Quick Configuration Guide for the ILM Store
Version for SAP IQ
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1 Introduction

SAP Information Lifecycle Management (ILM) Store enables you to run the entire data retention process – from archiving to storing data – within the SAP environment without having to use external interfaces. This process takes into consideration SAP ILM Retention Management (RM) specifications.

You can use the WebDAV interface standard to store archive files in an SAP IQ database. This guide covers the steps to configure the ILM Store with the SAP IQ database.

**i Note**

This is a quick set-up guide. For a comprehensive documentation, refer to Installation & Config. Guide ILM Store (from SPS 13).

![Diagram of SAP ILM Store with SAP IQ Architecture](image)

Figure 1: SAP ILM Store with SAP IQ Architecture

The system landscape may be configured in various combinations, such as:

- Using archiving client, SRS, and ILM Store on the same system.
- Using remote SRS to isolate the archiving client and the SRS.
- Using archiving client and SRS on the same system, and using ILM Store on a separate system.

**Caution**

Once the ILM Store is set up and the operations have started, do not make any changes in the settings as this can lead to the loss of the information stored so far.
2 Prerequisites

To configure the ILM Store, ensure the following:

- You use an SAP NetWeaver system with the minimum requirements of software component SAP_BASIS 740 Support Package 13 or SAP_BASIS 750 Support Package 02. SAP recommends using the latest version of the SAP_BASIS software component.
- You have activated the business function ILM_STORE.
- You have an SAP IQ database of Enterprise Edition of Version 15.4 SP03 or higher. For more information, see the SAP Help Portal at SAP IQ Help. For information about the installation of the Enterprise Edition for SAP IQ and the required licenses, see SAP First Guidance - SAP NetWeaver BW: Implementation SAP NLS with SAP IQ.
- You need to ensure the following for the SAP IQ database:
  - The unstructured data analytics option (IQ_UDA) is available.
  - The variable ENABLE_LOB_VARIABLES is switched on.

2.1 Important SAP Notes

Furthermore, ensure that you have implemented the notes below.

<table>
<thead>
<tr>
<th>Title</th>
<th>SAP Note</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILM Store - Collection of notes</td>
<td>2563024</td>
<td>This note gives a list of notes for component BC-ILM-STO. Refer to this note for detailed information.</td>
</tr>
<tr>
<td>SAP IQ: Remote connection to IQ 16.0 SP8</td>
<td>2016130</td>
<td>Enable Remote Connection to SAP IQ</td>
</tr>
<tr>
<td>Sybase IQ: Enable remote/secondary connect to SAP IQ</td>
<td>1737415</td>
<td>Troubleshooting information</td>
</tr>
</tbody>
</table>
3 Authorizations

Access to the ILM Store

1. Create a technical user with the authorization to access the ILM Store and to save files in the store.
2. Assign a role to the user. Use the following authorizations:

<table>
<thead>
<tr>
<th>Authorization Object</th>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SILMSTOR</td>
<td>ACTVT</td>
<td>16 (Execute)</td>
</tr>
<tr>
<td>S_DATASET</td>
<td>FILENAME</td>
<td>*</td>
</tr>
</tbody>
</table>
|                      | PROGRAM          | CL_ILM_STOR_DATASET====
|                      |                  | CP,                     |
|                      |                  | RILM_STOR_PUT_WORKER   |
|                      | ACTVT            | 6 (Delete), 33 (Read), 34 (Write) |
| S_DEVELOP            | OBJTYP           | TABL                   |
|                      | ACTVT            | 07, 40                 |
| S_CTS_ADMI           | CTS_ADMFCT       | TABL                   |
| S_CTS_SADM           | CTS_ADMFCT       | TABL                   |

ILM Store Administration

To be able to install, configure, and test the store, you need a role with the authorization object SILMSTORAD with the following values of ACTVT:

1. **02** = Change
2. **07** = Activate, Generate
3. **39** = Check
4 Storage Connections

Administrative data of the archive files is stored in the system database tables. The archive file data is stored in the BLOB (Binary Large Object) format in the secondary SAP IQ DB tables.

4.1 Creating Database Connections

Use transaction DBCO to create the required secondary database connection to the SAP IQ database.

4.2 Testing the Database Connection

To test the configuration of the database connection, start transaction SE38 and execute ABAP report ADBC_TEST_CONNECTION.

![Figure 2: Expected Output of Report ADBC_TEST_CONNECTION](image-url)
5 Publishing the ILM Store

5.1 Create the ICF Node for the ILM Store

1. Start transaction SICF and create a new service under node ILM. Enter the service name in the Service Name field.

![Figure 3: SICF Node Creation for the ILM Store](image)

2. In the Logon Data tab, enter a user with the authorization to access the ILM Store. For more information, see Authorizations [page 5].

3. On the Handler List tab, enter `CL_ILM_STOR_WD_REQUEST_HANDLER` as Handler.

4. Activate the service.

5.2 Create the RFC Destination

1. Start transaction SM59.

2. Create a new HTTP connection to the external server (type G).

3. In the Technical Settings tab, maintain the below values:
   - Target host
   - Service number (port) corresponding to your system
- Path prefix: this represents the connection between the destination and the ICF node. Insert the service path you have defined using transaction SICF in Create the ICF Node for the ILM Store [page 7].

4. Save your changes and perform a connection test.

![RFC Destination in Transaction SM59](image)

**iNote**

In case you are running the SRS and the ILM Store on two different systems, set up the RFC destination in the SRS system using the same procedure. The RFC destination in the ILM Store system is for testing purposes.
6 Origin Customizing

The origin serves as the identifier of the data source. It is essential for the Store’s configuration.

