SAP Event Management
Improved Archiving with Support for High-Volume Processes

Enhancement Package 1 for SAP Event Management 7.0 and higher
Improved Archiving with Support for High-Volume Processes

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2 Configuration Steps
3 Execution Steps
4 Display Archived Data on the SAP EM Web UI
In addition to the classic archiving concept, it is possible to define an archiving sequence, according to the lifecycle needs of the scenario:

- For long-living processes (e.g. a drug package that can be returned even years after being sold), event messages can be archived fast, whereas the representation of the item shall stay in the operational database to be able to process late-coming events.
- On the other hand, you can also define that the representation of the process/object is archived before archiving related event messages.
- The system can be configured in a way that also archived data is retrieved and displayed on the Web UI. Note that event handler sets are not supported, and specific rules apply for setting up appropriate Web interface selection profiles.
New Archiving Concept for Event Handlers and Event Messages

In addition to the earlier archiving concept for SAP EM, an advanced archiving concept is available explicitly tailored to high volumes. It comprises the following features:

- New archiving objects for event handlers and event messages
  - SAPTRX_EH Event Handler
  - SAPTRX_EVM Event Messages
- Use of new generic archiving features (generic header extension tables can be included)
- Archived data can be retrieved and displayed on the SAP EM Web UI. With that, you can for example also display archived event messages for an event handler that still resides on the database
- Support of different archiving sequences, according to the lifecycle needs in the specific scenario

Compared to the earlier concept, the following features are not supported:
- Event Handler Set
- Document Flow
- Retrieve event messages that have been processed for higher-level event handlers (using an event handler hierarchy)
New Archiving Object for Event Handlers

The following event handler tables are archived as part of SAPTRX_EH:

- /SAPTRX/EH_HDR
- /SAPTRX/EH_CNTRL
- /SAPTRX/EH_INFO
- /SAPTRX/EH_TRKID
- /SAPTRX/EH_EXPEV, /SAPTRX/EEHST
- /SAPTRX/EH_STAT, /SAPTRX/EH_STHST
- /SAPTRX/EH_MEASR, /SAPTRX/EH_MEHST
- /SAPTRX/EH_MEHST
- /SAPTRX/EH_HIER
- /SAPTRX/EH_QRYID
- /SAPTRX/EH_AUTHR
- /SAPTRX/EH_EVMSG
- /SAPTRX/EH_ERMSG
- /SAPTRX/EH_EVMAD
- /SAPTRX/EH_TASK

Event Handler Header
Event Handler Control Parameters
Event Handler Info Parameters
Event Handler Tracking IDs
Event Handler Expected Events and Histories
Event Handler Status Attribute and Histories
Event Handler Measurements and Histories
Event Handler Measurements Histories
Event Handler Hierarchies
Event Handler Query IDs
Event Handler Authorizations
Event Handler Event Messages
Event Handler Error Messages
Event Handler Event Message Additional Data
Event Handler Tasks

The auxiliary table to store extension tables for archiving (/SAPTRX/EH_EXTT) is not used. Instead, an event handler header extension table per specific visibility process can be used.

<table>
<thead>
<tr>
<th>Object Name</th>
<th>SAPTRX_EH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text</td>
<td>Event Handler in Event Management</td>
</tr>
<tr>
<td>Application Area</td>
<td>CA</td>
</tr>
<tr>
<td>Application Component</td>
<td>/SAPTRX/EM61000011</td>
</tr>
<tr>
<td>Write Program</td>
<td>/SAPTRX/ARCHIVE_EH_WRITE</td>
</tr>
<tr>
<td>Delete Program</td>
<td>/SAPTRX/ARCHIVE_EH_DELETE</td>
</tr>
<tr>
<td>Reload Program</td>
<td>/SAPTRX/ARCHIVE_EH_RELOAD</td>
</tr>
<tr>
<td>Preprocessing Program</td>
<td>/SAPTRX/ARCHIVE_EH_PREPROCESS</td>
</tr>
<tr>
<td>Postprocessing Program</td>
<td></td>
</tr>
</tbody>
</table>
New Archiving Object for Event Messages

The following Event Message tables are archived as part of SAPTRX_EVM:

