SAP HANA Metadata Scanner

Security Requirements

The following document details the installation and configuration requirements to extract the metadata necessary from within SAP HANA.

Access to the database via read only ODBC required. Analytic Privilege: _SYS_BI_CP_ALL and Modeller role.

If this role cannot be granted then the user ID will need access to each individual package where the model views are stored.

Required Objects:
SYS.TABLE_COLUMNS
SYS.VIEW_COLUMNS
SYS.TABLES
SYS.VIEWS
SYS.INDEX_COLUMNS
SYS.CONSTRAINTS
SYS.M_TABLES
SYS.OBJECT_DEPENDENCIES
SYS.REFERENTIAL_CONSTRAINTS
_SYS_BI.BIMC_DIMENSION_VIEW

Metadata Types Supported

- Tables (all types)
- Views (all types)
- Columns
- Dimensions (all types)
- Relationships between objects (tables and view) from:
    - Dependencies
    - Referential Constraints

Configuration

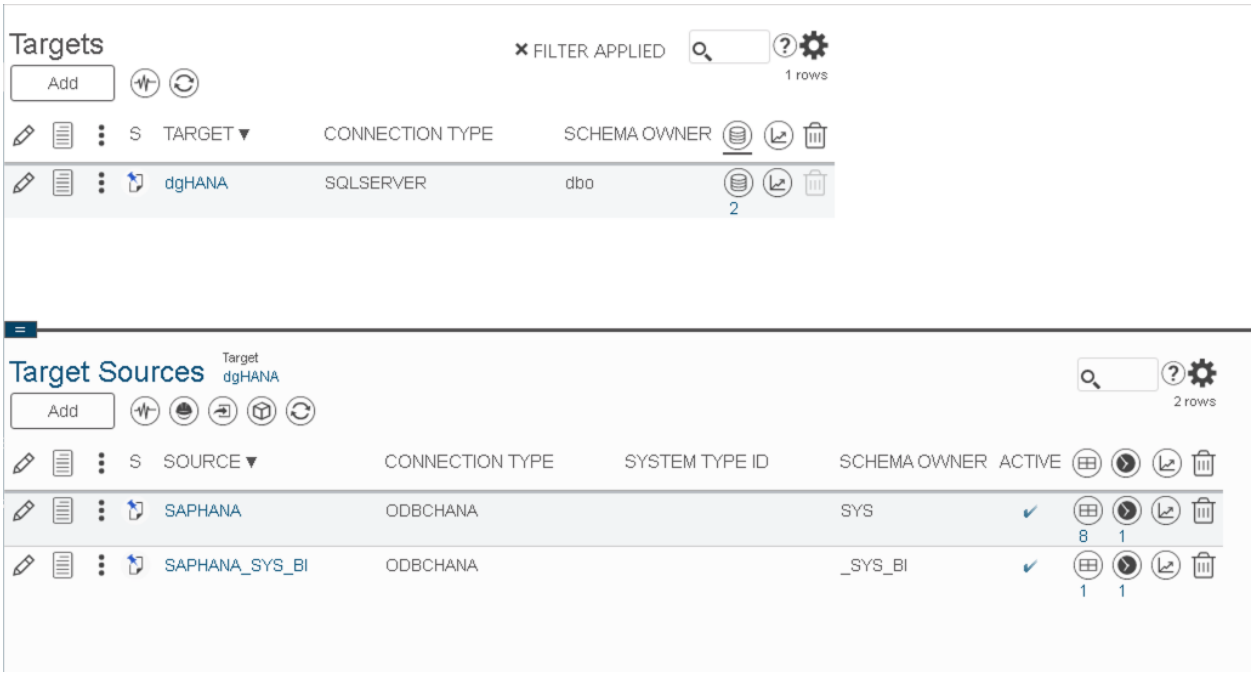
Setup DataSource in Administration:

1. Create Data Source in the Admin → Data Source for HANA connection
    a. One Data Source needed per Schema (SYS, _SYS_BI)

    b. Multiple are necessary for the Collect Target Source Registration to bu successful
2. Enter the following data
    a. Database Type = Hana
    b. Connection String = DSN=**********;UID=**********;PWD=********;Port=30015;Driver={HDBODBC};SESSIONVARIABLE:APPLICATION=VBR_DSP_HDI
    c. Username
    d. Password
3. Create Data Source for the Collect Target local SQL database (i.e. dgHANA)
    a. The Install Scripts assumes the database will be named dgHANA, in order for the installation to be automated please create that database now.
    b. Once the database is created run the first installation script in the install package:
        i. dgHANA_DataSource_Create.sql
4. Register Data source created in step 3 as a Collect Target
5. Register the Data Sources created in steps 1 and 2 as Target Sources
6. Register the required objects in the list above to the appropriate Target Data Source (see example screenshot below).
7. Build and Refresh each successfully registered object.
8. Confirm data is being returned by looking at the record count on the Target source Table registration.

Using the DSP application Collect, download the above tables or views into a Collect Target (i.e. dgHANA)

Download the metadata from Collect



Once all the tables are created and downloaded successfully into dgHANA, you can now run the installation script.

Your ODBCHANA Target Source Connection Type may need to be updated to download data from views.

1. Navigate to **Collect** → **Connection Types** → **Sources** button on the row for SQLSERVER Target Connection Type

2. Find the source connection type for “ODBCHANA” and **click** the vertical view.

3. Edit the Download Table SQL field to support views with the following value

   SELECT SCHEMA_NAME AS SCHEMAOWNER, TABLE_NAME AS TABLENAME, 'Download Table' AS DESCRIPTION FROM PUBLIC.TABLES ORDER BY 1, 2
   UNION
   SCHEMA_NAME AS SCHEMAOWNER, VIEW_NAME AS TABLENAME, 'Download Table' AS DESCRIPTION FROM PUBLIC.VIEWS

4. **SAVE** the Record and proceed.

RUN the Installation SQL script provided in the install package

SAP HANA ScannerTech_Install.sql
If you encounter any errors please open a ticket at support.syniti.com.

Create System Type Model Views

1. Run the install script for the HANA metadata scanner to create the System Type Model and the supporting views.
    a. **NOTE** - the install script for the HANA scanner creates the **SAPHANA** System Type Model and the Views within dgHANA.

Create System Type from Model

1. Create a new System Type (i.e. SAP HANA) in Common → System Types
    a. Add new System Type (i.e. SAP HANA)
    b. Import from Datasource of Model
        i. We will be using the above SAPHANA System Type Model to populate the system type.
            1. Example data
                a. DataSourceID = dgHANA
                b. System Type Model = SAPHANA
                c. LanguageID = English
                d. Import Model Option = Import tables from the selected model.
2. Import the data from the System Type Model that was created in previous steps.
    a. Click the **Import Model** Button

Add Data Base, Instance and Schemas values

1. Navigate to Syniti Metadata Discovery application
2. Locate the System Type created in the steps above.
3. Enter Instance and Database information
4. Navigate to the Tables and enter schema information in mass update or individually.