

Simplification List for SAP BW/4HANA 2.0

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Revision Log

Version	Date	Remarks
1.0	2017-06-27	<ul style="list-style-type: none"> Initial version of the Simplification List for SAP BW/4HANA 1.0
1.1	2017-09-01	<ul style="list-style-type: none"> Update of Simplification Items (especially related to ODP) New Simplification Items for BI Add-on for SAP GUI, Hierarchy / Attribute Change Run, SEM APIs, BI Content Analyzer, and Change Documents for Analysis Authorizations
1.2	2017-11-01	<ul style="list-style-type: none"> New Simplification Item for SAP Business Planning & Consolidation (BPC), Conversion of DataSource Field into InfoObject Update of Simplification Items for DataStore Objects (classic), InfoSets, Persistent Staging Area, Update Rules, Open Hub Service, BEx Objects, Interfaces and Customer-Specific ABAP Development, BI Content, Other Unavailable Objects
1.3	2018-04-25	<ul style="list-style-type: none"> Update of Simplification Items for InfoObjects, BEx Objects, Interfaces and Customer-Specific ABAP Development, Analysis Process Designer, Local Provider and Local CompositeProvider, Data Federator Façade, Process Chains and Process Variants, DataStore Objects (classic), DataStore Object (advanced), InfoPackages and Persistent Staging Areas, Data Archiving (3.x), Other Front-end Objects
1.4	2018-07-13	<ul style="list-style-type: none"> Corrected SAP Note in section 2.10 – SAP BW Administration Cockpit / Technical Content (SAP Note 2467074) Update of Simplification Items for InfoCubes, DataStore Objects (classic), Aggregation Levels, Data Archiving Processes Update of Interfaces and Customer-Specific ABAP Development
1.5	2018-12-01	<ul style="list-style-type: none"> Corrected SAP Note in section 2.7 – Business Planning and Simulation (SAP Note 2468702) Update of Simplification Items for Data Archiving Processes
1.6	2019-02-08	<ul style="list-style-type: none"> New Simplification Item for Report-Report-Interface Update of Simplification Items for Process Chain Variants, Aggregates, Myself Source System, Data Archiving / NLS, Interfaces and Customer-Specific ABAP Development
1.7	2019-04-25	<ul style="list-style-type: none"> Update of Simplification Items for Add-ons, Hierarchy DataSources, InfoSources, SAP Data Services & Web Services Source Systems, Data Archiving (3.x), Interfaces and Customer-Specific ABAP Development, Customer Relationship Management (CRM) BAPI, Standard Authorizations, BI Content
2.0	2019-02-08	<ul style="list-style-type: none"> Update Simplification Items for SAP BW/4HANA Release 2.0

2.1	2019-18-09	• Update Simplification Note 2482164
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1 Simplification List for SAP BW/4HANA

SAP BW/4HANA is SAP's next generation data warehouse solution. It is a new product (not a legal successor of any existing SAP Business Warehouse solution), built entirely on one of the most advanced in-memory platforms today – SAP HANA. It provides a simple set of objects that is well suited for modelling an agile and flexible layered architecture of a modern data warehouse. SAP BW/4HANA manages all sorts of data, whether from SAP applications or other systems, structured or unstructured, and allows accessing of all models through an open SQL interface. SAP BW/4HANA comes with state-of-the-art user interfaces for administrators, developers, and end users as well as completely SAP HANA-optimized processes that let you leverage huge amounts of data in real time for competitive advantage.

The core functionality of SAP BW is preserved and the transition to SAP BW/4HANA can be compared with the transition of SAP Business Suite to SAP S/4HANA. As part of this transition, SAP BW/4HANA will drastically reduce the number of data objects to be stored and maintained. All future innovations will take place in SAP BW/4HANA. Prior releases of SAP BW powered by SAP HANA will move into maintenance, receiving little development or new functionality moving forward.

With SAP BW/4HANA, SAP has re-architected its solution for modern data warehousing processes that the ever-increasing digitization of the world demands. Re-architecting a solution that has been growing over the past 20 years and has, at points, evolved into different data structures and architectures means that we also must decide on one data structure and architecture as we move forward. This is the only way that we can prepare the solution for increased simplicity and faster innovation cycles.

In most cases, SAP is pursuing the functional strategies that were already laid out in the existing SAP Business Warehouse world, where many innovations originate from. Consequently, it is possible to prepare for the system conversion to SAP BW/4HANA by already adopting the future target capabilities in the classic SAP Business Warehouse powered by SAP HANA.

SAP is taking on responsibility for managing the impact of these decisions.

- Many of the changes are purely technical and will have no or only limited impact on people's work; therefore, they will not trigger business change management. Such changes will be mandatory when converting a system to SAP BW/4HANA.
- Other decisions are of a more strategic nature, determining which version of functional support will evolve into the digital era and provide the capabilities that today's unstoppable data warehousing and business analytics innovation demands. When these strategic directions demand change management through adoption, SAP will keep the traditional capabilities available as compatibility scope, enabling a technical migration of these processes and leaving the timing of change management as a customer decision. Change management may therefore take place during the initial conversion or be postponed to a later point in time.

When compared to the number of SAP Business Warehouse features that appear in this list, the total list of simplifications for SAP BW/4HANA may appear long. However, SAP does not foresee that any one customer system will be affected by all of them, because the simplifications cover all capabilities of the system, including rarely used functionality. This list should be treated as a complete inventory that needs to be mapped against a productive environment to determine the impact of converting.

SAP expects that the same applies to custom code that our customers or partners have implemented. This code has grown over time, and experience has shown that a large share of custom code is not even used anymore. Simplifying your own extensions will benefit the general simplification of your system. To ease this process, SAP is planning to provide an analysis to identify custom code in the context of these changes, thereby quantifying the effort involved in custom code migration into a projectable quantity.

In addition, customers should know that only supported SAP BW/4HANA packages and add-ons (and no other software) shall be deployed on an SAP BW/4HANA installation. Details are provided in SAP Note [2189708](#) "SAP BW/4HANA Add-On Handling and Usage".