- /SAPTRX/EVM_HDR: Event Message Header
- /SAPTRX/EVM_LID, /SAPTRX/EVM_LAI: Event Message Location, Additional IDs
- /SAPTRX/EVM_PID, /SAPTRX/EVM_PAI: Event Message Partner, Additional IDs
- /SAPTRX/EVM_PAR: Event Message Event Handler Parameters
- /SAPTRX/EVM_REF: Event Message Further References
- /SAPTRX/EVM_STA: Event Message Status Attributes
- /SAPTRX/EVM_EEM: Event Message Modifications to EE List
- /SAPTRX/EVM_MER: Event Message Measurements
- /SAPTRX/EVM_DOC: Event Message Document References
- /SAPTRX/EVM_AFH, /SAPTRX/EVM_AFB, /SAPTRX/EVM_AFC: Event Message Attached File Related
- /SAPTRX/EVM_AFR: Event Message Attached File Reference
- /SAPTRX/EVM_CST: Event Message Confirmation Status
- /SAPTRX/EVM_EDL: Event Message Deadline Estimations
- /SAPTRX/EVM_NED, /SAPTRX/EVM_NEV: Event Message Next Event Deadlines
- /SAPTRX/EVM_THD, /SAPTRX/EVM_TXL: Event Message Text Header, Text Line
- /SAPTRX/EH_EVMSG: Event Handler Event Message

The auxiliary table to store extension table for archiving (/SAPTRX/EVM_EXTT) is not used; instead, an event message header extension table per specific visibility process can be used.
### Agenda

**Improved Archiving with Support for High-Volume Processes**

1. Overview
2. Configuration Steps
   - 1 Event Handlers
   - 2 Event Messages
   - 3 EH Hierarchies
   - 4 Define Archiving Sequence
   - 5 Define Residence Time for Archiving or Deletion
   - 6 Change the Archiving Behavior with BAdIs
   - 7 Define Archiving Profile
   - 8 Assign Archiving Profile to User Profile
   - 9 Assign User Profile to Web Transaction
3. Execution Steps
4. Display Archived Data on the SAP EM Web UI
2. Configuration Steps

**Configuration in the Archive Retrieval Configurator**
Allow the archive information system to execute archive searches for attributes relating to the specific object types:

Create scenario-specific field catalogs and information structures & activate the respective information structure for

1. Event Handlers
2. Event Messages
3. (Optional) Event Handler Hierarchy

**SAP EM specific Configuration for Archiving / Deletion**
Allow application-specific settings for archiving and deletion

4. Define archiving sequence
5. Define residence times for archiving or deleting
6. Change the archiving behavior with BAdIs

**Configuration for the SAP EM Web UI**
Allow query and display of archived data

7. Define Archiving Profiles
8. Assign Archiving Profile to User Profile
9. Assign User Profile to Web Transaction
1a. Event Handlers: Create Field Catalog

The field catalog serves as a template for creating an archive information structure. An info structure always refers to a field catalog. The field catalog defines the fields from which the data fields can be selected for the info structure. With the help of selectable fields, this enables you to find and display archived data.

Create new field catalogs for your specific visibility processes to search archived event handlers in the SAP EM Web UI. Selectable fields specified in the field catalogs are used as search criteria. This structure must contain all used selection fields.

*Hint:* only include fields that are actually required for selection, since each additional field slows down the runtime and increases the required memory.

1. In the Archive Retrieval Configurator initial screen (transaction code SARJ), choose *Environment > Field Catalogs* and then *New Entries*.

### Change View "Field Catalogs": Overview

<table>
<thead>
<tr>
<th>Field catalog</th>
<th>Name</th>
<th>Archiving obj</th>
<th>File i</th>
<th>Offset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z_LTL_EH</td>
<td>Deliv.in LTL Shipment - EH</td>
<td>SAPTRX_EH</td>
<td>K</td>
<td>K</td>
</tr>
<tr>
<td>Z_LTL_ENTIERS</td>
<td>Deliv.in LTL Shipment - FT</td>
<td>SAPTRX_EH</td>
<td>K</td>
<td>K</td>
</tr>
<tr>
<td>Z_LTL_FK</td>
<td>Deliv.in LTL Shipment - FK</td>
<td>SAPTRX_EH</td>
<td>K</td>
<td>K</td>
</tr>
</tbody>
</table>
2. Carry out the field assignment. Select the *Field Selection* function in the navigation area. Choose *New Entries* and enter the required data.

