

Connection with SDI /\ Obsolete /\



The new wiki link for this data flow is here:

[Connection with SDI](#)

Please update the new doc there and no longer here.



Connection with SDI

With the migration to the Cloud and the new connection type available with HANA, it has been decided to create a new connection between Dynasys and BW using SDI (Smart Data Integration).

The SDI is able to create the table on HANA and this can be used directly on calculation view or BW datasource.

As we have a large volume for transactional data in Dynasys, it is a good option to implement this type of connection.

With UD Connect it was necessary to clear the cache of the datasource structure in J2EE Layer in case of modifications, not anymore with SDI.

How to add a new Dynasys Table with SDI ?

Before continue, it is mandatory to have access to the WEB IDE tool => See the link [SAP WEB IDE](#).

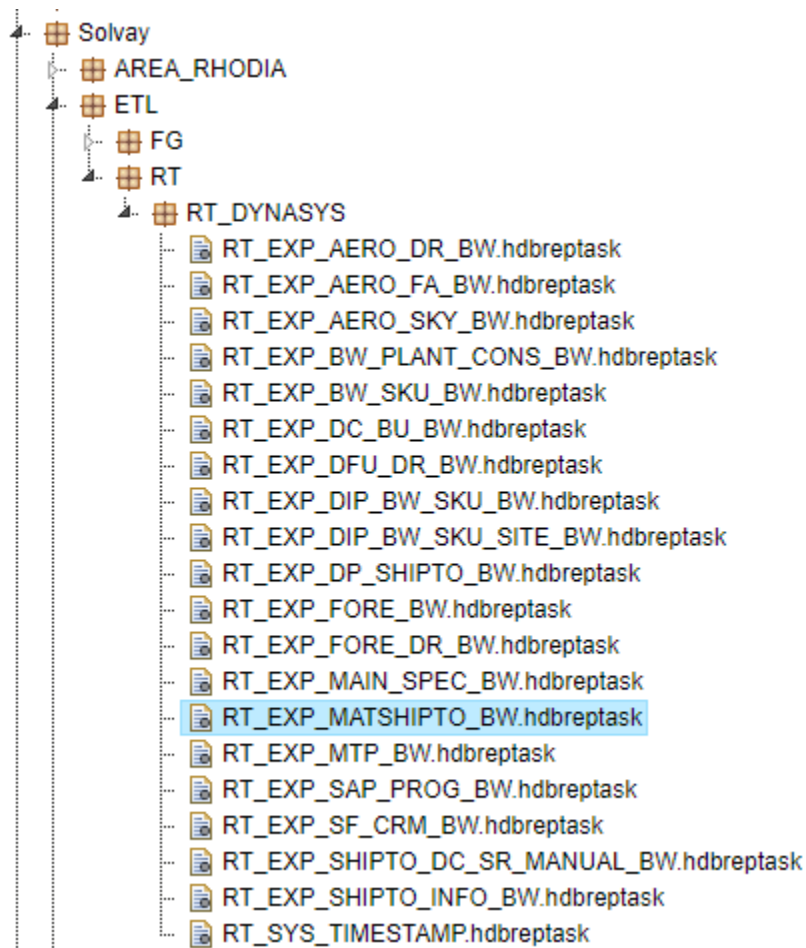
And also see Dynasys Catalog :

1. Target Schema = TB_DYNASYS
2. Virtual Table Schema = VT_DYNASYS

The storage of the data is organized into 2 different catalogs on HANA DB:

- Target data: TB_DYNASYS
- Virtual table VT_DYNASYS

1. The first step is to create a new replication task named "RT_" + "Dynasys view technical name" under the package "RT_DYNASYS" like below :



2. Replication task properties
 - a. Remote Source = RS_DYNASYS
 - b. Target Schema = TB_DYNASYS
 - c. Virtual Table Schema = VT_DYNASYS

Please find below an example on an existing Dynasys table (EXP_DFU_DR_BW)