To enable our customers to better plan and estimate their path to SAP BW/4HANA, we have created the "Simplification List for SAP BW/4HANA". In this list, we describe in detail, on a functional level, what happens to individual data models, transactions, and solution capabilities in SAP BW/4HANA. Compared to the SAP Business Warehouse products, we have in some cases merged certain functionality with other elements or reflected it within a new solution or architecture.

1.1 Purpose of the Document

The purpose of this document is to support customers in converting their system from SAP Business Warehouse to SAP BW/4HANA.

1.2 General Topics for the Simplification List

For a typical SAP BW customer, moving to the SAP BW/4HANA requires a database migration to SAP HANA (if the customer is not yet running SAP HANA), followed by the installation of the new simplified code. Changes in adaption on the customer's side are also required.

The most prominent examples for which the customer needs to adapt to these SAP BW/4HANA simplifications are changes to the data model to SAP HANA-optimized object types, potentially switching from classical Business Explorer user interfaces to a modern SAP BusinessObjects experience (or a 3rd party tool), and the custom code, which needs to be compliant with the data structure and scope of the appropriate SAP BW/4HANA release.

Customers' expectation related to the transition to the SAP BW/4HANA is that SAP informs and provides guidance about the required steps and tasks on this journey. Based on the "Simplification List for SAP BW/4HANA", SAP will provide information about the SAP BW/4HANA related simplifications for each application/functional area and type of data warehousing object. The Simplification List is a collection of individual "Simplification Items"

that focus on what needs to be considered throughout an implementation or system conversion project from SAP BW 7.0 or higher to SAP BW/4HANA.

1.2.1 Simplification Item Information

Each Simplification Item will provide the following information:

- Description, impact on data warehouse, and recommendations
- References to any available migration/conversion tools or steps in task lists (optional)
- References to SAP Notes or related help.sap.com documentation, pre-checks or custom code checks (optional)

Description

The Simplification List is structured into different application / functional areas that you should already be familiar with from SAP Business Warehouse, with a short explanation about the technical change.

Data Warehouse-Related Information

Here you will find a description of what the Simplification Item means for the related data warehouse processes.

Recommendations

The dedicated recommendations provide a description about how the related SAP BW process or data model needs to be adapted.

Note: The recommendations are formulated in a general manner corresponding to a standard customer SAP Business Warehouse architecture and may therefore differ depending on the System Landscape that is in place.

1.2.2 Simplification Categories

The simplification items can be categorized based on their type of impact:

- **Re-architecting for SAP HANA in-memory platform**
Used for functionality that is optimized to leverage the capabilities of the SAP HANA database, for example the new data model based on SAP HANA-optimized object types.

- **Consolidation of existing functionalities**
Functionality that is unified in the core and optimized according to the principle of one, but from a data warehouse process and user perspective, the functionality basically remains the same.
- **No functional equivalent**
Compared to the SAP Business Warehouse, there may be no functional equivalent available in SAP BW/4HANA, because SAP BW/4HANA is not a legal successor of an SAP Business Warehouse product. Alternative functionality with application innovation is in many cases already available in an SAP BW/4HANA scope, or it is on the roadmap.

1.2.3 Related Business Impact Notes

With SAP BW/4HANA, the texts of the simplification items are maintained in separate SAP Notes. A spreadsheet with an overview of the Simplification Items and their corresponding SAP Notes and application components can be found as attachment in SAP Note [2421930](#) "Simplification List for SAP BW/4HANA".

1.3 The Simplification List – This Document

The Simplification List for SAP BW/4HANA provides the information related to the Simplification List Items which are applicable for customers doing a system conversion from SAP BW 7.0 or higher to SAP BW/4HANA.

The Simplification List Items and corresponding SAP Notes

The text of the Simplification Items included in this Simplification List is generated based on corresponding SAP Notes (they are called in the context of the Simplification List the *Business Impact Notes*). Examples:

Simplification Item	SAP Note
InfoSpoke	2437637
InfoCube	2443489

You can find the corresponding SAP Note in the Simplification List as a spreadsheet attachment. The Business Impact Note might contain additional information related to the Simplification Item, for example, references to other SAP Notes or additional How-To Guides.

In this sense, the Simplification List document is always a collection of the texts of the dedicated Simplification Item which are stored as original in the corresponding SAP Notes. In case you have questions or requests to improve the text related to a Simplification Item, please open a support ticket based on the component of the SAP Note.

The generation of the Simplification List document based on the SAP Notes does have an influence on the format and the length of this document.

The Simplification List Items as Spreadsheet

Beside the Simplification List in PDF format (this document), the Simplification List is available additionally in XLS format as attachment of SAP Note [2421930](#).

A new, web-based UI for searching and displaying Simplification Items

In parallel to this PDF document, the *SAP Simplification Item Catalog* offers direct search and browse of SAP BW/4HANA Simplification Items in their current state via the SAP ONE Support Launchpad at <https://launchpad.support.sap.com/#/sic/>:

The screenshot shows the SAP Simplification Item Catalog web interface. At the top, there is a navigation bar with the SAP logo, the title 'Simplification Item Catalog', a dropdown menu set to 'Known...', a search input field with the placeholder 'Enter search term', and a user profile for 'Marc Bernard (1822646)'. Below the navigation bar, the main content area features a teal background with the title 'Simplification Item Catalog' and a brief description: 'To help customers to better prepare for the transition to SAP S/4HANA and SAP BW/4HANA, the simplification item catalog provides customers with a description of all relevant changes that might have an impact when converting from SAP ERP to SAP S/4HANA or SAP BW to SAP BW/4HANA. Within each topic, which is referred to as a "simplification item", corresponding SAP Notes and mitigation possibilities are documented.' There is a search bar with the placeholder 'Search Simplification Item by title, ID, or business impact note' and a 'View All' link. Below this, a section titled 'Simplification Items Grouped by Product Version' displays four teal boxes representing different product versions and their item counts: 'SAP S/4HANA 1709' (434 items), 'SAP S/4HANA 1610' (445 items), 'SAP S/4HANA, on-premise edition 1511' (328 items), and 'SAP BW/4HANA 1.0' (84 items). The footer contains links for 'Contact Us', 'Share Your Feedback', 'About the Launchpad', 'Status', 'Terms of Use', 'Copyright and Trademarks', 'Legal Disclosure', 'Privacy', and a Chinese government registration number '沪ICP备09046015号-2'.

