

SAP BW SPS 14 Onwards: New, Changed and Deleted Features



Applies to:

SAP BW 3.x & SAP BI Net Weaver 2004s. For more information, visit the [EDW homepage](#).

Summary

This article will acquaint the reader with the new, enhanced and deleted features of SAP NetWeaver Business Warehouse SPS14 Onwards. These are interesting features to know and understand with respect Data Warehouse, Reporting, Business Planning etc. for usage types of both BI and BI Java.

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New Features BW Support Pack Stack 14 Onwards

Enterprise Reporting, Query, and Analysis (Usage type BI)

Document Display in the BEx Query Designer

In the BEx Query Designer, we can now display the documents for a query and for reusable query components (filters, variables, structures, and calculated and restricted key figures). Data Archiving Process

We can now create a data archiving process for write-optimized DataStore objects in order to archive data.

Because of the special structure of write-optimized DataStore objects, they have some special features when we create a data archiving process.

Formatting of Hierarchies in the BEx Report Designer

In the BEx Report Designer, we can format hierarchies and generate corresponding row patterns. This allows us to:

- Format hierarchies according to the type of the hierarchy node
- Format hierarchies according to hierarchy levels

OLE DB for OLAP for Microsoft Excel 2007

With OLE DB for OLAP for Microsoft Excel 2007, we can now connect our BI system directly to Microsoft Excel 2007 and analyze the BI data there in a pivot table report. We can use all the enhanced reporting and formatting functions of Microsoft Excel 2007 for the analysis.

Enterprise Reporting, Query, and Analysis (Usage Type BI Java)

New Features for Distributing Workbooks and Queries

In the BEx Broadcaster, we now have the following additional options for distributing workbooks and queries:

- We can distribute online links to workbooks
- We can make a setting so that when the user clicks the online link, the BEx Analyzer starts and the query is displayed in it.

Ad Hoc Formula Definition in BEx Web

In BEx Web applications, we can now use a formula to make an ad hoc recalculation of key figures in a structure. We can save the formula definition in the query view and also reuse it as a data provider for other BI applications, if required.

Personalization of Variables in Web Applications

We can personalize variables in BEx Web applications and display them in the variables screen.

Web Item "Custom Extension"

Using the "custom extension" Web item that is available in the BEx Web Application Designer, we can insert our own HTML or JavaScript into our Web applications. We create our own ABAP classes for this.

Export Library for SAP NetWeaver BI

The Export Library for SAP NetWeaver BI is a component of the BEx Java Web runtime. It allows us to export PDF, PostScript, and PCL files from BEx Web applications.

It is optimized for exporting complex documents and, as part of SAP NetWeaver, is available on all platforms supported by SAP NetWeaver.

The Export Library can be used in the scope of the export scenario in the Business Explorer as an alternative to Adobe document services. This does not affect user interaction or the user interface in BEx Web applications.

Planning Sequences in Process Chains

By integrating planning sequences into process chains, we can execute planning sequences in the background.

For planning sequences that are executed in the background, we can specify whether and how the planning sequences are to be divided into smaller packages. These packages can be executed in parallel as separate sub jobs in multiple work processes.

Deleted Features BW Support Pack Stack 14 Onwards

None

Changed/Enhanced Features BW Support Pack Stack 14 Onwards

Enterprise Reporting, Query, and Analysis (Usage Type BI Java)

Scatter Chart and Time Scatter Chart

The required structure of data providers for scatter charts and time scatter charts has changed.

Values that are displayed on the X axis are no longer taken from the first data column, but from the first data row. The values on the Y axis are taken from the remaining data rows and are no longer taken from the remaining data columns.

Analysis Web Item

The following features have been added to the Analysis Web item:

- The colors for the hierarchy display and for the title blocks in the analysis grid can be set using portal themes.
- Calling the context menu and drag and drop actions no longer depends on the text in a cell, but on the entire cell. It is therefore now possible to use drag and drops call the context menu on empty cells.
- We can now sort the characteristic values or structural components of the analysis grid according to our requirements using drag and drop, thus setting the sequence of given values. This function is also available in hierarchies, for example to move sibling nodes.
- Using the Modification parameter (MODIFICATION), we can individually define the behavior of a table and how it is displayed. Using modules, we can adjust the table structure and table rows.

Input Help Dialog in BEx Web

The following new features are available in the input help dialog in BEx Web:

- We can exclude values from the selection.
- We can change the sequence of the selected values by using arrow icons.
- For time characteristics, we can now select calendar days from a calendar rather than from a list of values.

Navigation Pane Web Item

The following features have been added to the Navigation Pane Web item:

- We can now use parameter NAV_FREE_CHAR_SORTING to activate or deactivate the alphabetical sorting of the free characteristics.
- We can use parameter NAV_CHARACTERISTIC_SEL to specify a list of the characteristics that are to be displayed as free characteristics.

BEx Web

The Web Design API now contains the Set Status of Module command

Web Design API

The documentation on the Web Design API has a new chapter with the title BEx Web interfaces. We can use the following Web interfaces:

Interface to display information related to the current navigational state or results set of a data provider, and to insert HTML and JavaScript

Interface to change the standard behavior and display in the Web items analysis

Integrating Content from BI into the Portal

The documentation on the sender-receiver assignment in BEx Web Application iViews has been restructured and expanded.

BI Integrated Planning

The documentation on the formula based planning has completely been restructured and expanded.

Description of master locks has expanded into the documentation on the lock concept and management.

When we use the Button design item to create pushbuttons in the BEx Analyzer, in the Command Wizard we can also specify variables for the variable values contained in the function or sequence for the commands Execute a Planning Function and Execute a Planning Sequence.