Remote Source: RS_DYNASYS
 Target Schema: TB_DYNASYS
 Virtual Table Schema: VT_DYNASYS
 Use Package Prefix: ☐ Virtual Table ☒ Target Table

Source Virtual Table Prefix:

Source Remote Object	Source Virtual Table	Target Name (Remote Source, Remote Obj...)	Drop Targ...	Replicatio...
"dbo"."EXP_DFU_DR_BW"	VT_EXP_DFU_DR_BW	TB_EXP_DFU_DR_BW	Yes	Initial load only

Details

Target Columns: Filter Load Behavior: Initial load only Type: COLUMN_TABLE Truncate table on execution: ☐ Drop target table on activation (if): ☒

Column Name	Projection Expression	Key	Nullable	Data Type
Material_Code	"Material_Code"	☐	☒	NVARCHAR(255)
ShipTo_Code	"ShipTo_Code"	☐	☒	NVARCHAR(255)

Source Remote Object => Select the Dynasys view

Source Virtual Table => Must be prefix by VT*

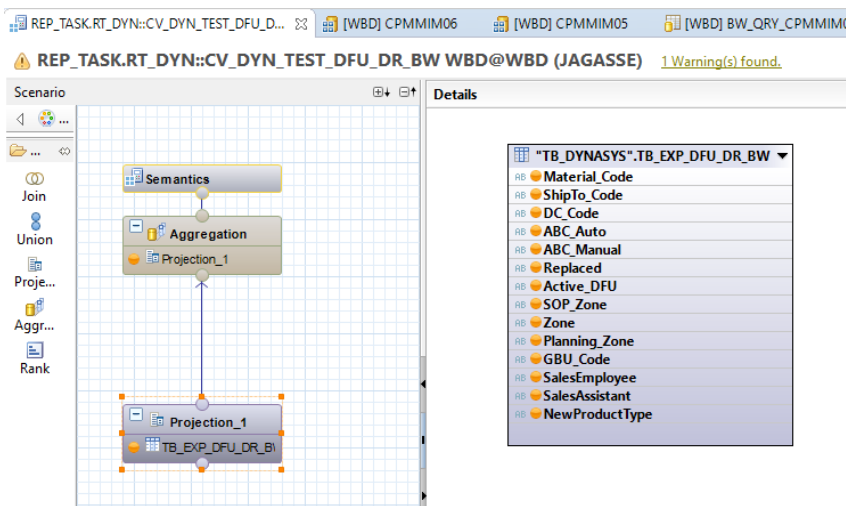
Target Name => Must be prefixed by TB*

3. Check the new tables created and make a data preview (if possible) on HANA

The screenshot shows the SAP HANA Systems Explorer interface. On the left, the 'Catalog' tree is expanded to show the 'Tables' section under the 'TB_DYNASYS' schema. The table 'TB_EXP_DFU_DR_BW' is highlighted. On the right, the 'Raw Data' tab displays a data preview of the table. The table has 200 rows and 176 columns. The columns are: Material_Code, ShipTo_Code, DC_Code, ABC_Auto, ABC_Manual, Replaced, Active_DFU, and SOP_Zone. The data shows various material codes and their associated attributes.

