

SAP BI – Reconcile PSA Data with Data Target



Applies to:

SAP BW 3.5 / SAP 7.0 Consultants. For more information, visit the [EDW Homepage](#) .

Summary

Compare the contents in Data Target for the data loaded from the ECC source system with the PSA data for data flows in SAP BW 3.5 and SAP BI 7.0 systems.

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Scenario

Compare the data loaded in Infocube with PSA data loaded both in SAP BW 3.5 system and SAP BI 7.0 systems.

SAP BW 3.5 (PSA): Export Datasource is possible on PSA. Datasource can be used as any other datasource to read the data remotely and compare the data with the existing Infocube data.

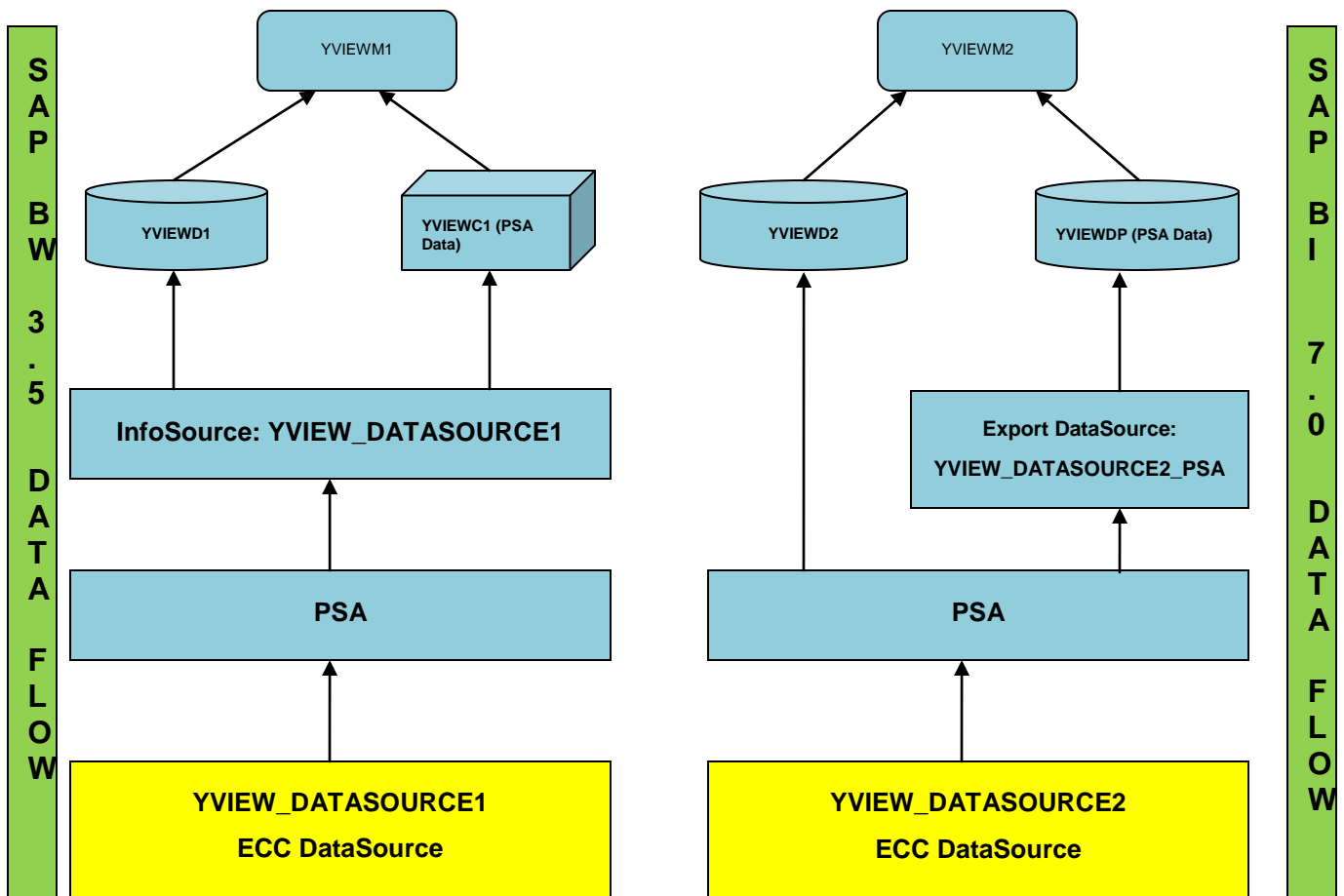
SAP BI 7.0(PSA): Generic Datasource can be build on top of the PSA table which can be further used to read the data remotely and compare the data with the Infocube data.

