

# An Overview on “Data Archiving in SAP Financial Accounting Module” in SAP ECC System

**Srinivasa Rao Gunturu**

Independent Researcher

Global Digital Transformation Expert

**Abstract:** *This article Outlines the Basics and Classifications of Data Archiving, Maintaining Data Archiving and Executing Data Archiving for Exemplary Financial Accounting Objects in SAP ECC system. Here I share my experience to provide the basics and classification of data archiving in SAP ECC. So SAP Financial Accounting Consultants will be able to learn about reasons for executing an archiving activity in their projects.*

**Keywords:** SAP ECC, Data Archiving

## I. INTRODUCTION

This article Outlines the Basics and Classifications of Data Archiving, Maintaining Data Archiving and Executing Data Archiving for Exemplary Financial Accounting Objects in SAP ECC system. Here I share my experience to provide the basics and classification of data archiving in SAP ECC. So SAP Financial Accounting Consultants will be able to learn about reasons for executing an archiving activity in their projects.

## II. BUSINESS STATEMENT FROM SAP CUSTOMERS

In the database systems of today, a large data volume can lead to performance bottlenecks that cause poor performance on the user side and increased resource consumption on the administration side. Therefore, with data archiving in SAP System, we can safely remove application data which no longer needs to be actively accessed in day-to-day activities from the database. Simply deleting the data, however, is not an option because read access to the data may be needed to be provided for internal and external authorities whenever needed. Therefore, the data needs to be transferred from the database to external storage media so that it can be read later.

As a system administrator and Consultant, we need to keep the data volume as low as possible. We need to verify how long documents and master data must be retained in the system in Financial Accounting (FI). Based on these, Customizing is then performed for the SAP Financial Accounting archiving area.

SAP Consultants need an understanding of data archiving and also clear understanding of the basic configuration of FI archiving. So I thought of providing some insights on this topic here.

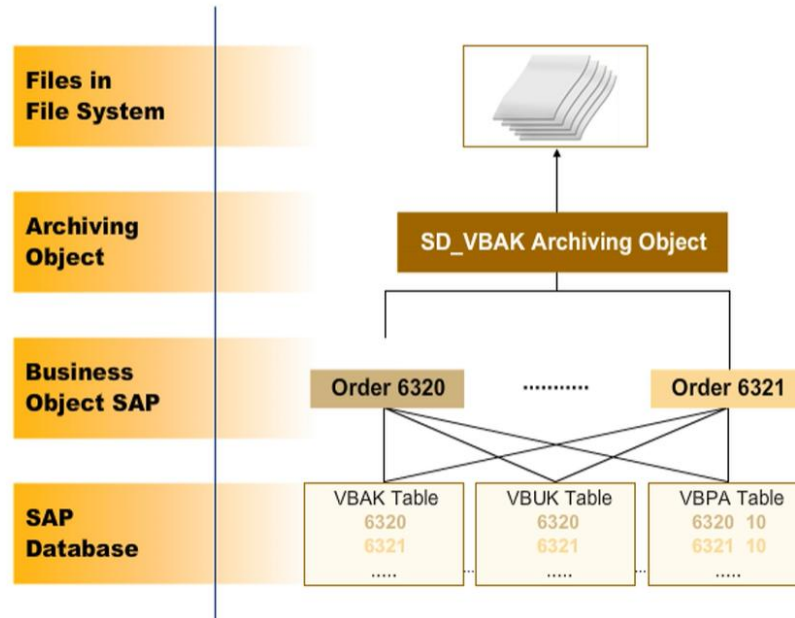
Data archiving is the consistent transfer of data objects from SAP system database tables to the document storage system (generally considered to be the electronic storage) outside the SAP system database. Related table entries that characterize a data object will be written to an archive file outside the database. Business consistency must be ensured by SAP archiving programs that, based on archiving objects, store all relevant table entries together elsewhere.

The content of the business objects in the SAP system is distributed throughout several tables in the SAP database. The activity of archiving objects that bundle logically related tables of business objects ensures, that, in the framework of data archiving, all information regarding a business object is transferred out of the database.

The figure below clarifies the relationship among database tables, business objects, and archiving objects. The application data that is removed from the SAP system database is compressed and stored in another location, for example, in a file system.

Data is archived in online mode, so the system does not have to be shut down during data archiving.

In IT world Archiving is very common word. Therefore, the important terms specific to data archiving are covered in this unit to clarify the definition of data archiving.



Credit : SAP

### III. DATABASE BACKUPS

Historically, (as a result of SAP R/2), the term reorganization represents a double scenario in the SAP arena. In the first scenario, it is about physical deletion of application data from the database. In the second scenario, it is about reorganization of database. During reorganization of database, the data will be removed from and loaded back into the database to optimize the physical distribution of data on the hard disk.

A backup means storing the contents of the database to avoid data loss due to system failure. The goal of a backup is to restore the database as close to its condition before the failure as possible. Backups are scheduled to take place at fixed intervals and are performed according to a fixed procedure. When you reload the saved data from a backup, it is called restoring.