2 Overview of Simplifications

The following tables show if a change from one capability to another capability is recommended or mandatory for a given solution.

Note: The “SAP BW/4HANA” column also refers to “SAP BW powered by SAP HANA” with “SAP BW/4HANA Starter Add-on” (formerly known as “SAP BW, edition for SAP HANA”).

2.1 General

	SAP BW 7.4 or 7.5	SAP BW/4HANA
Add-ons	Optional	Mandatory SAP Note 2189708
SAP BW Accelerator → SAP HANA	Recommended	Mandatory SAP Note 2442939
BI Add-on for SAP GUI → SAP BW/4HANA Modeling Tools, SAP BusinessObjects or SAP Analytics Cloud	Recommended	Mandatory SAP Note 2481504

2.2 Data Warehousing

	SAP BW 7.4 or 7.5	SAP BW/4HANA
InfoObjects released for Real-time Data Acquisition → Streaming Process Chains	Recommended (7.5 only)	Mandatory SAP Note 2442621
InfoObjects with ORECORDMODE as attribute → n/a	n/a	Not Available SAP Note 2442621
DataStore Objects (classic) → DataStore Objects (advanced)	Recommended	Mandatory SAP Note 2451013
InfoCubes → DataStore Objects (advanced)	Recommended	Mandatory SAP Note 2443489
InfoSets → CompositeProvider	Recommended	Mandatory SAP Note 2444912
VirtualProviders → Open ODS Views / SAP HANA Calculation Views	Recommended	Mandatory SAP Note 2444913
MultiProviders → CompositeProvider	Recommended	Mandatory SAP Note 2444718
HybridProviders → DataStore Objects (advanced)	Recommended	Mandatory SAP Note 2442730
Aggregates → n/a	Optional	Not Available SAP Note 2442781
Sematic Partitioned Objects → DataStore Objects (advanced) + Sematic Grouping	Recommended	Mandatory SAP Note 2472609

Classic CompositeProviders → n/a	Optional	Not Available SAP Note 2442063
Analytic Indexes → n/a	Optional	Not Available SAP Note 2442063
External SAP HANA Attribute and Analytic Views → SAP HANA Calculation Views	Optional	Mandatory SAP Note 2442775
InfoObject Catalogs → InfoAreas	n/a	Mandatory SAP Note 2442621

2.3 Data Staging

	SAP BW 7.4 or 7.5	SAP BW/4HANA
Data Transfer Processes with PSA / Error Stacks → DTP with Intermediate Storage	n/a	Mandatory SAP Note 2464541
PSA / InfoPackages → Data Transfer Processes (DTP)	Recommended	Mandatory SAP Note 2464367
InfoPackage Groups → Process Chains	Recommended	Mandatory SAP Note 2487598
Transformations with Read from DSO (classic) → Transformations with Read from DSO (advanced)	Recommended	Mandatory SAP Note 2479567
Data Flows 3.x → 7.x Transfer & Update Rules / Transfer & Communication Structures → Transformations	Recommended	Mandatory SAP Note 2470352
Data Sources 3.x (original or emulated) → DataSources 7.x	Recommended	Mandatory SAP Note 2470352
Generic and Export DataSources → ODP DataSources (CDS Views)	Recommended	Mandatory SAP Note 2470315
Hierarchy DataSources → ODP DataSources (if available)	Recommended	Mandatory SAP Note 2480284
InfoSources 3.x → InfoSources 7.x	Recommended	Mandatory SAP Note 2470352
Process Chains and Process Variants	Optional	Mandatory SAP Note 2448086
Myself Source System → Operational Data Provisioning (ODP) Source System	n/a	Mandatory SAP Note 2479674
SAP Source System (S-API) → Operational Data Provisioning (ODP) Source System	Optional	Mandatory SAP Note 2443863
DB Connect Source System → SAP HANA Source System	Recommended (7.5 only)	Mandatory SAP Note 2447932
UD Connect Source System → SAP HANA Source System	Recommended (7.5 only)	Mandatory SAP Note 2441884
SAP Data Services Source Systems and External Systems (Partner ETL) → SAP HANA Source System	Recommended (7.5 only)	Mandatory SAP Note 2441836
Web Service Source System → n/a	Optional	Not Available SAP Note 2441836

Open Hub Destination (3 rd Party / Database Table with Technical Key) → SAP HANA Source System	Recommended	Mandatory SAP Note 2469516
InfoSpoke → Open Hub Destination	Mandatory	Mandatory SAP Note 2437637
Real-time Data Acquisition (RDA) → Streaming Process Chains	Recommended (7.5 only)	Mandatory SAP Note 2447916
Near-line Storage (NLS) Partner Solutions → NLS using SAP IQ or Hadoop or Data Tiering Optimization (DTO)	Optional	Mandatory SAP Note 2441922
Data Archiving Processes 3.x → Data Archiving Processes 7.x	Recommended	Mandatory SAP Note 2469514
Classic Request Management (RSSM) → New Data Request and Data Target Status Management (RSPM)	Mandatory (for ADSO only)	Mandatory (also for InfoObjects and Open Hub Destination) SAP Note 2482164
Hierarchy/Attribute Change Run → n/a	Optional	Not Available SAP Note 2526218

2.4 Analytic Manager

	SAP BW 7.4 or 7.5	SAP BW/4HANA
BEx Query Designer 3.x → BEx Query Designer 7.x	Mandatory (optional for queries)	Not Available
BEx Query Designer → Query Designer in BW Modeling Tools	Recommended	Mandatory
BW Queries 3.x → BW Queries 7.x	Recommended	Mandatory SAP Note 2479683
Obsolete Query Features	Mandatory SAP Note 1911469	Mandatory SAP Note 1911469
Runtime Statistics 3.x → Runtime Statistics 7.x (based on CDS views)	Mandatory SAP Note 955990	Mandatory SAP Note 2467074
VirtualProvider and Query Snapshot → n/a	Optional	Not Available SAP Note 2442781
Currency Translation Type, Quantity Conversion Type, Key Date Derivation based on InfoSets → n/a	Optional	Not Available SAP Note 2443281
Quantity Conversion Type based on classic DataStore objects → Quantity Conversion Type based on DataStore objects (advanced)	Optional	Mandatory SAP Note 2443281
Personalization based on DSOs (OPERS*) → Personalization based on specialized tables (RSPERS_*)	n/a	Mandatory SAP Note 2487535
Data Federator Facade → SAP HANA Views	Optional (Generated Models)	Mandatory SAP Note 2444890
Report-Report-Interface	Optional	Depends on Front-end SAP Note 2739095