Step-By-Step Solution

Persistent Staging Area (PSA) is the inbound storage area for data from source systems coming into the system. The requested data is saved in relational database tables in the same format as the DataSource. The data held within the PSA remains unchanged from the source system, meaning that no summarization or transformations haven't take place. While validating the data between source system and the data loaded we oftentimes need to validate data between PSA and Data Target.

In **SAP BW 3.5** we had an option of loading data directly to Infoproviders completely by-passing the PSA all together, however this all changed with the release of BI 7.0. In BW 3.5, export data source was possible on PSA which further can be used to validate the data with the data loaded to data targets.

In **SAP BI 7.0** PSA has become mandatory to use the PSA for all the data loads. Along with this when we are loading small amount of master data and want to avoid using the PSA, we can specify this in DTP by marking the checkbox 'Do Not Extract from PSA but Access Data Source (for Small Amounts of Data)'. Here in SAP BI 7.0, export data source is not possible on PSA so for validation purpose we can build generic extractor on PSA table which further be used to validate the data loaded to the data targets.



Step-By-Step Procedure for SAP BW 3.5 Data Flow:

- Reconcile PSA with DSO Data (SAP BW 3.5) – Steps to reconcile the PSA with the loaded data in data target
- Validate – PSA with DSO Data (SAP BW 3.5) – Validate data between PSA and Data Target

Step-By-Step Procedure for SAP BI 7.0 Data Flow:

- Reconcile PSA with DSO Data (SAP BI 7.0) – Steps to reconcile the PSA with the loaded data in Data target
- Validate – PSA with DSO Data (SAP BI 7.0) – Validate the data between PSA and Data Target

Reconcile PSA with DSO Data (SAP BW 3.5)

Step1: Create Infosource (YVIEW_DATASOURCE1) and map the InfoSource to the DSO (YVIEWD1: Sales Doc (3.5)):

YVIEWD1	Manage
4LUECI6Q1AZMEZ0...	Change
YVIEW_DATASOUR...	Change InfoSources
YVIEW_DATASOUR...	Change
YVIEW_DATASOUR...	Change DataSources SR5CLNT140
ZPAK_4LUEDMIHK...	Schedule DataSources