Credit: SAP

Database backups are independent of data archiving and should be scheduled and executed at regular intervals. Document storage consists of the electronic storage and administration of documents on storage systems outside the SAP system. The documents are transferred to a document storage system by the user. The SAP system then contains a link that points to the externally stored document and permits access. You can only archive data from completed business processes. Test data seldom reaches this status.

### **Reasons for Archiving Data**

#### **The data archiving Reasons:**

- Ensure good and improved response times.
- More efficient database administration
- Low amount of downtime needed for software upgrades,

#### **Legal regulations& company-related policies related to data archiving include the following data:**

- Country-specific storage regulations
- Data accessibility to auditors
- Potential reusability of data

As Size of the database increases, it needs more time of the administrator to on work for recovery and backup. An increasing number of resources will be needed to secure ECC system services. Furthermore, upgrades to the system and database require proportionately more effort as the database becomes larger.

For users, an increase in database size means a higher system load for individual database queries. The increase in database size also results in an increase in response times for reporting and access to individual database records.

Archived Data can be easily accessed even after a system is upgraded to the next version.

There are different regulations governing how long systems retain documents, master data, and transaction figures in different countries. In all cases, FI application managers confirm the timelines they must adhere to with the department (in consultation with auditors and other responsible bodies). According to these regulations, the procedures, execution times, and duration of retention for archiving data in FI are specified.

FI application managers do not perform data archiving themselves; instead, a system administrator performs data archiving. However, the application manager still plays an important role in the projects for archiving. Person related to this activity will coordinate the archiving procedure with the FI department, in order to ensures the implementation of regulations, and executes FI-specific Customizing.

### **Cooperation Between System Administration and Finance Departments**

The Objective of administrator is to keep the database small as it reduces TCO. System administrators delete as many data objects as possible to reduce the load on the database. On the other hand, the goal of the FI department is to provide fast online access to as many documents (such as queries, lists, and searches) as possible.

This type of project needs mutually satisfactory compromise between important two demands.

The long-term goals of data archiving are as follows:

- To keep the data volume in the database as constant as possible
- To archive data proactively rather than as a reaction

Because the volume of transaction and master data can increase very quickly after live operation commences, schedule the archiving of application data as you begin to implement SAP software.

The data archiving process requires completion of the following steps:

Generate the archive files.

The write program generates one or more archive files. Then, the data to be archived is read from the database and written to the archive files.

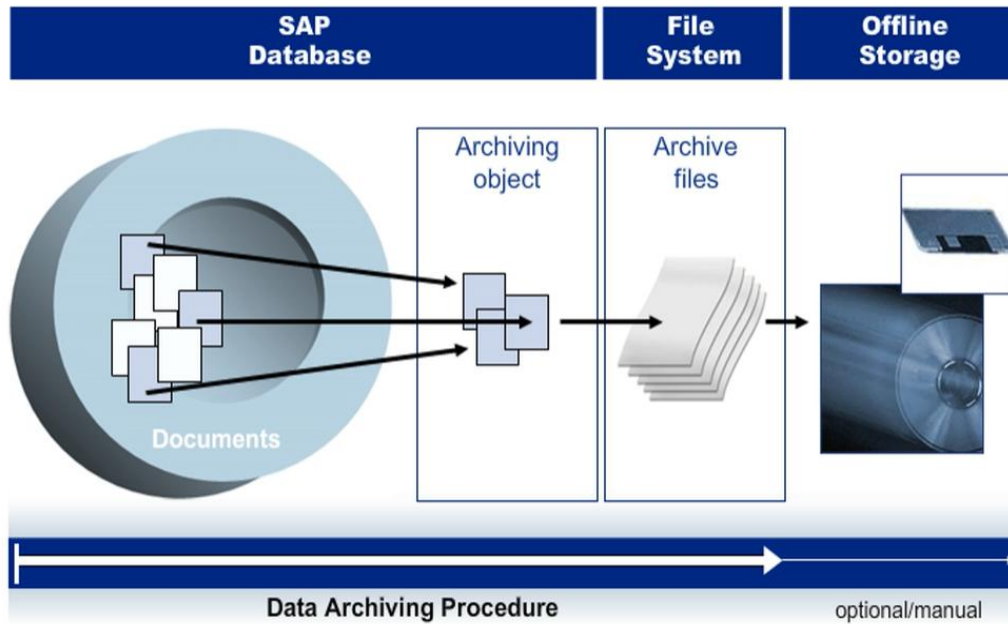
**Store the archive files.**

The archive files are stored in an external document storage system.

**Delete the data.**

The program related to deletion first reads the data in the archive file & then deletes the corresponding records from the database.

As a rule, it is not sufficient to write the data to archive files and then delete it from the database. Store and administer archive files so that you can access them as needed.