**Change View "Field Selection": Overview**

- The same name has to be used for Target and Reference Field
- Following tables can be used as Source tables:

<table>
<thead>
<tr>
<th>Source Table</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>/SAPTRX/EH_HDR</td>
<td>Event Handler Header</td>
</tr>
<tr>
<td>/SAPTRX/EH_STAT</td>
<td>Event Handler System Parameters</td>
</tr>
<tr>
<td>/SAPTRX/EH_TRKID</td>
<td>Event Handler Tracking IDs</td>
</tr>
</tbody>
</table>
3. The use of additional fields from other source tables requires a logical link between these fields by means of a join. To carry out the source field assignment, select EH_GUID in *Field Selection*, then select the *Other Source Fields* in the navigation area.

**Change View "Other Source Fields": Overview**

The following entries can be used, depending on the entries in the field selection:

<table>
<thead>
<tr>
<th>Source Tables</th>
<th>Source Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario Specific Event Handler Extension</td>
<td>EH_GUID</td>
</tr>
<tr>
<td>/SAPTRX/EH_STAT</td>
<td>EH_GUID</td>
</tr>
<tr>
<td>/SAPTRX/EH_TRKID</td>
<td>EH_GUID</td>
</tr>
</tbody>
</table>

As an alternative, a handling function for the event handler info structure can be used *(for more details see slide 31).*
1d. Event Handlers: Create Field Catalog

You can use fields from the following tables:

- **/SAPTRX/EH_HDR**  
  Event Handler Header table
  - EH_GUID is mandatory
  - For the main tracking id, the Field TRACKINGID is sufficient; TRACKINGIDTYPE is not necessary

- **/SAPTRX/EH_STAT**  
  Event Handler Status Attribute table
  - STATUS_TYPE and STATUS_CODE needs to be specified as field catalog.
  - If more than one status attribute is used in your visibility process, we recommend only transferring one of these to the archive information structure. In this case you have to define which status attributes is to be used in the handling function and assign it to the archive profile.

- **/SAPTRX/EH_TRKID**  
  Event Handler Tracking ID table
  - TRACKINGIDTYPE and TRACKINGID needs to be specified as field catalog.
  - If several tracking IDs are used in your visibility process, we recommend only transferring one of these to the archive information structure. In this case, you have to define which Tracking Code Set and Tracking ID is to be used in the handling function and assign it to the archive profile.

- Event Handler Extension Table (system parameters defined for the Event Handler Type)

**Restrictions:**

- **/SAPTRX/EH_STAT** and **/SAPTRX/EH_TRXID** cannot be used at the same time
- Control and info parameters as well as Query IDs cannot be used as source table
1e. Event Handlers: Create Info Structure

Define the information structure to be used for archive reporting. Specify which source fields from the archive are copied to which fields in the information structure with the help of your scenario-specific field catalogs.

1. In the Archive Retrieval Configurator initial screen (transaction code SARJ), Choose Archive Info Structure > Create.

Archive Retrieval Configurator

2. In the right frame, select all the fields that you want to include in the information structure. Choose Include Selected Fields. The selected fields are included in the information structure in the left frame.
After creating an information structure, you have to activate it. At this stage, the system generates a transparent database table. The structure will be filled automatically during the next delete phase for this archiving object.

1. In the Archive Retrieval Configurator initial screen (transaction code SARJ), choose Archive Information Structure > Activate.

![Archive Retrieval Configurator](image-url)
Create new field catalogs for your visibility processes to display (and search for, if required) archived event messages.

1. In the Archive Retrieval Configurator initial screen (transaction code SARJ), choose Environment -> Field Catalogs and then New Entries.
2b. Event Messages: Create Field Catalog

2. To carry out the field assignment, select the Field Selection function in the navigation area. Choose New Entries and enter the required data.