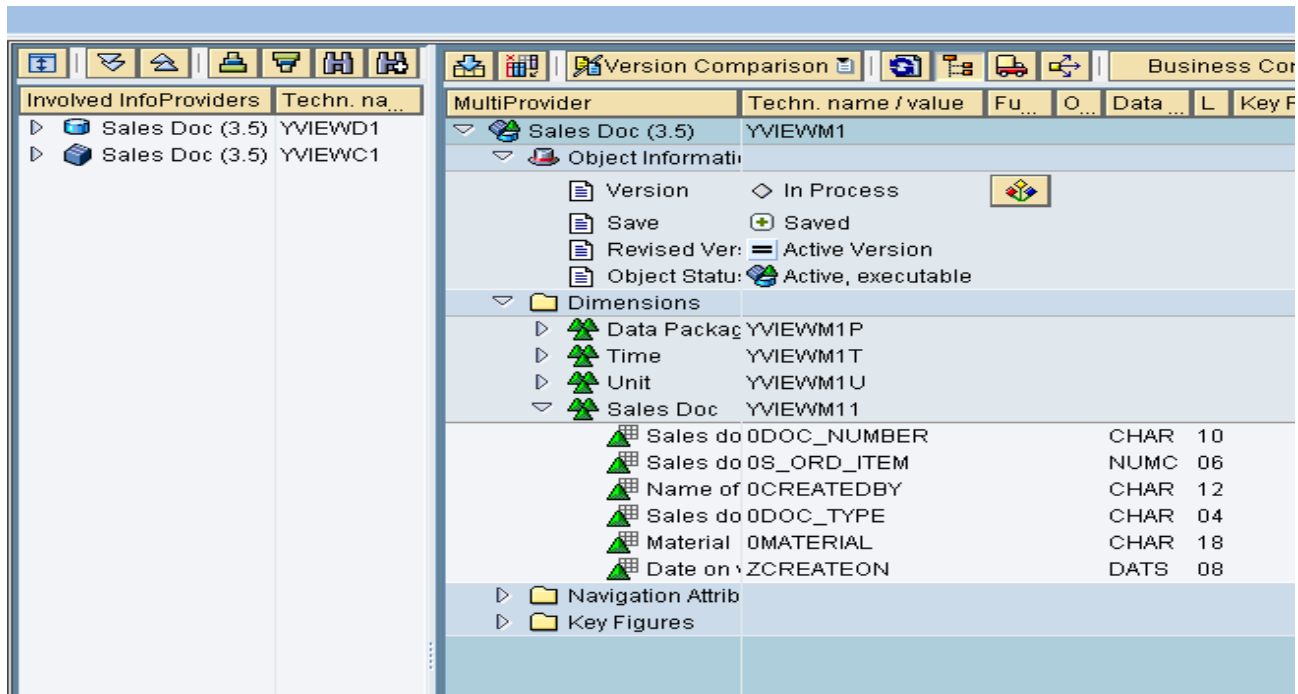
Step2: Generate Export DataSource for PSA (YVIEW_DATASOURCE1_BB):

The screenshot shows the SAP Data Warehouse Center interface. Under 'Sales Doc (3.5)', the 'SR5 Client 140' folder is expanded, showing 'YVIEW_DATASOURCE1_BB'. A context menu is open over this object, with the 'Generate Export DataSource' option highlighted in orange. Other menu items include 'Edit Several Requests...' and 'Delete PSA Data...'.

Step3: Create Virtual Infocube based on Infosource (YVIEW_DATASOURCE1):

The screenshot shows the 'Edit InfoCube' dialog box. The 'InfoCube' field is set to 'YVIEWC1' and the 'InfoArea' is 'NODESNOTCONNECTED'. Under 'InfoProvider Type', 'VirtualProvider' is selected, and 'YVIEW_DATASOURCE1' is chosen as the data source. The 'System Type (Namespace)' is set to 'CUS (Generated by User)'. A green checkmark is visible at the bottom left of the dialog.

Step4: Create MultiProvider on DSO (YVIEWD1) and Infocube (YVIEWC1):



Query would be build on top of this multiprovider to validate the PSA and DSO data.

DSO (YVIEWD1): Data loaded from datasource 'YVIEW_DATASOURCE1'.