Material_Code	ShipTo_Code	DC_Code	ABC_Auto	ABC_Manual	Replaced	Active_DFU	SOP_Zone
70083R	2041517R	07R	C	N	0	0	?
97051R	1217R	07R	C	N	0	0	?
97051R	2020568R	07R	C	N	0	0	?
97051R	2031416R	07R	C	N	0	0	?
97051R	2041392R	07R	C	N	0	0	?
97051R	2045009R	07R	C	N	0	0	?
97051R	83335R	07R	C	N	0	0	?
114094R	2041426R	07R	C	N	0	0	?
20677R	71459R	07R	C	N	0	0	?
114547R	2022268R	07R	C	N	0	0	?
114547R	2023871R	07R	C	N	0	0	?
114547R	2031090R	07R	C	N	0	0	?
114547R	2044159R	07R	C	N	0	0	?
114547R	2048021R	07R	C	N	0	0	?
114571R	2033541R	07R	C	N	0	0	?
114572R	2045138R	07R	C	N	0	0	?
114603R	200943R	07R	C	N	0	0	?
114603R	2022487R	07R	C	N	0	0	?
114603R	90278R	07R	C	N	0	0	?
115152R	2033641R	07R	C	N	0	0	?
145848R	2033537R	07R	C	N	0	0	?
145848R	2044435R	07R	C	N	0	0	?
145848R	2059633R	07R	C	N	0	0	?
145848R	2059345R	07R	C	N	0	0	?
145848R	2059885R	07R	C	N	0	0	?

4. The table is available on calculation view



5. For each calculation view, there is an associated datasource based on the calculation view that permit to load data into BW :

The screenshot shows the SAP HANA Data Warehouse (BW) Data Source configuration screen. The 'Display DataSource DTS_CV_EXP_DFW_BW_MD_SKU_BW(WBQ_HANAV)' window is open. The 'General' tab is active, showing the 'DataSource' and 'Source System' information. The 'DataSource' is 'DTS_CV_EXP_DFW_BW_MD_SKU_BW' and the 'Source System' is 'WBQ_HANAV'. The 'Adapter' is 'HANA Information Views'. The 'Operational Data Provider' is 'HANA Information Views'. The 'Data Format' is 'Already Binary'. The 'Conversion' and 'Number Format' are set to 'User Master Record'.

Field	Value
DataSource	DTS_CV_EXP_DFW_BW_MD_SKU_BW
Source System	WBQ_HANAV
Adapter	HANA Information Views
Operational Data Provider	HANA Information Views
Data Format	Already Binary
Conversion	User Master Record
Number Format	User Master Record

How to load data from Dynasys into BW ?

Before the loading of the DTP, it is important to fill the VT_* tables from Dynasys using the replication tasks.

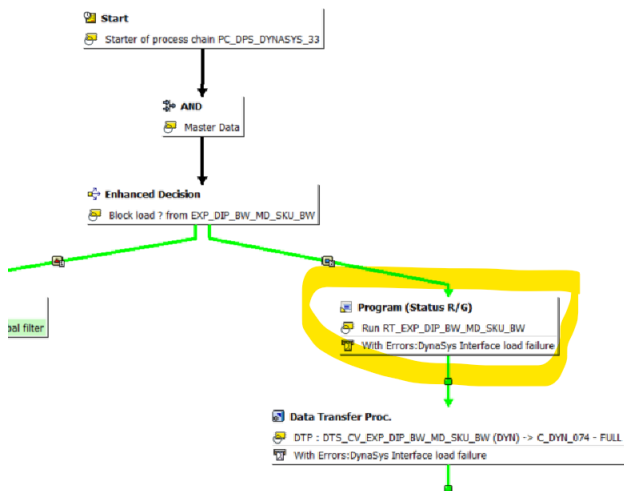
We'll not run every tasks manually but we'll use the program **ZBW_RUN_REP_TASK**.

An associated Variant is existing for each Dynasys view.

In the variant you must fill the Schema and the replication task to run like below :

ABAP: Selections of Variant ZBW_DYN_001					
Catalog Values Attributes					
Objects for selection screen					
Selection Screen	Field name	Type	I/E	Option	frm to
1000	Schema / Catalog Target	P			TB_DYNASYS
1000	Replication Task	P			RT_EXP_DIP_BW_MD_SKU_BW

Then, the program will be used in the process chain before the stop of TP running.