Change View "Field Selection": Overview

- Target and Reference Field have to be the same
- Following tables can be used as source tables:

<table>
<thead>
<tr>
<th>Scenario specific EH Header Extension</th>
<th>Event Handler System Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>/SAPTRX/EVM_HDR</td>
<td>Event Handler Header</td>
</tr>
<tr>
<td>/SAPTRX/EVM_DOC</td>
<td>Event Message Document Reference</td>
</tr>
<tr>
<td>/SAPTRX/EH_EVMSG</td>
<td>Event Handler Event Message</td>
</tr>
</tbody>
</table>

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The following entries can be used, depending on the entries in the field selection:

<table>
<thead>
<tr>
<th>Source Tables</th>
<th>Source Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>/SAPTRX/EVM_DOC</td>
<td>EVT_GUID</td>
</tr>
<tr>
<td>/SAPTRX/EH_EVMSG</td>
<td>MSG_GUID</td>
</tr>
</tbody>
</table>

As an alternative, a handling function for the event message info structure can be used *(for more details see slide 31).*
2d. Event Messages: Create Field Catalog

You can use fields from the following tables:

- **/SAPTRX/EVM_HDR**: Event Message Header table
  
  - EVM_GUID is mandatory and sufficient for the event message information structure to allow displaying event messages.

- **/SAPTRX/EVM_DOC**: Event Message Document Reference table
  
  - DOCTYPE and DOCID need to be specified as field catalog.
  
  - If several document types are used in your visibility process, we recommend only transferring one of those to the archive information structure. In this case, you have to define which document type is to be used in the handling function and assign it to the archive profile.

- **/SAPTRX/EH_EVMSG**: Event Handler Tracking ID table
  
  - Target and reference field have to be the EH_GUID
  
  - /SAPTRX/EH_EVMSG is only required if you want to include event message attributes as search criteria in the SAP EM Web UI. In this case, add EH_GUID as target / reference field (e.g. Document ID from /SAPTRX/EVM_DOC).
Define the information structure to be used for archive reporting. Specify which source fields from the archive are to be copied to which fields in the information structure with the help of your scenario-specific field catalogs.

1. In the Archive Retrieval Configurator initial screen (transaction code SARJ), choose *Archive Info Structure > Create*.

2. In the right frame, select all the fields you want to include in the information structure. Choose *Include Selected Fields*. The selected fields are included in the information structure in the left frame.
After creating an information structure, you have to activate it. At this stage, the system generates a transparent database table. The structure will be filled automatically during the next delete phase for this archiving object.

1. In the Archive Retrieval Configurator initial screen (transaction code: SARJ), choose *Archive Information Structure > Activate*.

**Archive Retrieval Configurator**

<table>
<thead>
<tr>
<th>Typ</th>
<th>Message text</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Info structure Z_LTL_EVTMSG activated</td>
</tr>
</tbody>
</table>
3a. (Optional) EH Hierarchies: Create Field Catalog

To allow displaying archived event handler hierarchies in your visibility process, you have to create the respective field catalogs. These look as follows:

1. In the Archive Retrieval Configurator initial screen (transaction code SARJ), choose Environment > Field Catalogs and then New Entries.

   **Change View "Field Catalogs": Overview**

   ![Field Catalogs Table]

   - **Field catalog**: Z_EH_HIER
   - **Name**: Event Handler Hierarchy
   - **Archiving obj**: SAPTRX_EH
   - **Field i**: K
   - **Offset**: K

2. To carry out the field assignment, select the Field Selection function in the navigation area. Choose New Entries and enter the required data. Source Table is /SAPTRX/EH_HIER. Target / reference fields are EH_GUID, EVTTST and HL_EH_GUID, as shown below.

