

Reading Data from SAP HANA Modelling Views Using PowerCenter

Abstract

This article explains how to read data from SAP HANA modelling views using PowerCenter.

Supported Versions

- PowerCenter 10.4.0

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Overview

Use the SAP HANA subtype in an ODBC connection to read data from SAP HANA modelling views.

You can read data from attribute views, analytical views, and calculation views. Install an SAP HANA license to read data from SAP HANA modelling views.

Input Types for HANA Modelling Views

You can use the following input types when you read data from SAP HANA modelling views:

- Variables. A variable is a filter. A variable is associated with an attribute column, for example, company name, of the view. However, a variable does not appear in the source metadata in the PowerCenter Designer. Provide the variable value in the attribute column that you specified in SAP.
- Parameters. An input parameter is a placeholder to the query. You can use parameters to insert values for analytical views and calculation views. The data type for an input parameter in PowerCenter is `char`. Specify the data for input parameters in the format that you defined in SAP.

Input Parameter Types

When you import a HANA modelling view, Informatica adds a prefix to the parameter name. The prefix is used to indicate the parameter type.

You can use the following types of parameters:

- Mandatory Parameter. A parameter for which you are required to specify a value. For example, in the field `param_M_AENAM`, `param_M` is the prefix for a mandatory parameter that Informatica adds. `AENAM` is the parameter name that is a part of HANA modelling views.

- **Optional Parameter.** A parameter for which you do not need to provide a value. For example, in the field param_O_UNAME, param_O is the prefix for an optional parameter that Informatica adds. UNAME is the parameter name that is a part of HANA modelling views.

Reading Data from SAP HANA Modelling Views

To read data from SAP HANA modelling views, perform the following steps:

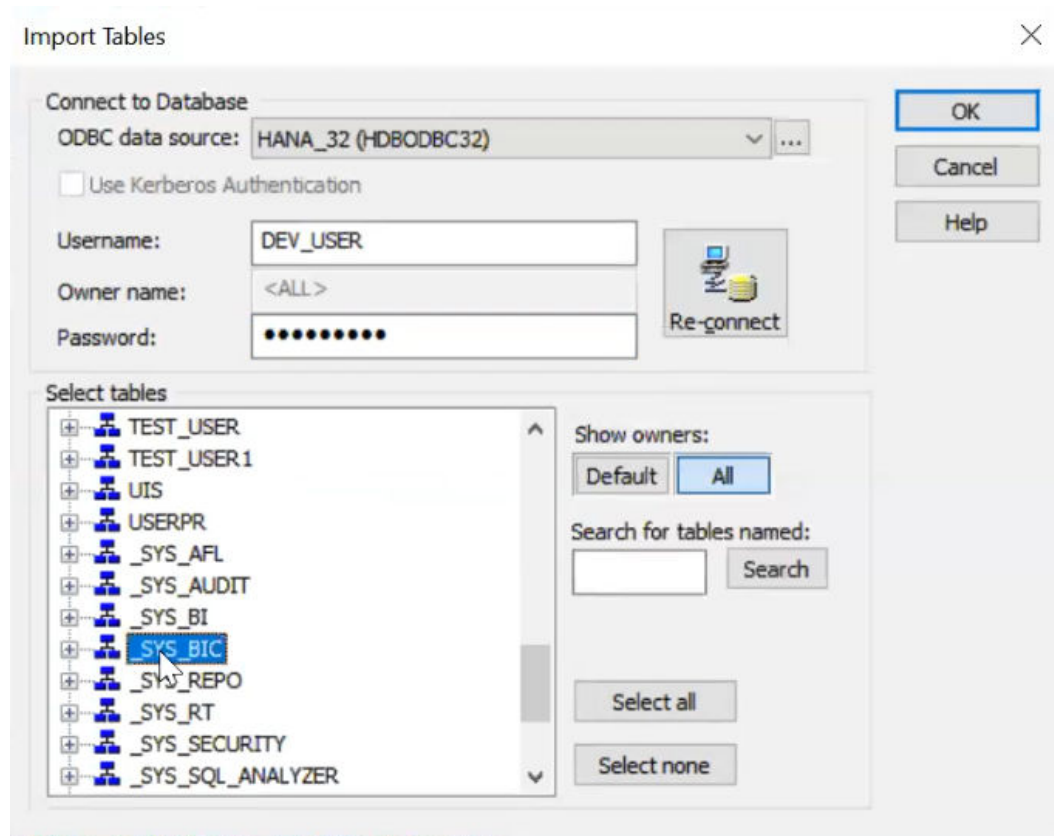
1. Install the SAP HANA license.
2. Install the 32-bit HANA ODBC driver. Use the 32-bit ODBC data source to import the SAP HANA modelling views.
3. Create a mapping.
4. Install the 64-bit HANA ODBC driver. Use the 64-bit ODBC data source in the ODBC connection.
5. Create the sessions and workflows.