Transport of replication task

1. Use the T-CODE **SCTS_HTA** with SAP Logon.
2. Go to the Dynasys package **Solvay.ETL.RT.RT_DYNASYS**

SAP HANA Transport for ABAP - Synchronization

Package Selection for Synchronization

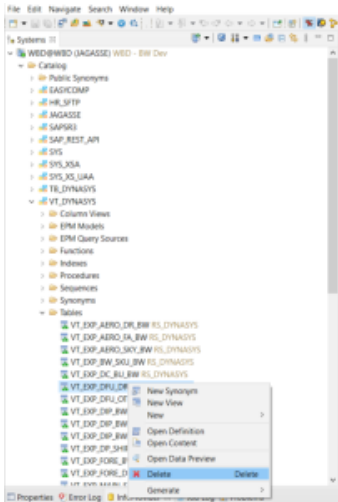
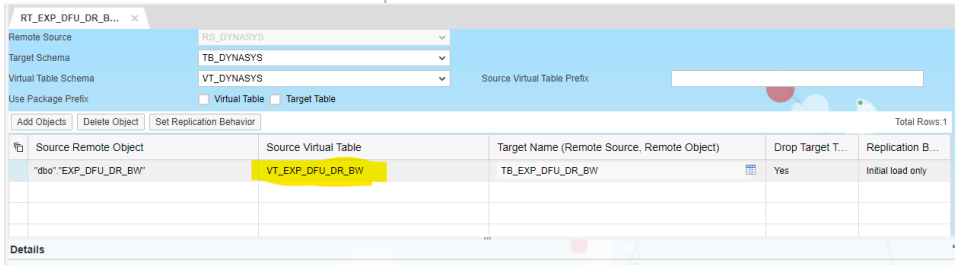
SAP HANA Repository Package	Solvay.ETL.RT.RT_DYNASYS
☒ Subpackages too	

3. Choose the replication task modified and assign it to your transport request

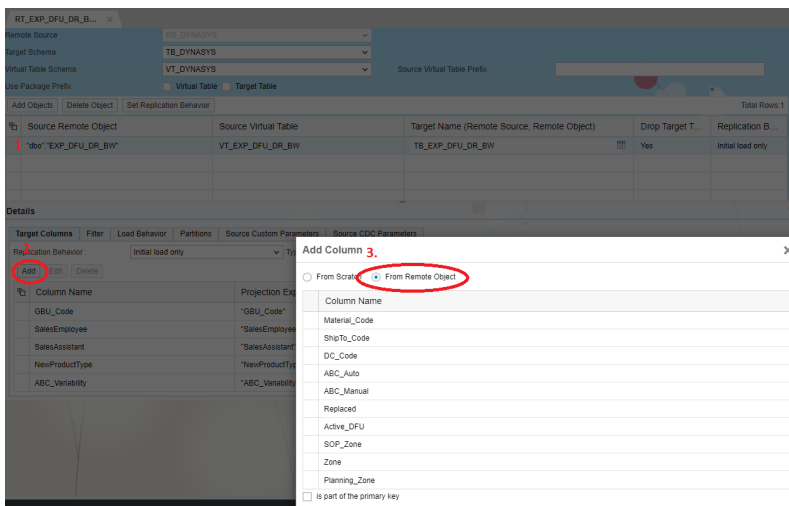
SAP HANA Transport for ABAP - Synchronization									
Display for 'Solvay.IA_DPS.DATA_EXTRACT_DYNASYS' with subpackages 1 packages/2 objects									
Status	Package Name	Synchronized By	Synchronized At						
Status	Object Name	Object Type	HANA Object Status	Object Version in HANA	Object Version in ABAP	Last Changed By in HANA	Last Changed By in ABAP	Activated	
	Solvay.IA_DPS.DATA_EXTRACT_DYNASYS	<unknown>	<unknown>						
	RT_MD	hdbreptask		1	<unknown>	JAGASSE	<unknown>	2021-04-26	
	RT_TRANSAC	hdbreptask		1	<unknown>	JAGASSE	<unknown>	2021-04-26	

How to add a new field in an existing SDI datasource ?