   **Change View "Field Selection": Overview**

   ![Field Selection Table]

   - **Field Catalog**: Z_EH_HIER
   - **Source Table**: /SAPTRX/EH_HIER
   - **Ref. field**: EH_GUID
   - **Field**: EH_GUID
   - **Target Field**: /SAPTRX/EH_HIER
   - **Ref. field**: EVTTST
   - **Field**: EVTTST
   - **Target Field**: /SAPTRX/EH_HIER
   - **Ref. field**: HL_EH_GUID
   - **Field**: HL_EH_GUID
   - **Target Field**: /SAPTRX/EH_HIER
   - **Ref. field**: HL_EH_GUID
Define the information structure to be used for displaying archived event handler hierarchy. For any visibility process making use of event handler hierarchy, the following information structure needs to be defined:

1. In the Archive Retrieval Configurator initial screen (transaction code SARJ), choose Archive Info Structure > Create.

   **Archive Retrieval Configurator**

   ![Archive Retrieval Configurator](image)

   - Infostructure: Z_EH_HIER
   - Archiving object: SAPTRX_EH
   - Field catalog: Z_EH_HIER

2. In the right frame, select all fields you want to include in the information structure. Choose Include Selected Fields. The selected fields are included in the information structure in the left frame.

   ![Include Selected Fields](image)

   - Infostructure fields:
     - Name: EH GUID, Stat: EH_GUID
     - Name: UTC TST, Stat: EVITST
     - Name: HL EH Guid, Stat: HL_EH_GUID

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After creating an information structure, you have to activate it. At this stage, the system generates a transparent database table.

**Archive Retrieval Configurator**

![Image of Archive Retrieval Configurator]

- **Typ**: Message text
- **Info structure Z_EH_HIER activated**
4a. Define Archiving Sequence

In this IMG activity you define the archiving sequence for SAP EM objects.

Go to SPRO > Event Management > Archive and Delete SAP Event Management Objects > Define Archiving Sequence for SAP Event Management Objects, and select an archiving sequence. The following archiving sequence are available:

- first Event Handlers, then Event Messages
- first Event Messages, then Event Handlers

The archiving sequence is a basic setting. Once set, it cannot be changed subsequently.
4b. Define Archiving Sequence

The sequence that you choose for archiving depends upon which objects need to be available in the operational system for how long:

Change View "Archiving Sequence": Details

<table>
<thead>
<tr>
<th>Archiving Sequence</th>
<th>Arch. Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Event Handler, Event Message</td>
<td></td>
</tr>
<tr>
<td>2 Event Message, Event Handler</td>
<td></td>
</tr>
</tbody>
</table>

a) If you want to keep event message data until all related event handlers have been archived, select the archiving sequence **Event Handler, Event Message**. The archiving process starts with the event handler object. Within a second step, the system archives the event messages. It only archives event messages linked to already archived event handlers.

b) If you want event messages to be archived before the related event handlers have been archived, select the archiving sequence **Event Message, Event Handler**. The archiving process then starts with the event message object. The system selects all event messages with a positive residence time check and writes them into the archive. Within a second, step all inactive event handlers with a positive residence time check are archived independently.
5. Define Residence Time for Archiving or Deletion

Go to IMG Activity > Event Management > Archive and Delete SAP Event Management Objects > Define Residence Times for Archiving or Deleting

Specify the residence time [in days] for archiving event handlers as well as the field against which the residence time is to be checked.

**New Entries: Overview of Added Entries**

Specify the residence time [in days] for archiving event messages. Here, two options are available.

**New Entries: Overview of Added Entries**

**Change View "Residence Times for Even**
6. Change the Archiving Behavior with BAdIs

<table>
<thead>
<tr>
<th>Event Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Settings in SAP Event Management</td>
</tr>
<tr>
<td>Solutions and Scenarios</td>
</tr>
<tr>
<td>Event Handlers and Event Handler Data</td>
</tr>
<tr>
<td>Event Messages, Status Queries, and Web Interface</td>
</tr>
<tr>
<td>Reactions to Event Messages</td>
</tr>
<tr>
<td>Authorizations and Filters</td>
</tr>
<tr>
<td>Interface to Document Flow</td>
</tr>
<tr>
<td>SAP Business Information Warehouse Interface</td>
</tr>
<tr>
<td>Archive and Delete SAP Event Management Objects</td>
</tr>
<tr>
<td>Business Add-Ins for SAP Event Management</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BAdIs for Enterprise Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAdl: Parameter Change After Mapping</td>
</tr>
<tr>
<td>BAdl: Update Event Handler Data</td>
</tr>
<tr>
<td>BAdl: Change Web Configuration Profiles</td>
</tr>
<tr>
<td>BAdl: Document Flow Status</td>
</tr>
<tr>
<td>BAdl: Changing Event Messages</td>
</tr>
<tr>
<td>BAdl: Definition of a Custom Access to Archived Data</td>
</tr>
</tbody>
</table>