The Origin Customizing can be generated as shown in Generation of Administrative and Operational Origin or it can be created manually as shown in Administrative Customizing and Operational Customizing.

6.1 Generation of Administrative and Operational Origin

A simplified and automatic method to create the settings required for the ILM Store set-up is enabled. Check note 3068508 for further information.

Follow the steps below:

1. In the ILM Store system, go to transaction ILM_STOR_GEN_CUST.
2. Enter the values for the input field.
3. Select SAP HANA or SAP IQ as storage media. In the input field for Database Connection, enter the secondary database connection.
Figure 5: Generation of ILM Store Customizing

4. Click on execute.
5. A result page with details of the customizing values created will be displayed as shown below.

Figure 6: Result of Generation Report

```
<table>
<thead>
<tr>
<th>Generated Customizing Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Store Client</td>
</tr>
<tr>
<td>Administrative Origin</td>
</tr>
<tr>
<td>Operational Origin</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Media Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Media</td>
</tr>
<tr>
<td>Database Connection</td>
</tr>
</tbody>
</table>
```
iNote
If you perform the generation, then the below steps for Administrative or Operational Origin are not needed.

6.2 Administrative Customizing

1. Start transaction ILM_STOR_ADM_CUST, or go to SAP NetWeaver Customizing, and choose Application Server ➤ Basis Services ➤ Information Lifecycle Management ➤ ILM Store ➤ Define Settings for Administrative Customizing.
2. Click Create.
3. Enter the Client and the Logical File Name.
4. Specify a name and a description for the new Administrative Origin.

![Customizing in Transaction ILM_STOR_ADM_CUST](image)

Figure 7: Customizing in Transaction ILM_STOR_ADM_CUST

5. Click Add Operational Origin.
6. In the pop-up Create Operational Origin, enter the Operational Origin name and a Description.
7. In the DB Connection field for TILM_STOR_BLOB, enter IQ_DBCO.
6.3 Operational Customizing

To maintain additional properties, start the transaction `ILM_STOR_OPR_CUST`, or go to the `SAP NetWeaver Customizing`, choose ▶️ Application Server ▶️ Basis Services ▶️ Information Lifecycle Management ▶️ ILM Store ▶️ Define Settings for Operational Customizing ▶️.

To maintain additional properties, enter the client maintained in Administrative Origin and click Execute.

6.4 Routing Table Configuration

1. In transaction `SM30`, enter the table name `TILM_STOR_O_ROUT`.
2. Create the following entry:
   - **SAP System ID**: `<System ID>`
   - **Client**: `<Client>`
   - **Data Source**: `<Your operational origin>`

![Routing Table Entries](image)

6.5 Class Factory Customizing

1. In transaction `SM30`, enter the table name `TILMSTOR_CF`.
2. Create an entry with the following values.

![Display View "ILM DB Store: Class Factory": Details](image)

Figure 10: Class Factory Table Entries
7 Storage and Retention Service

The Storage and Retention Service (SRS) is needed for the storing of ILM-enabled archive files in the ILM Store. To use SRS for managing ILM stores in, you need to activate it in the application system.

7.1 Activation of SRS

To activate SRS, you can choose between the following options:

- Activate the SRS that runs locally on the application system.
- Activate the SRS that runs on a separate (remote) system. To facilitate this, establish an HTTP connection between the relevant systems.

For more information, refer to the SAP Help Portal under SAP Information Lifecycle Management > Making SAP ILM Available > Providing Stores for SAP ILM > Configuring the Service for the Control of ILM Stores > Configuring Storage and Retention Service for ILM Stores.

7.2 Creation of the ILM Store in the SRS Administration

To enter stores that are available for the SRS in transaction ILMSTOREADM, create a new entry with the following values:

1. **ILM Store**: <identifying name for the store>
2. **Description**: <descriptive text>
3. **HTTP Connection**: <previously created RFC destination>

![Figure 11: Creation of Store in ILMSTOREADM](image)

This store can further be used in the ILM rule maintenance in transaction IRMPOL. For more information, refer to the SAP Help Portal under SAP Information Lifecycle Management > Using ILM Retention Management in the Application System > Editing ILM Policies > Editing Retention Rules.
8 Testing the ILM Store

After completing the setup, test the ILM Store according to the following guidelines.

8.1 Origin for Test Purposes

To test the ILM Store configurations, you can use a test origin archeb.
1. Start transaction SM30, and enter table TILM_STOR_CUS.
2. Create new entries for the origin archeb by copying all the entries of your origin (for example adk and archive).
   It is mandatory to use the test reports to check the ILM Store functionality.

8.2 Test Reports

To test the ILM Store functionality, you can use the report RILM_STOR_TEST_PF_SINGLE. In the report selection, provide the RFC destination (created in Create the RFC Destination [page 7]), and execute.
To check various data constellations and operations as defined in the specification BC-ILM 3.1., you can use the report RILM_STOR_TEST_AT. In the report selection, provide the RFC destination (created in Create the RFC Destination [page 7]), and execute.
To clear all table entries, you can use the report `RILM_STOR_TEST_CLEAR`.

### 8.3 Application Logs

The application log object for the ILM Store is `ILM_STOR`. To access the logs of all operations performed in the store, start transaction `SLG1` and enter the object as `ILM_STOR`.

### 8.4 Troubleshooting

If you run into issues, access the troubleshooting blog to find a list of common issues.

For further support, raise an incident for the application component `BC-ILM-STO`. 
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