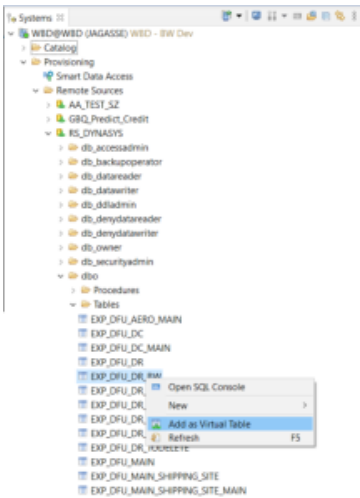
1. Go to the replication task in which the new field will be added on WEB IDE Tool.
2. Delete the virtual table associated to the replication task :



3. Select the Source Remote Object (1) and click to add (2) and then choose the new field from remote object (3) :

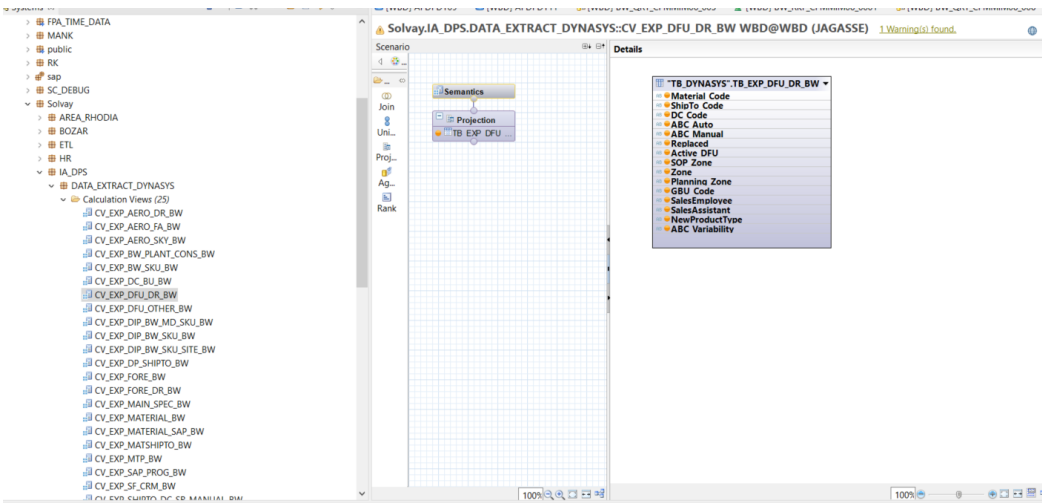


4. Re-create the virtual table choosing the remote table source :

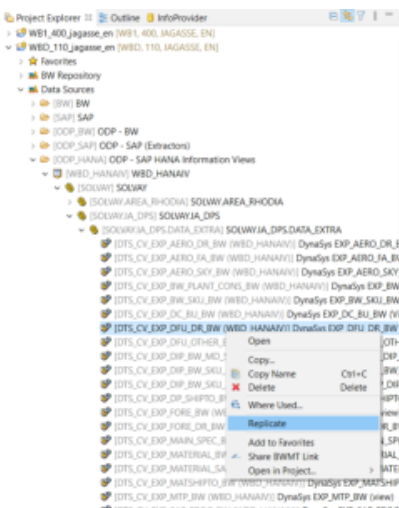


5. Activate and run the replication task.

6. Update the associated calculation view to add the new field in the projection step based on TB* table



7. Replicate the datasource based on the previous calculation view to display the new field



Transport :

Be careful, before transporting the replication task you need to :

- 1.Delete the virtual table in the target system (refer to step 2.).
2. Ask to Dynasys Interface Team to add the new field in the Dynasys view on Test System or Prod System (if you move to prod).
3. Recreate the virtual table (refer to step4.)
4. Check the new field is available in the virtual table
5. Move the TR with the replication task on the target system.