Validate - PSA with DSO Data (SAP BW 3.5)

Step1: Load DSO (YVIEWD1) from datasource 'YVIEW_DATASOURCE1' (Full Load):

Request ID	R	D	ID of Requ...	Re	Loa	Log	Transferred	Added Rec...	Type of Data Update	Source/InfoSource
46867			46868				48741	47450	Full update	YVIEW_DATASOURCE1

Step2: Display the data for the Infocube 'YVIEWC1' and validate records in DSO (YVIEWD1):

Data Browser: Table /BIC/AYVIEWD100 Select Entries 47,450

DOC_NUMBER	S_ORD_ITEM	DOC_TYPE	/BIC/ZCREATEON	CREATEDBY	NETVALOR...	CURREN...	RECORDMODE	MATERIAL
5600004546	10	ZOWB	10/20/2010	OTS_TEST1635	10.40	USD		00000000000309604
5600004545	10	ZOWB	10/20/2010	OTS_TEST1635	10.40	USD		00000000000309604
5600004544	10	ZOWB	10/20/2010	OTS_TEST1635	0.00	USD		00000000000309604
5600004543	10	ZOWB	10/19/2010	CAPTEYNA	10.01	USD		000000000003096014

DSO(BI Data): YVIEWD1

"YVIEWC1", List output

ODOC_NUMBER	Item	ODOC_TYPE	ZCREATEON	OCREATEDBY	ONETVALORDH	Currency	OMATERIAL	0CHNGID	Record type	0REQUI...	0LOGSYS
5600004546	10	ZOWB	10/20/2010	OTS_TEST1635	10.40	USD	00000000000309604				SR5CLNT140
5600004545	10	ZOWB	10/20/2010	OTS_TEST1635	10.40	USD	00000000000309604				SR5CLNT140
5600004544	10	ZOWB	10/20/2010	OTS_TEST1635	0.00	USD	00000000000309604				SR5CLNT140
5600004543	10	ZOWB	10/19/2010	CAPTEYNA	10.01	USD	000000000003096014				SR5CLNT140

Infocube (Virtual): YVIEWC1

Reconcile PSA with DSO Data (SAP BI 7.0)

Step1: Create a Generic Datasource on top of the database view 'YVIEW_DATA_PSA' which references the PSA table :

Database View: YVIEW_DATA_PSA

View field	Table	Field	Key	Data elem.	Mod	DTyp	Length	Short description
ZREQUEST	/BIC/B0004164000	REQUEST	<input checked="" type="checkbox"/>	RSREQUNR	<input type="checkbox"/>	CHAR	30	Request number for the data transfer
ZDATAPAKID	/BIC/B0004164000	DATAPAKID	<input checked="" type="checkbox"/>	RSDATAPID	<input type="checkbox"/>	NUMC	6	Data packet number
ZPARTNO	/BIC/B0004164000	PARTNO	<input checked="" type="checkbox"/>	RSPARTVAL	<input type="checkbox"/>	INT4	10	Partition value for PSA table
ZRECORD	/BIC/B0004164000	RECORD	<input checked="" type="checkbox"/>	RSARECORD	<input type="checkbox"/>	INT4	10	Data record number
VBELN	/BIC/B0004164000	VBELN	<input type="checkbox"/>		<input type="checkbox"/>	CHAR	10	Sales Document
POSNR	/BIC/B0004164000	POSNR	<input type="checkbox"/>		<input type="checkbox"/>	NUMC	6	Item
AUART	/BIC/B0004164000	AUART	<input type="checkbox"/>		<input type="checkbox"/>	CHAR	4	Sales Doc. Type
ERDAT	/BIC/B0004164000	ERDAT	<input type="checkbox"/>		<input type="checkbox"/>	DATS	8	Created on
ERNAM	/BIC/B0004164000	ERNAM	<input type="checkbox"/>		<input type="checkbox"/>	CHAR	12	Created by
MATNR	/BIC/B0004164000	MATNR	<input type="checkbox"/>		<input type="checkbox"/>	CHAR	10	Material
NETWR	/BIC/B0004164000	NETWR	<input type="checkbox"/>		<input type="checkbox"/>	CURR	15	Net value
WAERK	/BIC/B0004164000	WAERK	<input type="checkbox"/>		<input type="checkbox"/>	CUKY	5	Doc. Currency

