test logs are archived cross-client.

Runtimes (CA-CAT-TOL)

Eachr CATT test which is scheduled for archiving is written separately. The average file size per test is approx. 0.02 MB multiplied by the number of logged functions in this procedure. The file size thus depends heavily on the size of the logged test.

Variant Settings for Archiving (CA-CAT-TOL)

Use

Archiving procedure [Ext.]

Functions

You specify whether the delete program and archiving is a test session.

Application Customizing (CA-CAT-TOL)

Use

Before you start the archiving programs, you must maintain various settings for archiving, including the size of the archive file and variants for the test and production runs of the delete program.

For further information, see Customizing [Ext.].

Activities

For the *Maximum no. of data objects* input field in the *Archive file size* group box, **a data object** is defined as one test for the object **CATPROARCH.** This value should always be '1'.

Time Sheet Data Archiving (CA-TS)

Definition

Archiving object [Ext.] CATS_DATA for archiving data from the CATSDB database table for the *Time Sheet*.

Use

You can considerably improve the performance of the *Time Sheet* by saving time sheet data that you no longer immediately require for processing to archive files.

⇨

> For general information on *Archiving*, see the Introduction [Ext.].

Structure

You can call the following functions using the CATS_DATA archiving object:

Archiving	The time sheet data you want to archive is written to an archive file [Ext.].
Create index	Your Customizing [Ext.] settings determine whether an index is created [Ext.] automatically or manually for archived time sheet data. The index for a time sheet record consists of the client, personnel number, date, counter, and document number.
Delete [Ext.] archived data	Your Customizing settings determine whether archived data is deleted automatically or manually from the CATSDB database table.
Analyze [Page 30]	Function for displaying the data stored in archive files.
Reload [Ext.] archived data	Function for reloading archived time sheet data that has been deleted from CATSDB into the *Time Sheet*.

Application Customizing (CA-TS)

Use

To use the archiving function, you do not need to make any Customizing settings in the *Time Sheet* for the archiving object CATS_DATA.

For more information on Customizing for *Archiving*, see Customizing [Ext.].

Authorizations (CA-TS)

To archive time sheet data, you require the authorization S_ARCH_ALL (all activities for all archiving objects).

Archiving: Maintaining Variants (CA-TS)

Use

Each time you perform an archiving run [Ext.], you must specify a variant. You use the variant to determine which time sheet data is selected for archiving.

In addition to specifying a variant, you must maintain the spool parameters [Ext.] and the start date [Ext.] before you can start the archiving run.

Procedure

1. On the *Archive Management: Initial Screen* (transaction SARA), enter the archiving object CATS_DATA and choose ✅ *Enter*.

2. Choose 🗃 *Archive*.

    The *Archive Management: Create Archive Files* screen appears.

3. Choose 🗂 *Maintain*.

4. In the *ABAP: Variants* dialog box, enter a name for the variant and choose 🗋 *Create*.

    The *Variants: Change Screen Assignment* dialog box appears.

5. Determine whether you want to create the variant for all the selection screens or for the archiving screen only, and choose ✔ *Continue*.

    The *Maintain Variant* screen appears. On this screen, you determine which time sheet data you want to archive.

6. Enter your selection criteria and decide whether you want to create the variant for a test run or for the actual archiving run.

    ➡

    We recommend you perform a test run before archiving your data to uncover any potential errors.

    If you want to use the same variant for the archiving run as for the test run, you must first delete the test run from the job overview. Then call the variant but this time select the *Archiving* instead of *Test run* option.

7. Choose 🔧 *Attributes* and enter a short text for the variant.

8. 💾 Save your entries.

Result

You have created a variant for a test run or for an actual archiving run.

Running the Analysis Program (CA-TS)

Use

You can use the standard analysis program RCATS_ARCH_READING (*Display Archived Time Sheets*) to display and check archived records.

Prerequisites

If you want to display archived data, the archiving run [Ext.] must be complete and the index [Ext.] must have been created.

Procedure

1. On the *Archive Management: Initial Screen* (transaction SARA), enter the archiving object CATS_DATA and choose 🗸 *Enter*.

2. Choose 🖿 *Analyze*.

   The *Archive Management: Execute Analysis Program* screen appears.

3. Select whether you want to execute the analysis program online or in the background (as a batch job). The standard analysis program for the archiving object CATS_DATA is already set up.

   If you choose to run the program as a batch job, maintain the archive selection [Ext.], start date, and spool parameters [Ext.]. Note that it is irrelevant whether you select one or several archive files in the *Archive selection* section. The program takes into account all archived time sheet data during selection, regardless of which archive files it is stored in.

4. Choose 🕓 *Execute*.

   The *Display Archived Time Sheet Data* selection screen appears.

5. Enter the selection criteria by which you want the archived time sheets to be selected.

6. Choose 🕓 *Execute*.

Result

An overview of the data you selected appears, specifying the personnel number, date, processing status, document number, and counter.