#### Enhancements for Event Handler Archiving

- **Notes on Implementation**
- BAdl: Check of Archivability Against Add-on-Specific Criteria
- BAdl: Check of Deactivation Against Add-on-Specific Criteria
- BAdl: Deletion of Add-on-Specific Table Entries from Database
- BAdl: Writing Add-on-Specific Data to Archive

#### Enhancements for Event Message Archiving

- **Notes on Implementation**
- BAdl: Check of Archivability Against Add-on-Specific Criteria
- BAdl: Deletion of Add-on-Specific Table Entries from Database
- BAdl: Writing Add-on-Specific Data to Archive
6. New BAdIs for Archiving Event Handlers

**Enhancement Spot: /SAPTRX/ARC_EH**

- **BAdI: Check of Archivability Against Add-on-Specific Criteria**
  Use this BAdI to nullify the archiving decision for an event handler based on add-on-specific criteria. The Badi is called in the following program.
  - /SAPTRX/ARCHIVE_EH_PREPROCESS
  - /SAPTRX/ARCHIVE_EH_WRITE

- **BAdI: Check of Deactivation Against Add-on-Specific Criteria**
  Use this BAdI to nullify the deactivation decision for an event handler based on add-on-specific criteria.
  - /SAPTRX/ARCHIVE_EH_DEACTIVATE

- **BAdI: Deletion of Add-on-Specific Table Entries from Database**
  Use this BAdI to delete add-on-specific table entries relating to event handlers from the data base
  - /SAPTRX/ARCHIVE_EH_DELETE

- **BAdI: Writing Add-on-Specific Data to Archive**
  Use this BAdI to write add-on-specific table entries relating to event handlers from the data base
  - /SAPTRX/ARCHIVE_EH_WRITE
Enhancement Spot: /SAPTRX/ARC_EVM

◆ **BAdI: BAdI: Check of Archivability Against Add-on-Specific Criteria**
Use this BAdI to nullify the archiving decision for an event message based on add-on-specific criteria.

  /SAPTRX/ARCHIVE_EVM_WRITE

◆ **BAdI: Deletion of Add-on-Specific Table Entries from Database**
Use this BAdI to delete add-on-specific table entries relating to event messages from the database.

  /SAPTRX/ARCHIVE_EVM_DELETE

◆ **BAdI: Writing Add-on-Specific Data to Archive**
Use this BAdI to write add-on-specific table entries relating to event messages from the database.

  /SAPTRX/ARCHIVE_EVM_WRITE
7a. Define Archiving Profile

Define an archiving profile to query data in archive files. This allows querying and displaying data from the database with data that is already archived in a transparent way.

Go to IMG Activity > Event Management > Archive and Delete SAP Event Management Objects > Define Archiving Profiles for Querying and Displaying Archive Files
Handling Function for EH Field Catalog or Info Structure

Handling Functions are used for the ad-hoc evaluation of the event handler/event message archive information structures that refer to a virtual field catalog. To avoid performance problems, keep the archive information structures as lean as possible. If you cannot avoid having many selection fields, you may group the selection fields, for example, per event handler type, in different archive information structures. This is only possible if the groups are logically separated, which means that the archive query of each group can be separated. Each archive information structure should have its own field catalog that only contains the related selection fields. To avoid storing unnecessary archive information structures, for example for a different event handler type, the related archive information structures can be filled or skipped within the handling function of the field catalogs.

Example function modules in the system:
/SAPTRX/ARC_VFCAT_EH_PTA_ID
/SAPTRX/ARC_VFCAT_EH_PTA_DELIV

Select an existing function module or create a new one using a template.
8a. Assign Archiving Profile to User Profile

Assign an archiving profile to a user profile. One selection profile can contain either event handler attributes or event message attributes; a mixture of both kinds of attributes is not supported.