2.5 Agile Information Access

	SAP BW 7.4 or 7.5	SAP BW/4HANA
Local CompositeProviders and Analytic Indexes with SAP BW → Local CompositeProviders and Analytic Indexes with SAP BW/4HANA	n/a	Mandatory SAP Note 2442062
BW Workspaces with SAP BW → Workspaces with SAP BW/4HANA	n/a	Mandatory SAP Note 2444273

2.6 Frontend Tools

	SAP BW 7.4 or 7.5	SAP BW/4HANA
Business Explorer 3.x → 7.x BEx Workbooks 3.x → 7.x BEx Web Templates 3.x → 7.x	Mandatory SAP Note 1932461 (optional for queries)	Not Available SAP Note 2444138
Business Explorer → BusinessObjects Suite / SAP Analytics Cloud BEx Workbooks → Analysis Office BEx Web Templates → Lumira (recommended), Design Studio or Web Intelligence (alternatives) BEx Report Designer → Crystal Enterprise	Recommended	Mandatory SAP Note 2444136 SAP Note 2444138
Reporting Agent, Information Broadcasting 3.x → Information Broadcasting 7.x	Mandatory SAP Note 2020590	Not Available SAP Note 2444136
Information Broadcasting → BusinessObjects Broadcasting	Optional	Mandatory SAP Note 2444138
SAP BW Enterprise Reports / SAP Crystal Reports → SAP Crystal Enterprise	Optional	Mandatory SAP Note 2478346
SAP Xcelsius Dashboards → SAP Design Studio / SAP Lumira	Optional	Mandatory SAP Note 2478346
Easy Query → OData Query	Optional	Mandatory SAP Note 2470206

2.7 Planning Tools

	SAP BW 7.4 or 7.5	SAP BW/4HANA
Business Planning (BW-BPS) → BPC version for SAP BW/4HANA (BPC embedded)	Recommended	Mandatory SAP Note 2468702
Integrated Planning (BW-IP) → BPC version for SAP BW/4HANA (BPC embedded)	Optional	Mandatory SAP Note 2443001
Business Planning and Consolidation → BPC version for SAP BW/4HANA (BPC standard and embedded)	n/a	Mandatory SAP Note 2189708

Aggregation Levels on Basic InfoProviders → Aggregation Levels on CompositeProviders	Optional	Mandatory SAP Note 2443001
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2.8 Custom Developments

	SAP BW 7.4 or 7.5	SAP BW/4HANA
Adjustments to Interfaces and Customer-Specific ABAP Development	Optional	Mandatory SAP Note 2462639
CRM Tool and CRM BAPI → SAP HANA Views	Optional (Generated Models)	Mandatory SAP Note 2463800
SEM APIs → n/a	Optional	Mandatory SAP Note 2526508

2.9 Security

	SAP BW 7.4 or 7.5	SAP BW/4HANA
Standard Authorization Objects for classic BW objects → Authorization Objects for SAP BW/4HANA objects	Optional	Mandatory SAP Note 2468657
Reporting Authorizations → Analysis Authorizations	Mandatory SAP Note 1125108	Mandatory SAP Note 2478384

2.10 Content

	SAP BW 7.4 or 7.5	SAP BW/4HANA
BI Content / BI Content XT → SAP BW/4HANA Basis Content / SAP BW/4HANA Content	n/a	Mandatory SAP Note 2400585
BW Administration Cockpit / Technical Content for Data Warehousing → CDS Views	n/a	Mandatory SAP Note 2467074
Conversion of DataSource Field into InfoObject → n/a	n/a	Not available SAP Note 2487597
BI Content Analyzer → n/a	n/a	Not available SAP Note 2528601
Change Documents for Analysis Authorizations → CDS Views	n/a	Mandatory SAP Note 2467074

2.11 Other Tools

	SAP BW 7.4 or 7.5	SAP BW/4HANA
Analysis Process Designer (APD) → Data Flows, Data Modeling (calculations on the fly), SAP HANA Analysis Processes, or SAP HANA Predictive Analytics	Optional	Mandatory SAP Note 2444220
Data Mining Models → Data Modeling (calculations on the fly), SAP HANA Analysis Processes, or SAP HANA Predictive Analytics	Optional	Mandatory SAP Note 2444220

3 The Simplification List for SAP BW/4HANA

3.1 SAP BW - General

3.1.1 BW4SL - Add-ons

SAP Note [2189708](#) - SAP BW/4HANA Add-On Handling and Usage

Version 51 from 2019-04-01
Component: BW - SAP Business Warehouse

Description

As one of the goals of SAP BW/4HANA is to simplify processes, not all SAP NetWeaver based add-ons are supported by SAP BW/4HANA.

In addition, SAP BW/4HANA itself does not support planning functionality, which is included in SAP BW as part of SAP NetWeaver. This is delivered SAP Business Planning and Consolidation based on BW/4HANA (including BW-IP/PAK).

This has implications to the SAP BW/4HANA Starter Add-On (formerly known as "SAP BW, edition for SAP HANA") which you need to install on top of your SAP BW 7.5 system to enable the conversion to SAP BW/4HANA.

Other Terms

SAP BW/4HANA Starter, SAP BW, edition for SAP HANA, Supported Add-Ons, SAP NetWeaver

Prerequisites and Checks

This note will give you an overview which add-ons are supported by SAP BW/4HANA and the SAP BW/4HANA Starter Add-On (on an SAP BW 7.5 system as part of SAP NetWeaver).

Recommendations

Disclaimer: This list is not complete and shows currently only the add-ons where SAP knows that they are not working on SAP BW/4HANA and SAP BW/4HANA Starter Add-On. Currently, no add-ons from 3rd party vendors are not supported. If your Add-On is not listed here, please follow the process given at the end of this section.

