



Data Replication

Setup Notes for Replications to SAP® HANA®

Version 9.6.0.50

Software Release Date: 9/12/19

Document History

Version	Author	Date	Reviewer	Date	Comments
1	JHLorenzin	8/28/18	ALaspertini		
2	JHLorenzin	10/3/19	ALaspertini		

Syniti Data Replication

Table of Contents

Connection Type.....	1
Additional Requirements for SAP HANA.....	1
Add Target Connection Wizard.....	3
Select Provider Screen	3
Set Connection String Screen	4

Syniti Data Replication

Syniti Data Replication allows you to replicate data from relational database tables to **SAP HANA** in the following ways:

- **Refresh (Snapshot replication)**

A one-time complete replication from any major relational database source to **SAP HANA** as a target, according to replication settings and scripts. You can control the timing of the replication, identify the columns to be replicated and add scripts to transform data during replication. Source databases include Oracle, Microsoft SQL Server, IBM Db2 for i, IBM Db2 LUW, Sybase, Informix, MySQL.

- **Continuous refresh**

A regularly scheduled refresh replication as described above. The schedule is defined in the replication settings.

- **One-way mirroring (Incremental Replication)**

A continuous update of replicated tables based on changes to the source database that have been recorded in the database server log. Typically, this involves an initial refresh operation, as described above, to set up the target table. Then you can define the replication settings to check the transaction log on the source database at regular intervals. Any changes found in the log are applied to data on the **SAP HANA** platform.

For complete details on the setup process, check the *Syniti Data Replication User Guide* available from the Management Center **Help** menu or the *Syniti Data Replication Setup Guide*, available for download in the [Help Center](#).

Connection Type

Either:

SAP HANA .NET Data Provider version 1.0.84.0 or above (Supported in DBMoto 8.5 and above)

1. Log in and register your account : https://community.sap.com/topics/hana-data-management-suite?sourceid=PPCDevelopers2&url_id=text-crm-xh12-ppc-ppcdbdg4-developeredition
2. Search for “Software Downloads”
[SAP HANA CLIENT Winx86 \(32 or 64 bit\)](#)

Assembly: Usually located in C:\Program Files\sap\hdbclient\ado.net\v4.5\Sap.Data.Hana.v4.5.dll

Or:

SAP HANA ODBC Driver

Available as part of the SAP HANA CLIENT Winx86 (32 or 64 bit)

[SAP HANA CLIENT Winx86 \(32 or 64 bit\)](#)

Additional Requirements for SAP HANA

1. If you choose the ODBC driver to connect to HANA, Syniti DR uses the <IMPORT FROM CSV file> statement to do bulk operations. This requires the addition of the IMPORT system privilege for the Syniti DR user in HANA (security – users – Syniti DR – system privileges.)

Syniti Data Replication

DBMOTO

Disable ODBC/JDBC access

Authentication

Password
 Password*: Confirm*:

Kerberos
 External ID*:

Valid From: Valid Until:

Session Client:

Granted Roles | System Privileges | Object Privileges | Analytic Privileges | Package Privileges

System Privilege	Grantor
IMPORT	SYSTEM

- The configuration of the HDB system under the SYSTEM user also needs to be changed (error message and change shown below)

Name	Default	System
indexserver.ini		◆
import_export		
csv_import_path_filter		
enable_csv_import_path_filter	true	● false
nameserver.ini		◆

- Create a folder (Import Path) that can be accessed from the HANA database (/hana/local/downloads for example.)

Add Target Connection Wizard

The following field(s) require specific information for SAP HANA.

Select Provider Screen

The screenshot shows the 'Add Target Connection Wizard' dialog box. The main header is 'Syniti Data Replication'. The sidebar on the left lists the steps: 'Select provider', 'Set connection string', 'Select tables', 'Actions', and 'Summary'. The main content area is titled 'Select the database target where to replicate data and indicate which provider to use.' It contains three sections: 'Target name' with a 'Name:' field containing 'SAPHANA-Tgt'; 'Data Provider(s)' with a 'Database:' dropdown set to 'SAP HANA', a 'Provider:' dropdown set to 'SAP Hana .NET Driver', and an empty 'Assembly:' field with a 'Browse' button. At the bottom are '< Back', 'Next >', 'Cancel', and 'Help' buttons.

Database

Choose SAP HANA from the drop-down list.

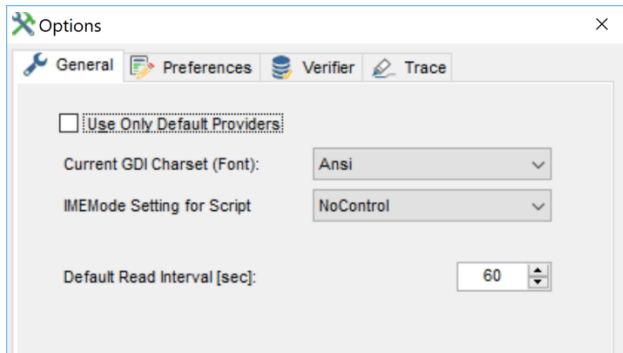
Provider

The default value is SAP Hana .NET Driver. However, an ODBC driver is also available. While the .NET Provider is easier to set up and maintain, the ODBC driver can offer better performance. The ODBC driver uses SFTP to perform bulk inserts which requires setup and testing of the FTP and requisite folders.

To access the ODBC driver for SAP HANA:

1. Exit the Add Source Connection wizard.
2. On the **Tools** menu in the Management Center, click **Options**.
3. In the **Options** dialog, uncheck the **Use Only Default Providers** option.
4. Click **OK** to save the change.
5. Restart the Add Source Connection wizard.

Syniti Data Replication



Assembly

(For .NET Data Provider connections only)

If no value is provided in the Assembly field, use the **Browse** button to locate the Sap.Data.Hana DLL. It is typically located in:

C:\Program Files\sap\hdbclient\ado.net\v4.5\Sap.Data.Hana.v4.5.dll

NOTE: The version number of your SAP HANA .NET Data Provider may be different. DBMoto supports SAP HANA .NET Data Provider version 1.0.84.0 or above.

Set Connection String Screen

Data Source

The IP address of your database server followed by a colon and the server port number.

IMPORTANT: The server name and port number should follow the format <server>:<port>. If you do not specify the port number, the default is used and the default is often not appropriate for standard SQL communications via client access. The format of the port for **standard SQL communication via client access is 3<instance-number>15** where <instance number> is the instance number of the SAP HANA database engine. For example, for instance 00, the port number would be 30015.

Last Updated on 10/3/2019