Importing SAP HANA Modelling Views

Install the 32-bit HANA ODBC driver. Use the 32-bit ODBC data source to import an SAP HANA modelling view.

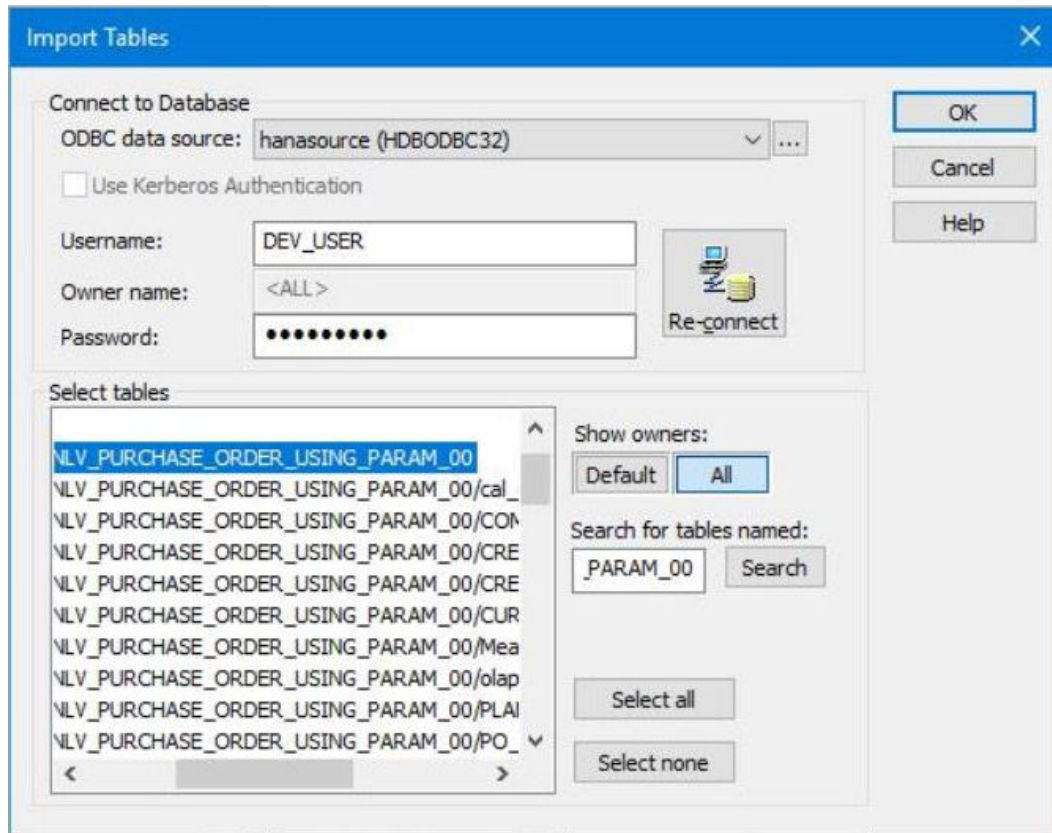
1. Click **Sources > Import from Database**.
2. Select the 32-bit ODBC data source.
Note: You must install the 32-bit HANA ODBC driver to use the 32-bit ODBC data source.
3. Enter the username and password.
4. Click **Connect**.
The **Select tables** list appears.
5. From the **Select tables** list, select **_SYS_BIC**.
Note: All the modelling views are listed under the **_SYS_BIC** schema and not under the user schema.

The following image shows the _SYS_BIC schema under the **Select tables** list:



6. Click the  icon next to the _SYS_BIC schema.
7. Click the  icon next to **Views** to select the column view name in the table list.
8. Select a basic view that you have created in SAP. Do not select a view name that has a hierarchy.

The following image shows the ANLV_PURCHASE_ORDER_USING_PARAM_00 view selected from the list of views:




- Click **OK** to import the source definition for the view.