For add-ons on SAP BW/4HANA and SAP BW/4HANA Starter Add-On you need to distinguish between the following cases.

1. The following add-ons **are** supported with **SAP BW/4HANA Starter Add-On** and **SAP BW/4HANA**. These add-ons will not be touched during the conversion.

Add-on for SAP BW	Software Component (Technical Name)	Supported with SAP BW/4HANA Starter Add-on	Supported with SAP BW/4HANA 1.0	Comments

SAP Gateway Foundation	SAP_GW_FND	Yes	Yes	
SAP UI5	SAP_UI	Yes	Yes	SAP BW/4HANA 1.0 SP 8 or higher require SAP_UI 752
SAP Solutions Tools Plug-In	ST-PI	Yes	Yes	
Service Tools for SAP Basis	ST-A/PI	Yes	Yes	See SAP Note 69455 . Q&A section Q20
SAP Access Control 10.1 (GRC Plug-In)	GRCPINW	Yes	Yes	See SAP Note 2423873
SAP Landscape Transformation 2.0	DMIS, DMIS_MOB	Yes	Yes	
SAP Test Data Migration Server 4.0	DMIS_CNT	Yes	Yes	
SAP Performance Management for Financial Services 3.0	FPMBASIS	Yes	Yes	
SAP Personas 3.0	PERSONAS	Yes	Yes	

2. The following add-ons **are** supported with **SAP BW/4HANA Starter Add-On** (but **not** with **SAP BW/4HANA**).

a. These add-ons are converted to SAP BW/4HANA compatible ones during the system conversion.

Add-on for SAP BW	Old Software Component (Technical Name)	Supported with SAP BW/4HANA Starter Add-on	Supported with SAP BW/4HANA 1.0	Target Solution	New Software Component (Technical Name)
PI Basis	PI_BASIS	Yes	No	SAP BW/4HANA Core	DW4CORE
BI Content	BI_CONT	Yes	No	SAP BW/4HANA Content	BW4CONTB, BW4CONT
BI Extended Content	BI_CONT_XT	Yes	No	SAP BW/4HANA Content	BW4CONTB, BW4CONT

SAP Business Planning and Consolidation 10.1, SAP NetWeaver 7.5	SAP_BW	Yes	No	SAP Business Planning and Consolidation 11.0, version for SAP BW/4HANA	BPC4HANA
SAP Strategic Enterprise Management - Consolidation	SEM-BW (BCS)	Yes	No	SAP BW/4HANA, business consolidation add-on 1.0	BCS4HANA
SAP Demand Signal Management	DSIM	Yes	No	SAP Demand Signal Management 1.0, version for SAP BW/4HANA	DSIM4H

b. For the following add-ons you can install the SAP BW/4HANA Starter Add-on and transfer the BW objects, but need to take action before the system conversion.

Caution: Although the SAP BW/4HANA Starter Add-on and SAP BW/4HANA Transfer Cockpit can be installed with these add-ons, this does **not** mean that you can transfer the classic SAP BW data models that these add-ons run on (for example, InfoCubes) to data models compatible with SAP BW/4HANA (advanced DataStore objects)! You must check with each add-on, if HANA-optimized data models are supported.

Add-on for SAP BW	Software Component (Technical Name)	Supported with SAP BW/4HANA Starter Add-on	Supported with SAP BW/4HANA 1.0	Uninstall Instructions
SAP Strategic Enterprise Management	SEM-BW	Yes	No	SAP Note 2505027
SAP Business Suite Foundation SAP Master Data Governance Foundation	SAP_BS_FND MDG_FND	Yes	No	SAP Note 2654906
SAP Financial Basis Framework SAP Financial Supply Chain Management	FINBASIS FSCM_CCD	Yes	No	SAP Note 2513541
SAP Web UI Framework	WEBCUIF	Yes	No	SAP Note 2417905
SAP POS Data Management	POSDM	Yes	No	SAP Note 2569045
Logging for SAP BW Access	LOGCOM, LOGBW	Yes	No	

SAP Budgeting and Planning for Public Sector	PBFBI, BPPS	Yes	No	
SAP Trade Management	TMAB	Yes	No	
SAP Invoice Management by OpenText	OTVIMBW	Yes	No	
SAP Learning Solution - Front-End	LSOFE	Yes	No	
SAP BusinessObjects Disclosure Management - BI Connector	DISCLMG	Yes	No	
Capital Investment Planning	TCIPB	Yes	No	
SAP BP for BW	BP-BW	Yes	No	

3. The following add-ons **are not supported**, neither with **SAP BW/4HANA Starter Add-on** nor with **SAP BW/4HANA**:

If any of these add-ons or solutions are installed, the installation of the SAP BW/4HANA Started Add-on will not be possible.

Add-on for / Solution with SAP BW	Software Component (Technical Name)	Supported with SAP BW/4HANA Starter Add-on	Supported with SAP BW/4HANA 1.0	Uninstall Instructions
SAP Spend Performance Management	ANAXSA	No	No	
SAP Supply Chain Performance Management	ANASCPM	No	No	
Financial Service Application	FSAPPL	No	No	
Financial Service Process Object Types	FSPOT	No	No	
SAP Notes Management	NOTESMG	No	No	
Analytics OPM Foundation	OPMFND	No	No	

POA Shared Business Components	POASBC	No	No	SAP Note 2322477
Demand Data Foundation	RTLDDF	No	No	
SAP S/4HANA, On-Premise-Edition	S4CORE	No	No	
SAP Supply Chain Management	SCM	No	No	
SAP SRM Server	SRM_SERVER	No	No	
SAP Sustainability Performance Management	SR_CORE	No	No	
UI for Basis Applications	UIBAS001	No	No	SAP Note 2256000
Post Copy Automation	PCAI_ENT	No	No	Deinstall see Availability of PCA for BW/4HANA is planned for Q4/2019

