# SAP Netweaver Metadata Scanner

## Security Requirements

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

This scanner can be used for the SAP Business Suite applications based on the SAP ABAP and Netweaver technology stack as well as SAP S/4HANA. The following SAP applications are examples of what is supported:

- SAP ECC (ERP)
- SAP S/4HANA
- SAP MDG
- Anything on SAP ABAP | Netweaver technology Stack included SAP Business Suite on HANA

Access to the database via read only ODBC or SAP RFC access required.
NOTE: we also have a SAP HANA database scanner which is used for when SAP HANA is used as a data warehouse or pure database that isn't supporting the SAP Applications.

**Required Objects:**
NOTE: if you are upgrading the SAP Netweaver scanner new required objects will need to be extracted via Collect.

D010TAB
DB6NAVSYST
DD02L
DD02T
DD03L
DD04T
DD05S
DD07L
DD07T
DD08L
DF14L
DF14T

EDIDC
EDIMSG
EDIMSGT
EDSAPPL
IDOCSYN
TADIR
TDEVC
TSTC
TSTCT

## Configuration

## Setup DataSource in Administration:

1. Create Data Source in the Admin → Data Source for underlying database connection NOTE: dgSAP is a target that is supplied in the installation. These steps are only needed if a new database is desired. Otherwise, dgSAP can be used.
    a. One Data Source needed
2. Enter the following data
    a. Database Type
    b. Username
    c. Password
3. Create Data Source for the Collect Target local SQL database (i.e. dgSAP)
4. Register Data source created in step 3 as a Collect Target
5. Register the Data Source created in steps 1 and 2 as Target Sources
6. Register the required objects in the list above to the appropriate Target Data Source.
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 Stewardship Tier application, Collect, download the above tables or views into a Collect Target (i.e. dgSAP; dgSAP_APO).

NOTE: there should be a target dedicated for each SAP instance you wish to scan. Also the dependent tables will need to be extracted for each instance that is in scope for scanning.

## System Type Model

The System Type Model and System Type Model Views are delivered as part of the main install in DSP Common application and database. The System Type Model that is delivered and points at dgSAP for metadata is named ‘SAP’

This model can be copied by using the system type copy functionality on the Configuration menu of the Metadata Discovery application. NOTE: the views may need to be scripted from DSPCOMMON database to the new datasource database, typically, the dg* target database where the metadata for the new instance is located.

## Install and Configure SAP Netweaver Scanner Technology

1. Run the install script for the SAP Netweaver metadata scanner to create the System Type Model and the supporting views.
    a. For fresh install or upgrade of the scanner run the installation SQL Script*: ScannerInstall_SAPnetweaver_v5_SMD_2_1.sql*

Please contact Syniti support if you do not have this script.

## Create System Type from Model

1. Create a new System Type (i.e. ECC PRD)
2. Import the data from the System Type Model that was created in previous steps.
3. Import Model

## Add Data Base, Instance and Schemas

1. Navigate to Syniti Metadata Discovery application, System Type | Extension page.
2. Locate the System Type name created in the steps above.

3. Enter Instance and Database information
    a. If you have already downloaded table DB6NAVSYST into the collect target configured for the System Type, then this information can be automatically assigned. Using the Discover Instance and Database names button on the toolbar of the System Type Extension Page.

## Generate Dependencies

This step is required before building the Application Module Hierarchy

1. Navigate to the vertical view of the System Type Extension under the Metadata Discovery Menu.
2. Ensure the Collect Target, System Data Source ID fields are populated under the Parameters needed for Analysis Automation tab.
3. Navigate to the Action Settings Tab
    a. Under the Dependencies Label
        i. Click **Generate**
        ii. NOTE: Error messages will appear if the dependent tables extract packages and tables are not built in teh Collect Target database source.
    b. If upgrading the SAP Netweaver scanner, dependencies will need to be generated again to reflect the new auto generation templates.
    c. Also there are more dependent tables that may need to be extracted.

## Build Application Module Hierarchy

1. Navigate to the Vertical View of the System Type created in the steps above.
2. Navigate to the Action Settings Tab
    a. Under the Analysis Action Label
        i. Click **Create SAP Application Module Taxonomy**
    b. Results will create the following:
        i. Navigation of the Application Module Hierarchical Taxonomy on the Horizontal and Vertical Views
        ii. Searchable flat Taxonomy by Table, Application Module or Transaction

# Analyze Application Modules

## Pre-Requisites

To get the full analysis, the following tasks should be completed  locally on the Stewardship Tier Instance where Metadata Discovery has been installed.

1. Extract Data and run profile via the Common Profile application in the Analyze menu.
2. ttTableRow should be populated in dspMetadataScan manually at the sql server layer.
    a. Under the Metadata Discovery → Configuration → Application Analysis → Database Queries page there is a list of queries that can be used to get Row counts from the database level.
        i. Once this is completed the information needs to be inserted into dspMetadataScan.dbo.ttTableRow
        ii.

| **Column Name** | **Data Type** |
|---|---|
| SystemTypeID | uniqueidentifier |
| TableName | nvarchar(128) |
| SchemaName | nvarchar(128) |
| RowCounts | nvarchar(255) |

Analysis combines information based on table row counts and profiling results to determine if Application Modules, Tables and Fields are in use or not.

1. Once the Application Module taxonomy has been created, the modules can then be analyzed
2. In order to analyze the modules, the metadata about the Table Row count and size of the underlying SAP database needs to be imported and updated to the System Type Table extension.
3. The Package ID field allows the user to identify what package is used to pull this information.

4. Once that information is there you can perform the following action
    a. Navigate to the Vertical View of the System Type created in the steps above.
    b. Navigate to the Action Settings Tab
        i. Under the Analysis Action Label
            1. Click **Analyze Modules**
                a. Results
                    i. In the Application Module Taxonomies, an Icon of, In use, not in use or undetermined is displayed based on the analysis steps performed. This status can be used for downstream automation and scoping for various project related activities.

## Scanner Results are Ready

Scanner Results are ready for Navigation and use. Please see the Metadata Discovery User Manual for more information on how the data can be used, sent to the Knowledge Tier or another application via Metadata Exchange.