Generic Datasource: YVIEW_DATASOURCE2_PSA

Display DataSource for Transactn data: YVIEW_DATASOURCE2_PSA

DataSource: YVIEW_DATASOURCE2_PSA

Applic. Component: BW

Data Reconciliation:

Obj. status: Saved

Texts

Short description: Sales Doc (7.0)

Medium description: Sales Doc (7.0)

Long description: Sales Doc (7.0)

Extraction from DB View

View/Table: YVIEW_DATA_PSA

ExtractStruct.: Z0XSB50032

Extraction from SAP Query

InfoSet:

Extraction by Function Module

Function Module:

Extract.Struct.:

Step2: Create transformation for DSO 'YVIEWDPS' from the Generic Datasource 'YVIEW_DATASOURCE2_PSA':

Sales Doc (7.0) PSA	YVIEWDPS	Manage	
RSDS YVIEW_DATASOURCE2_PSA SB5CLNT100 -> ODSO YVIEWDPS	0JOHXDROQKDRMLQR7GD11Q...	Change	
Sales Doc (7.0)	YVIEW_DATASOURCE2_PSA	Change	DataSources SB5CLNT100
Full Update (PSA)	ZPAK_4LUEJUC639J4Y3UGMJT...	Schedule	DataSources
Data Transfer Processes	YVIEWDPS	Create Data Tra...	
Full Update (PSA)	DTP_4LUEJ4IQYKDCCH50HY...	Change	

Step3: Create multiprovider 'YVIEWM2' on top of the two DSOs 'YVIEWD2' and 'YVIEWDP':

DSO (YVIEWD2): Data loaded from datasource (YVIEW_DATASOURCE2).

Validate - PSA with DSO Data (SAP BI 7.0)

Step1: Load data to DSO 'YVIEWD2' from datasource 'YVIEW_DATASOURCE2':

Requests from DataStore Object Sales Doc (7.0)(YVIEWD2)												
Request ID	R	D	ID of Requ	Re	Loa	Log	Transferred	Added Rec	Type of Data Update	Source/InfoSource	Name of Source	DataSource
46865			46866				2	2	Full update	DTASRC	DataSource	YVIEW_DATASOURCE2

Sales Document: **57000096**

Step2: Load DSO 'YVIEWDP' from the PSA:

Requests from DataStore Object Sales Doc (7.0) PSA(YVIEWDP)												
Request ID	R	D	ID of Requ	Re	Loa	Log	Added Rec	Type of Data Upd	Source/InfoSo	Name of Sour	DataSource	DataSource Nam
46863			46864				2	Full update	DTASRC	DataSource	YVIEW_DATASOURCE2_PSA	YVIEW_DATASOL

Step3: Validate the records in DSOs 'YVIEWDP' and 'YVIEWD2':

Data Browser: Table /BIC/AYVIEWDP00 Select Entries 2

DOC_NUMBER	S_ORD_ITEM	DOC_TYPE	/BIC/ZCREATEON	CREATEDBY	NETVALORDH	CURRENCY	RECORDMODE	MATERIAL
0057000096	1100	ZORP	09/13/2010	CAPAMMAP	0.00	USD		000000000000338979
0057000096	1150	ZORP	09/13/2010	CAPAMMAP	0.00	USD		000000000000338979

DSO(PSA data) : YVIEWDP

Data Browser: Table /BIC/AYVIEWD200 Select Entries 2

DOC_NUMBER	S_ORD_ITEM	DOC_TYPE	/BIC/ZCREATEON	CREATEDBY	NETVALORDH	CURRENCY	RECORDMODE	MATERIAL
0057000096	1100	ZORP	09/13/2010	CAPAMMAP	0.00	USD		000000000000338979
0057000096	1150	ZORP	09/13/2010	CAPAMMAP	0.00	USD		000000000000338979

DSO (BI loaded data): YVIEWD2

Related Content

For more information visit [EDW HomePage](#).

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