4. New add-ons for SAP BW/4HANA only

Add-on for SAP BW	Software Component (Technical Name)	Supported with SAP BW/4HANA Starter Add-on	Supported with SAP BW/4HANA 1.0	Comments
SAP Business Planning and Consolidation 11.0, version for SAP BW/4HANA	BPC4HANA	No	Yes	PAM / RIN / Conversion / Installation / Support Packages / Documentation
SAP BW/4HANA, business consolidation add-on 1.0	BCS4HANA	No	Yes	PAM / RIN / Conversion / Installation / Support Packages / Documentation
SAP Demand Signal Management 1.0, version for SAP BW/4HANA	DSIM4H	No	Yes	PAM / RIN / Conversion / Installation / Support Packages / Documentation

5. Special Case - Business Planning (including SAP BPC Planning)

a. SAP BW/4HANA

SAP BW/4HANA does not contain any planning functionality. SAP Business Planning and Consolidation, version for SAP BW/4HANA provides the known planning features for BPC standard as well as embedded model (including BW-IP/PAK).

b. SAP BW 7.5 with SAP BW/4HANA Starter Add-on (SAP BPC 10.1)

SAP BPC 10.1 Planning *standard model* is supported with SAP BW/4HANA Starter Add-On only in the *Compatibility Mode* from SAP BW 7.5 SP 7 onwards. Please apply the namespace /CPMB/* to the whitelist for the TLOGO objects CUBE and MPRO.

SAP BPC 10.1 Planning *embedded model* is supported with SAP BW/4HANA Starter Add-on after implementing SAP Note [2373204](#). This allows a customer using the embedded model to make their overall system ready for SAP BW/4HANA, but for clarification, it does not currently support the final system conversion from an SAP BW 7.5 system with the Starter Add-on to the final state SAP BW/4HANA system. Please see point below. Same holds for customers just using PAK and BW-IP, which are subsets of the BPC embedded model.

c. SAP BW 7.0 to 7.4 with SAP BPC 10.0 or 10.1 add-on

SAP BPC 10.x Planning *standard model* can be converted to SAP BPC 11.0, version for SAP BW/4HANA using backup & restore (see SAP Note [2510414](#)).

SAP BPC 10.1 Planning *embedded model* can be converted to SAP BPC 11.0, version for SAP BW/4HANA using a remote conversion (see SAP Note [2602319](#)).

d. SAP BW Integrated Planning 7.0 to 7.5

SAP BW-IP can be converted to SAP BPC 11.0, version for SAP BW/4HANA *embedded model* using a remote or shell conversion.

6. What happens if you have an add-on installed on your system, which is not supported anymore on SAP BW/4HANA?

- Prior to the system conversion, the add-on must be uninstalled. A list of add-ons, which can be uninstalled is available in SAP Note [2011192](#).
- If your add-on is from a 3rd party vendor, please contact the vendor and inquire if there are plans to support SAP BW/4HANA or make an uninstallation available.
- If your add-on is from SAP and not listed in this SAP Note but required by your business, please open a customer incident on the component BW-B4H-LM.
- Alternatively, consider a shell or remote conversion to SAP BW/4HANA.

7. How do I prepare the SAP BW for uninstalling add-ons?

Implement SAP BW Note Analyzer (program Z_SAP_BW_NOTE_ANALYZER) and run it with the XML file for the SAP BW/4HANA Add-on Uninstall. Note Analyzer will display the attribute change packages and SAP Notes that are required to uninstall add-ons found on your system (if uninstall is available). Follow the instructions provided by Note Analyzer to install the packages and SAP Notes to prepare your system for the uninstall. The uninstallation can then be performed using transaction SAINT.

Program and XML file are included in the ZIP file attached to this SAP Note. For more details, please see the [User Guide for SAP BW Note Analyzer](#), which is available on SAP Help Portal.

References

SAP Note	Title
69455	Servicetools for Applications ST-A/PI (ST14, RTCCTOOL, ST12)

SAP Note	Title
2011192	Uninstallation of ABAP add-ons
2347382	SAP BW/4HANA – General Information (Installation, SAP HANA, security corrections...)
2373204	SAP BW/4HANA Starter Add-On: Various problems
2423873	GRC AC 10.1 - Plug-in Compatibility with BW4HANA
2570363	Availability of BW PCA for BW/4HANA

Attachments

File Name	File Size
SAP_BW_Add-on_Uninstall_2018-12-04.zip	60 KB

3.1.2 BW4SL - SAP BW Accelerator

SAP Note [2442939](#) - BW4SL - SAP BW Accelerator

Version 6 from 2017-07-10
Component: BW-BEX-OT-BIA - BW Accelerator

Description

SAP BW Accelerator (BWA) is not available for SAP BW/4HANA.

Other Terms

\$BWA, BWA, BW Accelerator

Prerequisites and Checks

SAP BW Accelerator (BWA) is not available for SAP BW/4HANA.

Recommendations

For converting SAP BW Accelerator functionality to SAP BW/4HANA in the context of

- a Local Provider and a Local CompositeProvider in BW Workspaces, see SAP Note [2444273](#)
- a CompositeProvider and an Analytical Index, see SAP Note [2442062](#)
- Query Snapshots, see SAP Note [2442781](#)

"BWA-Only" InfoCubes are not available in SAP BW/4HANA. If such InfoCubes have a corresponding persistence in a classic DataStore Object, then this DSO can be converted to an DataStore Object (advanced) making the need for the InfoCube obsolete. If there is no persistency of the data available in your SAP BW system (data is really in BWA-only), then we recommend to create a DSO in SAP BW first and fill it from the BWA-only InfoCube before you start the conversion to SAP BW/4HANA.

References

SAP Note	Title
2442062	BW4SL - CompositeProvider and Analytical Index
2442781	BW4SL - VirtualProvider and Query Snapshots
2444273	BW4SL - Local Provider and Local CompositeProvider in BW Workspaces

3.1.3 BW4SL - BI Add-on for SAP GUI

SAP Note [2481504](#) - BW4SL - BI Add-on for SAP GUI

Version 3 from 2017-08-31

Component: BW-BEX-ET - Enduser Technology

Description

The BW/BI Add-on for SAP GUI - also called SAP Business Explorer (BEx) - is not available in SAP BW/4HANA. Therefore, the following front-end tools are not available in SAP BW/4HANA:

- BEx Query Designer
- BEx Web Application Designer
- BEx Analyzer
- BEx Enterprise Report Designer

Other Terms

\$BEX

Prerequisites and Checks

There is currently no automated analysis available, if the BI Add-on is used or not.