Go to IMG Activity > Event Management > Event Messages, Status Queries, and Web Interface > Web Interface > Configure Fields for User Profiles

1. Define Configured Fields for Selection based on the your field catalog. (fields that are part of the Field Catalog can be used as search criteria)

Change View "Configure Fields for Selection": Overview

<table>
<thead>
<tr>
<th>Field Catalog</th>
<th>Z_LTL_EH</th>
<th>Deliv in LTL Shipment - EH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Selection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F: Targ.Field</td>
<td>Key</td>
<td>SourceTable</td>
</tr>
<tr>
<td>10: EH GUID</td>
<td>/SAPTRX/EH_HDR/EH_GUID</td>
<td></td>
</tr>
<tr>
<td>20: TRACKINGID</td>
<td>/SAPTRX/EH_HDR/TRACKINGID</td>
<td></td>
</tr>
<tr>
<td>30: SHIP_TO_PARTY</td>
<td>/SAPTRX/DLV/SHIP_TO_PARTY</td>
<td></td>
</tr>
<tr>
<td>40: SOLD_TO_PARTY</td>
<td>/SAPTRX/DLV/SOLD_TO_PARTY</td>
<td></td>
</tr>
</tbody>
</table>
8b. Assign Archiving Profile to User Profile

Go to IMG Activity > Event Management > Event Messages, Status Queries, and Web Interface > Web Interface > Define User Profiles.

2. In the Selection Profile section, assign your Configured Fields for Selection based on the field catalog.

3. Define User Profile and assign defined Profiles.

In combination with the archived data display, document flow Display and retrieval of event messages for subordinate event handlers are not supported.
9. Assign User Profile to Web Transaction

1. Define Web Interface Transaction

Go to IMG Activity > Event Management > Event Messages, Status Queries, and Web Interface > Web Interface > Define Web Interface Transactions. Event Handler Set is not Supported.

Change View "Web Interface Transactions Maintenance": Overview

2. Assign User Profiles and Web Interface Transactions to Users.

Go to IMG Activity > Event Management > Event Messages, Status Queries, Interface > Web Interface > Assign User Profiles and Web Interface Transactions to Users or Assign User Profiles to Roles.

New Entries: Overview of Added Entries

In combination with the archived data display, event handler display is not supported.
Improved Archiving with Support for High-Volume Processes

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   Execution Steps for Archiving Event Handlers  37
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4 Display Archived Data on the SAP EM Web UI
3. Execution Steps

Depending on the configuration of the Archiving Sequence for SAP Event Management Objects, the execution steps vary:

- **Event Hander, Event Message**
  - First, follow the execution steps for Event Handler archiving, then for Event Messages

- **Event Message, Event Handler**
  - First, follow the execution Steps for Event Message archiving, then for Event Handlers
1. Deactivate Event Handlers
   - Use either the report /SAPTRX/ARCHIVE_EH_DEACTIVATE or a rule activity to deactivate event handlers. This is required because the archiving process does only consider inactive event handlers.

2. Execute Preprocessing Program for Event Handler Archiving
   - The preprocessing program /SAPTRX/ARCHIVE_EH_PREPROCESS checks the archivability of the selected event handlers and marks them for archiving. By default, this program checks for inactive event handlers with a positive residence time check.

3. Execute Write Program for Event Handler Archiving
   - The write program /SAPTRX/ARCHIVE_EH_WRITE writes the event handlers to be archived to the archive files.

4. Execute Delete Program for Event Handler Archiving
   - The delete program /SAPTRX/ARCHIVE_EH_DELETE reads the archive file created by the write program and deletes the corresponding event handlers from the application data base tables. Deleting the data after writing archive files ensures that no data can be lost.

5. (Optional) Reload Program for Event Handler Archiving
   - The reload program /SAPTRX/ARCHIVE_EH_RELOAD is a correction program which is only meant to be used in emergency! It loads back archived data to the application data base tables.
1. Deactivate Event Handlers

The archiving process only considers inactive event handlers. So you need to deactivate all relevant event handlers before starting archiving. You may either use either a rule activity or report /SAPTRX/ARCHIVE_EH_DEACTIVATE for this.

The deactivation program deactivates the selected event handlers.