Credit: SAP

**Preparatory Activities and System Settings for Data Archiving in FI**

The central element in data archiving is the archiving object. An archiving object is the smallest unit that can be archived in and deleted from the database in its entirety, and it describes how and which database objects must be accessed for a business object to be archived completely.

**An archiving object is basically made up of the following components:**

**Data declaration part**

The data declaration section consists of all the relevant DB objects those characterize an application object.

**Customizing settings**

Configurations will be used to set parameters specific to each archiving object for an archiving procedure.

**Programs**

Archiving object programs include the following programs:

- A write program that writes the data objects sequentially in the archive files
- A deletion program that deletes from the database all the data objects that are read in the archive file beforehand.
- Program that permits archived data objects to be read

**Customizing is divided into the following steps:**

Archiving Customizing is used to set parameters that control how data is archived.

Customizing is divided into the following steps.

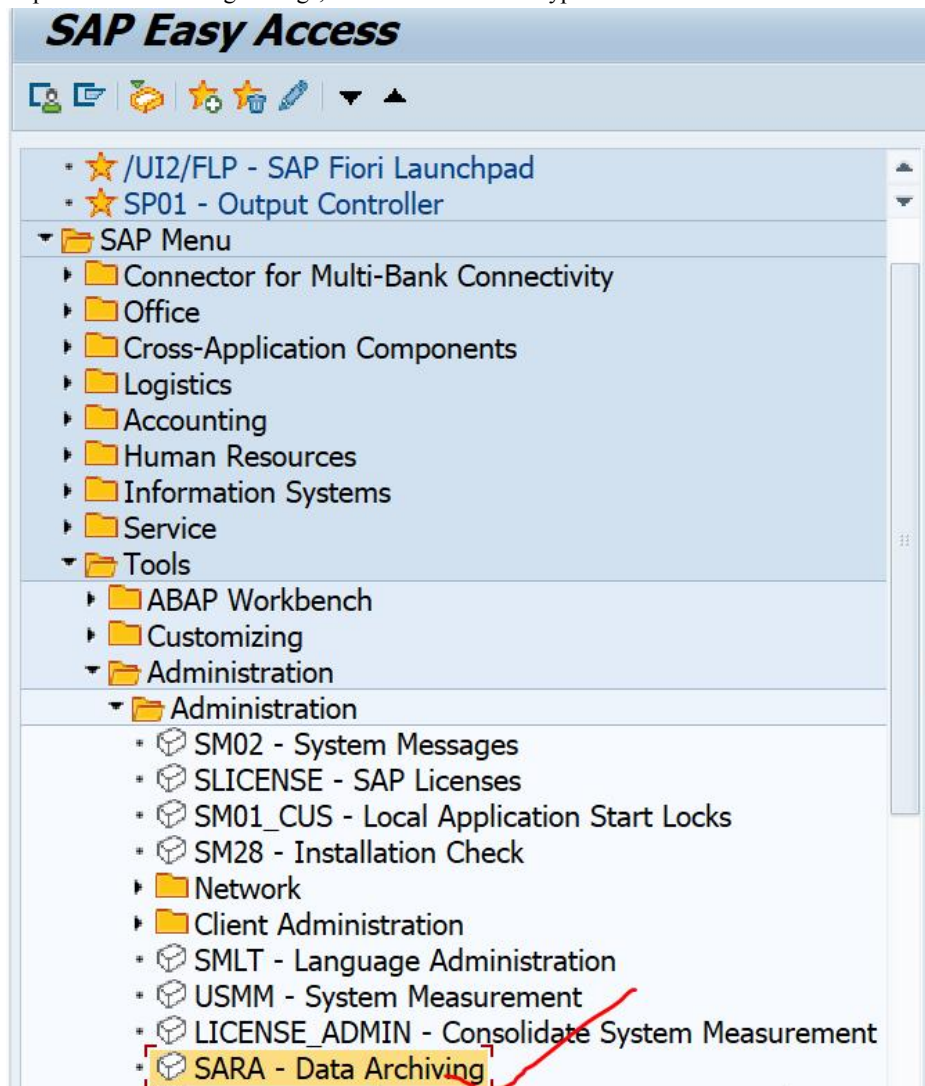
- Step 1: Basis Customizing
- Define logical path and file names
- Step 2: Cross-archiving object Customizing
- Define a server group for background processing
- Step 3: Archiving object-specific Customizing
- Size of an archive file
- Deletion program settings

**To open the Customizing settings,**

Use transaction code SARA (data archiving menu path:

SAP Easy Access → Tools → Administration → Administration → Data Archiving

Execute the FI-specific Customizing settings, which are document type runtimes and account runtimes.



**REFERENCES**

- [1]. SAP Data Archiving Process: Archiving Object FI\_DO... - SAP Community
- [2]. Introduction to SAP Data Archiving - SAP Community
- [3]. Data Archiving | SAP Help Portal
- [4]. Archiving Financial Accounting Documents (FI-GL, FI-AR, FI-AP) | SAP Help Portal
- [5]. SAP Note 1159756 - Data Archiving in FI