Recommendations

BEx Query Designer has been replaced with the Query Designer perspective of the SAP BW/4HANA Modeling Tools. The other front-end tools need to be replaced by SAP BusinessObjects, SAP Analytics Cloud or 3rd party tools for end-user access or for designing analytic applications.

Semi-automated transition of SAP BEx Analyzer Workbooks to SAP Analysis Office is available as a service offering.

For more details, see [Automated Mass Migration/Conversion of BEx Workbooks to Analysis Office](#).

For temporary usage of BEx Web Application Designer with SAP BW/4HANA and more details, see SAP Note [2444138](#).

Related Information

[SAP Business Intelligence Solutions](#)

[SAP Business Explorer Maintenance and Support Policy](#)

[Transition from SAP Business Explorer \(BEx\) to Modern User Interfaces for SAP BW/4HANA](#)

References

SAP Note	Title
2444138	BW4SL - BEx Objects (to be redesigned)

3.2 SAP BW - Data Warehousing

3.2.1 BW4SL - InfoObjects

SAP Note [2442621](#) - BW4SL - InfoObject Catalogs and InfoObjects

Version 9 from 2018-10-26

Component: BW-WHM-DBA-IOBJ - InfoObjects

Description

InfoObject Catalogs (IOBC)

InfoObject Catalogs are not available in SAP BW/4HANA. InfoObject Catalogs have been replaced by InfoAreas (AREA).

InfoObjects (IOBJ)

The following types of InfoObjects are not available in SAP BW/4HANA:

- Characteristics that use ORECORDMODE as an attribute
- Characteristics that are enabled for real-time-data acquisition
- Characteristics that use class CL_RSR_REMOTE_MASTERDATA as their master data read class
- Key figures of data type "Date" or "Time" with aggregation SUM

Also note that extraction out of InfoObjects in SAP BW/4HANA to target systems is no longer possible using Export DataSources but only using ODP-BW. For further information see SAP Note [2483299](#) - BW4SL - Export DataSources (SAP BW/4HANA as Source).

Other Terms

IOBC, DIOC, IOBJ, DIOB

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA.

See node: Automated Clean-up --> Adjustments --> TLOGO IOBC (InfoObject Catalog)

See note: Manual Redesign (take the necessary action) --> BW Object Type --> TLOGO IOBJ (InfoObject)

Recommendations

InfoObject Catalogs (IOBC)

You can migrate the assignments of InfoObjects to InfoObject Catalogs to InfoAreas by using report RSDG_IOBJ_IOBC_MIGRATE_TO_AREA. When running the report the system is set to an "InfoArea-only" mode. Please note that once the system has been switched to the "InfoArea-only" mode the authorization object S_RS_IOBJA is evaluated instead of S_RS_IOBJ.

InfoObjects (IOBJ)

You need to adjust the identified InfoObjects manually.

Material InfoObjects with conversion exits MATN1 or MATNB are handled in a special way. For details, see SAP Note [2635167](#) - Handling of Material InfoObjects with Conversion to SAP BW/4HANA.

For details about key figures of type DATS or TIMS and SUM aggregation, see SAP Note [1940630](#).

InfoObjects that are shipped with SAP BW or SAP BW/4HANA (see table RSDIOBJFIX) might require special handling. These InfoObjects are not part of BI or BW4 Content and generally activated at installation time. This includes for example the well-known time characteristics. We recommend to use the latest version of and keep the delivered settings for these InfoObject (adding custom attributes is allowed) If you are using an out-of-date, the system might not function properly or missing features. This includes for example pre-delivered master data read classes (value help might not work properly without it) and attributes for time characteristics (like number of days per period). If you are doing an in-place conversion, we therefore recommend to reactivate these InfoObjects after conversion to SAP BW/4HANA to ensure you have the latest version. For remote conversion, the latest version will be used when installing SAP BW/4HANA (at the beginning of the project), so adjustments are not required.

Related Information

For more information refer to the documentation:

- [InfoAreas](#)
- [Authorizations for InfoObjects](#)
- [Creating InfoObjects](#)

References

SAP Note	Title
1940630	Key Figure with Data Type DATS or TIMS and Aggregation SUM on gives SQL error
2364958	InfoObject ORECORDMODE no longer supported as attribute in BW/4HANA system
2635167	Handling of Material InfoObjects with Conversion to SAP BW/4HANA

3.2.2 BW4SL - DataStore Objects (classic)

SAP Note [2451013](#) - BW4SL - DataStore Objects (classic)

Version 8 from 2018-09-20

Component: BW-WHM-DBA-ODS - DataStore Object (classic)

Description

The SAP BW DataStore Object (classic) is not available in SAP BW/4HANA. It can be converted to a DataStore Object (advanced) via the SAP BW/4HANA Transfer Tool.

Other Terms

ODSO, DODS, ADSO, DSO

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA:

See node: "Supported by Transfer Tool" --> "BW4 Transfer Tool"

For the in-place conversion your system needs to be on SAP BW 7.5 SP 5, powered by SAP HANA or higher.

Recommendations

Under node "Supported by Transfer Tool" --> "BW4 Transfer Tool" --> "TLOGO ODSO (DataStore Object (classic))" the DataStore Objects are listed. They can be transferred "in-place" or via "remote conversion" to DataStore Objects (advanced) (ADSOs).