Creating a Mapping

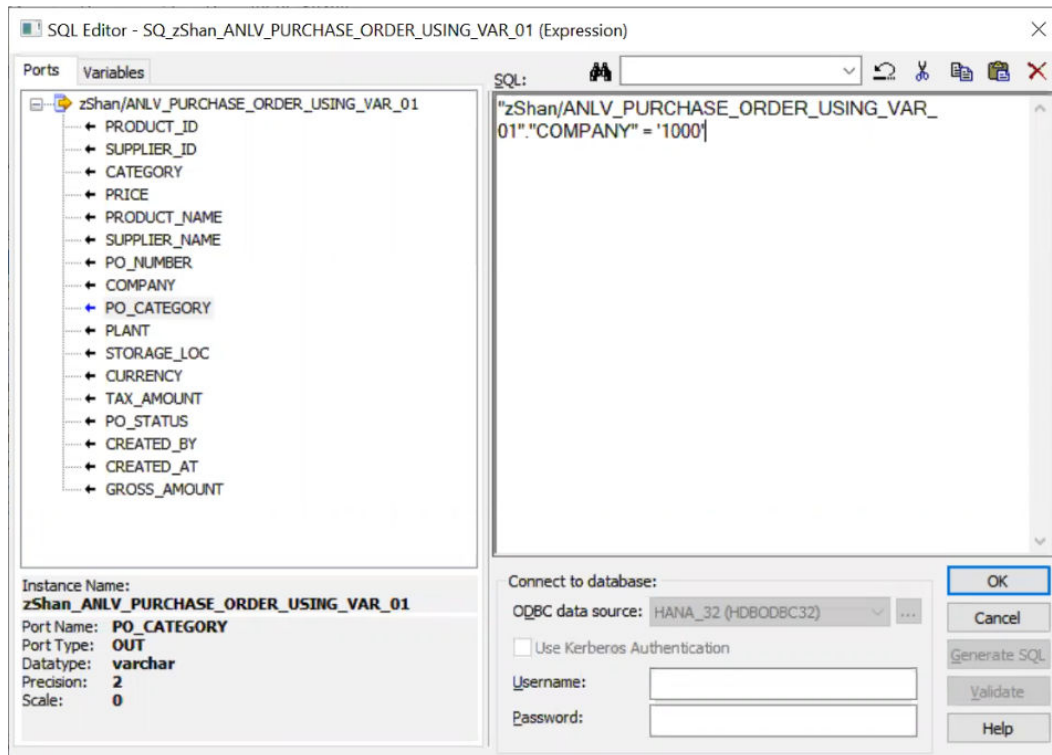
After you import the HANA modelling view, create a mapping. In PowerCenter, select a source filter that you configured in SAP and specify the variables or parameters.

- Create a mapping.

Note: If you use input parameters, do not connect the input parameters in the Source Qualifier to the output fields. Otherwise, the mapping fails.
- To edit the Source Qualifier, click the **Properties** tab in the **Edit Transformations** window.
- Click the  icon next to the **Source Filter** field.

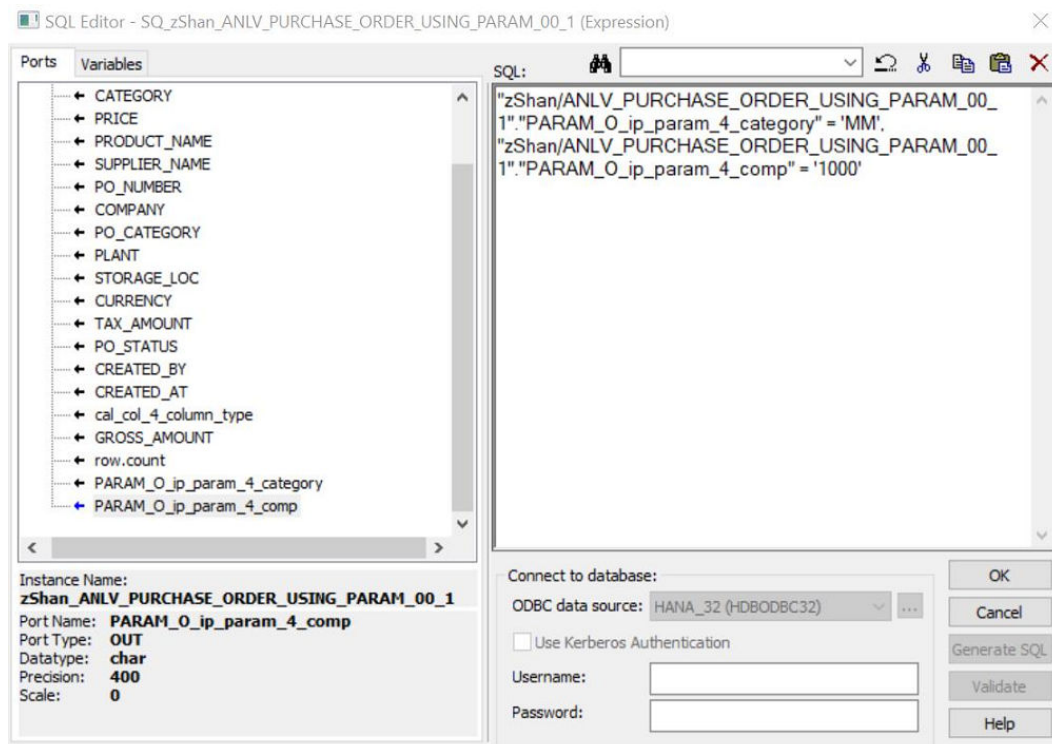
The **SQL Editor** page appears.
- Select the column view in which you want to apply a filter from the list of column views on the left pane.
- Specify the variable name or input parameter name in double quotes. Specify the variable value or input parameter value in single quotes. When you want to specify more than one variable or parameter, separate the variables or parameters using commas.