The documentation on using variables in BI Integrated Planning has been revised.

By means of optimized customizing and design of BI Integrated Planning, the system performance can be improved decisively.

Enterprise Reporting, Query, and Analysis (Usage Type BI)

Query Properties in the Query Monitor

There is an additional cache mode with this SPS: BLOB/Cluster Enhanced. The way in which data is processed and saved has fundamentally changed in this cache mode compared to existing cache modes. No lock concept (enqueue) is used, and there is no central directory of cache elements (cache directory). Cache mode BLOB/Cluster Enhanced is not available by default. To be able to use this cache mode, we must activate the RSR_CACHE_ACTIVATE_NEW RSADMIN parameter; (VALUE=x).

Variants in BEx Analyzer

Standard Variant

In BEx Analyzer, we can configure a variant as the standard variant. The standard variant is then used whenever the query is opened.

Variant for Workbooks

We can now save a variant for a workbook too. This variant can contain the variable values for multiple data providers.

BEx Query Designer

The documentation for the properties of query components now contains a new section. This deals with how the standard values are derived for properties.

The documentation for the selection/formula properties in the Aggregation, Planning and Calculations sections has been expanded.

The documentation for functions in the Query menu has been expanded.

BEx Report Designer

In Report Designer, we can insert two different types of charts: We can insert charts that depict the entire data provider and context-sensitive charts that are located in a certain context of a certain data provider.

We can use Report Designer to display a query in a tabular view. Displaying a Query in a Tabular View

Enterprise Data Warehousing (EDW) (Usage Type BI)

BI Accelerator

With SAP NetWeaver 7.0, SPS 14, the quick overview of the SAP NetWeaver BI Accelerator monitor was replaced by direct access to the detailed BI Accelerator monitor.

Data Flow Display

With SAP NetWeaver 7.0, SPS 14, the following enhancements have been made to the data flow display in the Data Warehousing Workbench:

- We can display the data flow for the following objects in upward or downward direction from the starting object, or in both directions: InfoAreas, InfoProviders, aggregation levels, open hub destinations, InfoSources, and DataSources.
- We can specify multiple start objects for which the system is to display the graphics on a screen.
- We can also show runtime objects for the data flow, such as InfoPackages and data transfer processes.
- We can call the context menu for Data Warehousing Workbench from a selected object or rule. This allows us to actually change the data model from the data flow display.
- When we refresh the display, any objects that were added to or deleted from the data flow are displayed. When we refresh the object, the display of the data flow that is currently displayed is optimized.
- We can show a navigation window that provides a clearer overview of larger and more complex data flows.

Transformation

Copying Transformations

Using the Copy Transformation function, we can create a transformation by copying an existing transformation. We can then adjust the copy to suit our requirements. This function is provided in the context menu in the InfoProvider tree for a transformation.

Error Analysis in Transformations Testing Rules

Using the Test Rule function, we can check whether source values are updated to the target (for example, for analyzing errors in complex routines). This function is available in the rule details for the transformation.

Enhanced Breakpoints

As of SPS 14, we can specify breakpoints after the start routine and before the end routine in addition to the existing breakpoints before and after the transformation.

Search in the Transformation

With SPS 14, we can search the transformation in the source, in the target, and in the rule name according to the technical name and/or description of InfoObjects/fields. We can call this function using the Search pushbutton in transformation maintenance.

Table View of the Metadata of the Transformation

With SPS 14, we can display the metadata of the transformation as a table (in HTML format) in a separate window, for example for documentation purposes. To do this, on the transformation maintenance screen, choose Extras à Table View. This table view is also available in the Metadata Repository.

Update Navigation Attributes

With SPS 14, we can update navigation attributes from InfoCubes and DataStore objects directly into the target. To do this, we must ensure that the navigation attributes are activated in InfoCube maintenance or in DataStore object maintenance.

Performance Optimization for Reading Master Data

The performance for reading master data was optimized in SPS 14. With the new procedure, the master data is no longer read for each key in the data package with a SELECT command. Instead, all the master data in the data package is stored temporarily and further processed from temporary storage. This reduces the number of times that the database is accessed and improves the performance when reading master data. The new procedure is set by default. We can switch back to the old procedure in the program SAP_RSADMIN_MAINTAIN (transaction SE38).

For more information, see SAP Note 1092539.

Changing the Update Behavior of End Routines

By default, only fields that have a rule in the transformation are transferred from the end routine. With SPS, we can set the All Target Fields (Independent of Active Rules) indicator by choosing. Change Update Behavior of End Routine. As a result, fields that are only filled in the end routine are updated and are not lost. This function is only available for standard DataStore objects, DataStore objects for direct writing, and for master data tables.

If only the key fields are updated for master data attributes, all the attributes are initialized, regardless of the settings described here. For more information, see SAP Note 1096307.

Real-Time Data Acquisition

Changes to the menu and the context menu of the monitor for real-time data acquisition

Assignment of daemons for InfoPackages and data transfer processes (DTP)

Repair process chains for repairing a broken data transfer or a missing delta in the DataStore object

Process types for starting and stopping real-time data acquisition

BI Service API – Delta-Determining Field Type for Generic Delta

As of source system release status Plug-In Basis 2006.1, SP 4, it is possible in generic DataSource maintenance (transaction RSO2) to select the UTC time stamp (Coordinated Universal Time) as the delta-determining field type for the generic delta.

Until now, the applications had to use the local time of the application server to calculate the delta, since the time stamp available for selection as the delta-determining field type was based on the local time of the application server. The applications can now also use the UTC time stamp to record data changes. The delta can be determined using a delta-determining field of type Time Stamp (UTC).

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