Archiving Business Data in BW

• 1 Documentation
• 2 ADK-based archiving
• 3 NLS
• 4 The data archiving process consists of three main steps:
• 5 Transport of DAP
• 6 Further topics

Purpose

Increasing amounts of data that need to be available for further analyses but that are rarely required place a load on your BW system. The granular storage of data can quickly result in a large volume of data, particularly in the Enterprise Data Warehousing layer.

If you want to keep the amount of data in your BW system constant without deleting data, you can use data archiving. The data is first moved to an archive or near-line storage and then deleted from the BW system. You can either access the data directly or load it back as required, depending on how you archived the data.

You can use ADK-based archiving or near-line storage (NLS) for InfoCubes and DataStore objects. The central object is the data archiving process (DAP). When defining the data archiving process you can choose between classic ADK archiving, storing in NLS, or a mix of both solutions.

The DAP in SAP BW is always related to a certain InfoProvider (InfoCube or DSO) and has to be created manually. It contains an Archiving Object or a Near Line Object or both.

Data Archiving can be automated within Process Chains.

Documentation

Online documentation: Help Data Archiving Process

Important notes

<table>
<thead>
<tr>
<th>SAP NOTE</th>
<th>SHORT TEXT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2056083</td>
<td>Consulting DAP: Time characteristic not available for selection in the data arc</td>
</tr>
</tbody>
</table>

ADK-based archiving

• ADK is a tool from SAP NetWeaver
• For data that is not needed for reporting, yet for potential future requirements
• Solution for InfoCubes and ODS objects
• Cost reduction using alternative storage media
• Archived data must be reloaded into the SAP NetWeaver BW database for analysis purposes
• Amount of data is too low to justify a NLS solution
• NLS solution cannot be afforded

NLS

• You can enhance your BW system with NLS solutions from third-party providers
• SAP NetWeaver BW has direct access to NLS data
• Availability of historic data for reporting and propagation with reduced costs
• Separation of frequently used data and rarely used data using Data Archiving Processes
• Reload of NLS-based data into the InfoCube or DataStore Object not necessary for analysis purposes
• Transparent access to NLS data for
  • Queries
  • Data Transfer Processes
  • DAP Restore
The data archiving process consists of three main steps:

1. **Write/Copy Phase**: In this phase the system copies the data from the InfoProvider into the defined targets. If the target is an ADK, then the corresponding archive file is created. If the target is any of the Near-Line Storage solutions, then the data is copied to the corresponding proxy table. Technically this can be further split to two steps:
   1. The first thing this phase does is to read the data from the Provider. This is done as if the read would be performed by a DTP or a Query.
   2. The read data is then written to the
2. **Verification Phase**: Once the write phase has finished, it needs to be ensured, that the archived data is correct and that it corresponds to the currently available data. Therefore the system performs a verification to check if the data is matching the data still in the Provider.
3. **Deletion Phase**: After a successful verification the system deletes the data from the Provider, which matches the criterias defined for the archiving run. This step is performed technically as a "Selective deletion".

**Transport of DAP**

Separate transportable logical object (TLOGO) is available:

- The data archiving process has a separate transportable logical object (**DAPA** for active version and **DAPD** for delivered version)

The definition of the NetWeaver BW 7.x data archiving process is not transported with the definition of an InfoCube (TLOGO object CUBE) or with a DataStore Object (TLOGO object ODSO). This is a difference between BW 3.x and BW 7.x. The BW 3.x archiving object was transported together with the definition of the InfoCube / DSO itself.

**Further topics**

Archiving and Compression flag example

BW NLS Archiving and Deleting data