The following image shows a source filter for a variable value:



In the above figure, the view ANLV_PURCHASE_ORDER_USING_VAR_01 has a variable COMPANY with a value of 1000.

The following image shows a source filter for parameter values:



In the above figure, the view `ANLV_PURCHASE_ORDER_USING_PARAM_00_1` has a parameter `PARAM_O_ip_param_4_category` with a value of `MM`. The view also has a parameter `PARAM_O_ip_param_4_comp` with a value of `1000`.

6. Click **OK**.

7. Click **Apply**.

The fields are mapped.

Creating Sessions and Workflows

Install the 64-bit HANA ODBC driver and use the 64-bit ODBC data source in the ODBC connection. Create an ODBC connection of the SAP HANA ODBC subtype. In the session, you must use a relational reader.

1. In the PowerCenter Workflow Manager, click **Tools > Task Developer**.

2. Click **Tasks > Create**.

3. Select **Session** as the task type to create.

4. Enter the session name and click **Create**.

The **Mappings** dialog box appears.

5. Select the required mapping and click **OK**.

6. Click **Done** in the **Create Task** dialog box.

7. In the workspace, double-click the session you created.

8. On the **Mappings** tab, select **Sources** in the Transformations pane on the left.

9. Select the source as **Relational Reader**.

10. To select the source connection name in the **Connections** pane, click **Edit**.

The **Connection Object Definition** page appears.

11. Enter the source connection name.

12. Enter the username and password.

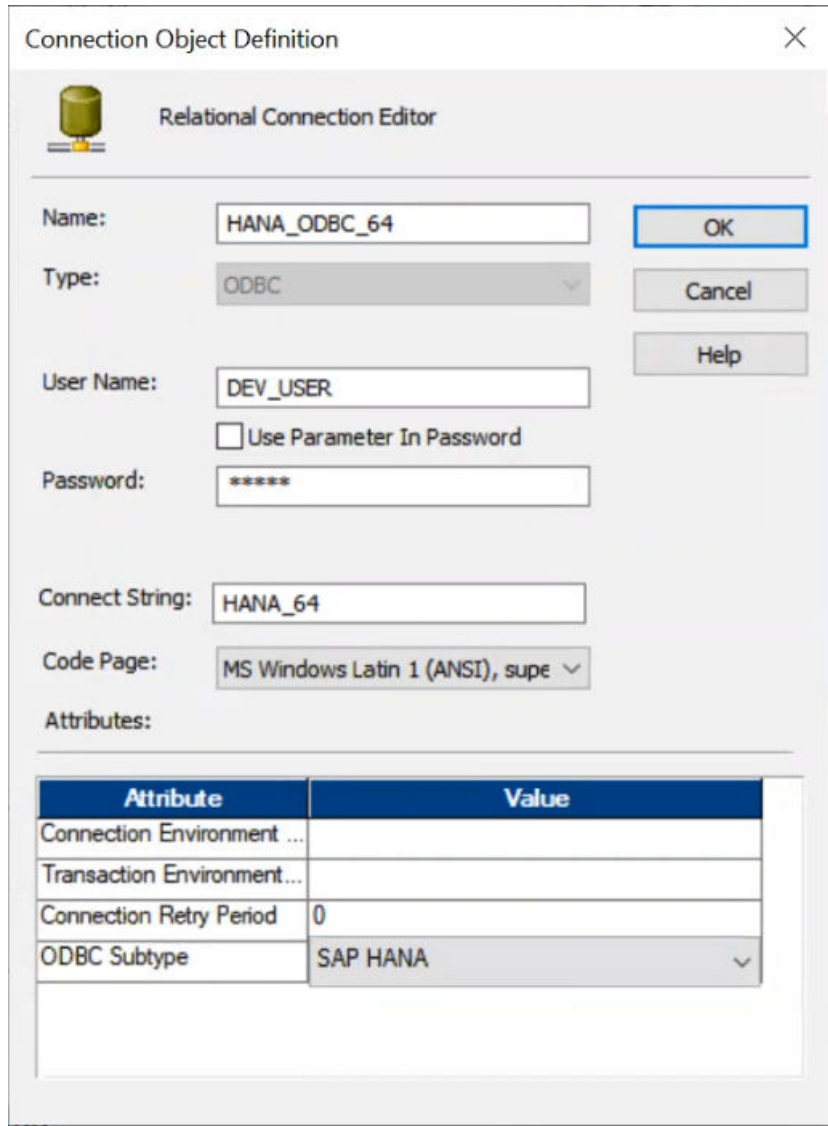
13. In the **Connect String** field, specify the 64-bit ODBC data source.