Archiving Event Handlers: Deactivating Event Handlers

- Application system ID
- Application object type
- Application object ID

Further Selection Criteria
- Creation Date
- Creation Time
- Updated Date
- Updated Time
- Activation Date
- Activation Time

Log (Summary) for SAPTRX_EH

- Message (Example)

Detail Log for SAPTRX_EH

<table>
<thead>
<tr>
<th>Object</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTL_DELIV 08300001690000001010</td>
<td>Event handler deactivated</td>
</tr>
</tbody>
</table>
2. Execute Preprocessing Program for Event Handlers

The preprocessing program checks the archivability of the selected event handlers and marks them for archiving. By default, the program checks for inactive event handlers with a positive residence time check. The preprocessing program sets the indicator for event handlers to be archived. (Field EH_ARCHIVED for Event Handler Header /SAPTRX/EH_HDR). Once this indicator is set, no changes are possible any more.
3. Execute Write Program for Event Handlers

The write program writes the identified event handlers to the archive file. The archivability was checked before by the preprocessing program.

Maintain Variant: Report /SAPTRX/ARCHIVE_EH_WRITE, Variant Z_EH_WRITE

The write program writes the identified event handlers to the archive file. The archivability was checked before by the preprocessing program.

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The delete program reads the archive file created by the write program and deletes the corresponding event handlers from the application database tables. Deleting the data after writing archive files ensures that no data can be lost.
Execution Steps for Event Messages

1. Execute Write Program for Event Message Archiving
   - The write program /SAPTRX/ARCHIVE_EVM_WRITE writes the event message data identified to be archived to the archive files. The archivability was checked before by preprocessing program.

2. Delete Program for Event Message Archiving
   - The delete program /SAPTRX/ARCHIVE_EVM_DELETE reads the archive file created by the write program and deletes the corresponding event messages from the application data base tables. Deleting the data after writing archive files ensures that no data can be lost.

3. (Optional) Reload Program for Event Message Archiving
   - The reload program /SAPTRX/ARCHIVE_EVM_RELOAD is a correction program which is only meant to be used in emergency! It loads back archived data to the application data base tables.
1. Execute Write Program for Event Messages

The write program writes the event message data to be archived to the archive files. The archivability was checked before by the preprocessing program.

Archiving Event Messages: Write Program

[Table and Log examples are shown]

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2. Execute Delete Program for Event Messages

The delete program reads the archive file created by the write program and deletes the corresponding event messages from the application data base tables. Deleting the data after writing archive files ensures that no data can be lost.

Archive Administration: Execute Delete Program

- Graphical display of spool request 30102 in system E1Q
- Production Mode: Statistics for Deleted Data Objects

<table>
<thead>
<tr>
<th>Archive File Key</th>
<th>000097-001SAPTRX_EVM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Deleted Data Objects</td>
<td>17</td>
</tr>
<tr>
<td>Deleted Database Space in MB</td>
<td>0.065</td>
</tr>
</tbody>
</table>
  - Tables                | 0.080               |
  - Indexes               | 0.005               |

<table>
<thead>
<tr>
<th>Type</th>
<th>No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>/SAPTRX/EH_EVMSG</td>
<td>17</td>
<td>Event Handler Event Message Table</td>
</tr>
<tr>
<td>/SAPTRX/EVM_HDR</td>
<td>17</td>
<td>Event Message Header</td>
</tr>
<tr>
<td>/SAPTRX/EVM_LID</td>
<td>14</td>
<td>Event Location</td>
</tr>
<tr>
<td>/SAPTRX/EVM_PAR</td>
<td>1</td>
<td>Event Message: Event Handler Parameters</td>
</tr>
<tr>
<td>/SAPTRX/EVM_PID</td>
<td>5</td>
<td>Event Manager: Partner Table</td>
</tr>
</tbody>
</table>
Agenda

Improved Archiving with Support for High-Volume Processes

1 Overview
2 Configuration Steps
3 Execution Steps
4 Display Archived Data on the SAP EM Web UI
If you follow the instructions on the previous slides, you are able to access archived data, and a mixture of data still residing on the database as well as data from the archive from the SAP EM Web UI.

After an event handler has been archived, processing event messages is not possible anymore.