Note: You must install the 64-bit HANA ODBC driver to use the 64-bit ODBC data source.

14. Select the ODBC subtype as **SAP HANA**.

Note: If you do not select the ODBC subtype as SAP HANA, the session fails.

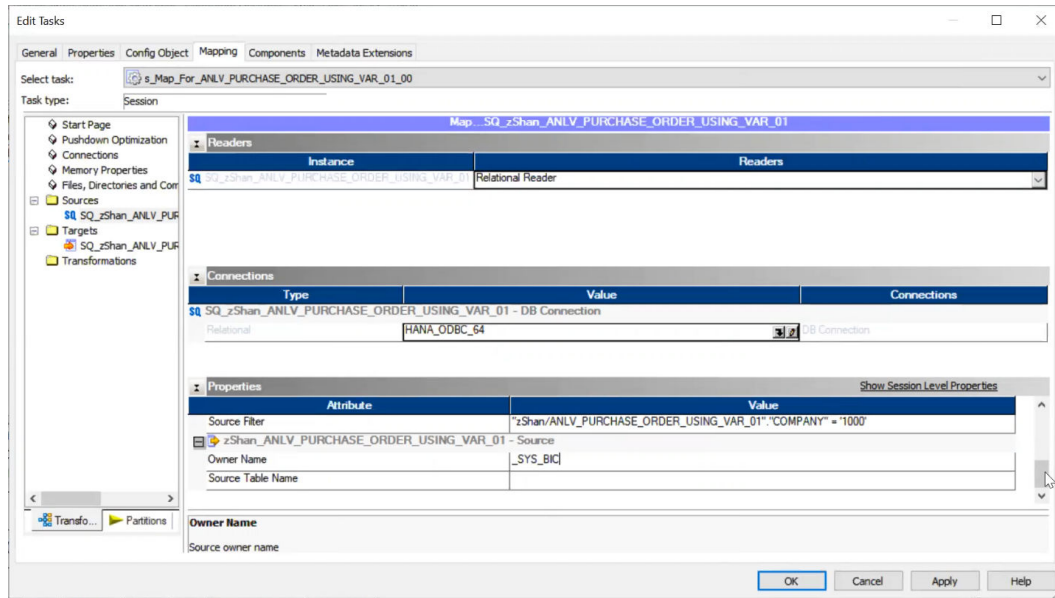
The following image shows the ODBC subtype selected for the connection:



15. Click **OK**.

16. In the **Properties** pane for the source connection, specify the **Owner Name** as **_SYS_BIC**.

The following image shows the owner name for the source connection in the **Properties** pane:



17. Select a target.
18. Click **OK** to save and close the session properties.
19. Create a workflow.
20. Run the workflow.

Rules and Guidelines for HANA Modelling Views

Consider the following rules and guidelines when you read data from SAP HANA modelling views:

- You cannot use parameters with lookups.
- SAP HANA adds a `row.count` field when you import a view in the calculated column. If you do not create a calculated column for a view, the `row.count` field does not appear in the source metadata.

Author

Sakshi Bansal

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