Transfer:

- **Write-optimized ODSOs** used in Queries or MultiProviders
 - Will be transferred into ADSOs with option "Keep inbound data, extract from inbound queue".
 - Please note that the write-optimized ODSO needs to have a semantic key. Write-optimized ODSOs w/o semantic key cannot be transferred and will cause the Transfer Tool to stop. Remove the ODSO from the MultiProvider or delete the Queries to continue.
 - The data won't automatically be activated after the transfer.
- **Write-optimized ODSO** not used in Queries or MultiProviders
 - Will be transferred into ADSOs without activation.
 - Please note that ADSOs provide more flexibility for write-optimized use-cases like corporate memories.
- **Standard ODSOs**
 - Will be transferred into ADSOs with activation and change log.
- **ODSO for direct update**
 - Will be transferred into ADSOs for direct update.
- In ODSOs, if a characteristic is key, compounding characteristics did not have to be in the key as well. This has changed for ADSOs. The transfer tool will check and adapt the key during transfer, so that also the compounding characteristics are included in the key automatically.
- The Transfer Tool will automatically replace process chain variant "Activate Data in DataStore Objects (classic)" with process chain variant "Activate Data in DataStore Objects (advanced)".
- The Transfer Tool will automatically replace process chain variant "Deletion of Requests from Change Log of DSO (classic)" and "Deletion of Requests from Write-optimized DSO (classic)" with process chain variant "Clean Up Old Requests in DataStore Objects (advanced)".

Restrictions:

- In-memory optimized DataStore Objects: ODSOs with option "HANA-optimized" cannot be converted into ADSOs. Use report RSDRI_RECONVERT_DATASTORE to revoke the option first.
- Field based DSO are not supported by the BW/4 conversion. Please remodel this kind of scenario manually.
- For write-optimized ADSOs, a semantic key cannot be defined without enabling the option "Activate Data". If a write-optimized ODSO is transferred into such an ADSO, the semantic key will be ignored. This might produce an unexpected behavior if the semantic key was used in a transformation for currency conversion for example. Please remodel this kind of scenario manually as follows:
 - Create an InfoSource with the corresponding ODSO as template
 - Make sure that the semantic key of the ODSO is defined as the key for the InfoSource
 - Create a transformation connecting the source of the ODSO with the InfoSource
 - Enable the currency conversion in the corresponding rule
 - Create a transformation connecting the InfoSource with the ODSO
- If a process variant for the deletion of old requests from changelogs or write-optimized ODSOs is used, please note that there are restrictions on the corresponding process variant for the deletion of old requests from DataStore objects (advanced). See SAP Note [2448086](#) for details.
- Transfer of ODSO with Key Figure Aggregation Type NO2 is only supported for direct update ODSOs, for other DSO types manual redesign is required before transfer.

Related Information

See the documentation for more details:

[Templates for Modeling the Data Warehousing Layers](#)

References

SAP Note	Title
1849498	SAP HANA: Reconversion of SAP HANA-optimized DataStores

3.2.3 BW4SL - InfoCubes

SAP Note [2443489](#) - BW4SL - InfoCubes

Version 6 from 2018-07-19
Component: BW-WHM-DBA-ICUB - InfoCubes

Description

The SAP BW InfoCube is not available in SAP BW/4HANA. Basic InfoCubes can be converted to a DataStore Object (advanced) (ADSO) with option "All characteristics are key, reporting on union of inbound and active table" using the BW4 Transfer Tool.

Other Terms

CUBE, DCUB

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA:

See node: Supported by Transfer Tool --> BW4 Transfer Tool (using transaction RSB4HTRF).

For the in-place conversion your system needs to be on SAP BW 7.5 SP 5, powered by SAP HANA or higher.

Recommendations

Under node Supported by Transfer Tool --> BW4 Transfer Tool --> TLOGO CUBE (InfoCube), the Basis InfoCubes are listed. They can be transferred using the Transfer Tool "in-place" or via "remote conversion" to DataStore objects (advanced).

Transfer:

- The Transfer Tool will automatically replace process chain variant "Compression of InfoCubes" with process chain variant "Clean Up Old Requests in DataStore objects (advanced)".
- DataStore objects (advanced) expose navigation attributes for staging processes only. It is not possible to consume navigation attributes of an ADSO directly in the query. The Transfer Tool will therefore automatically generate a CompositeProvider that enables the navigation attributes of the ADSO and redirects the query to it. See also SAP Note [2185212](#).
- For InfoCubes with non-cumulative key figures and near-line storage solution (NLS), see SAP Note [2618005](#).

Restrictions:

- InfoCubes of type VirtualProvider or HybridProvider cannot be converted (see SAP Notes [2444913](#) and [2442730](#))
- The DataStore object (advanced) does not support "zero elimination" at present
- Transfer of InfoCubes with key figure aggregation type NO2 is not supported. Manual redesign required before transfer.

- SID materialization: ADSOs are transferred from InfoCubes without generating materialized SID columns. This might result in impaired performance in some cases. SID materialization can be enabled for selected characteristics containing mass data after the transfer, which will cause a remodeling job.
- Partitioning: InfoCubes are distributed across the SAP HANA nodes round-robin; ADSOs are distributed using a hash function. The fields that will be hashed are determined automatically, but can be changed after the transfer.
- InfoCubes on SAP HANA that are not HANA-optimized cannot be converted. HANA-optimized these InfoCubes using transaction RSMIGRHANADB.
- InfoCubes with an audit dimension, i.e. InfoCubes for which the checkbox 'Auditable' flag has been checked, cannot be converted at present. In order to convert them, the flag 'Auditable' has to be removed.

References

SAP Note	Title
2185212	ADSO: Recommendations and restrictions regarding reporting
2442730	BW4SL - HybridProviders
2444913	BW4SL - VirtualProviders
2618005	Archiving advanced Data Store Objects with non-cumulative key figures

3.2.4 BW4SL - InfoSets

SAP Note [2444912](#) - BW4SL - InfoSets

Version 4 from 2017-10-27
Component: BW-WHM-DBA-ISET - InfoSet

Description

The SAP BW InfoSet is not available in SAP BW/4HANA. It can be converted to a CompositeProvider via the BW4 Transfer Tool.

Other Terms

ISET, DISE

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA:

See node: Supported by Transfer Tool --> BW4 Transfer Tool (use transaction RSB4HTRF)

Recommendations

Under node Supported by Transfer Tool --> BW4 Transfer Tool --> TLOGO ISET (InfoSet), the InfoSets are listed. They can be transferred "in-place" or via "remote conversion" to a CompositeProvider.

During the conversion, an InfoObject mapping is necessary, as InfoSet names of InfoObjects are not supported in the CompositeProvider. This requires an adoption of Queries and Query Views and other dependent objects, which are defined on top. Queries and Query Views are adopted in the BW4 Transfer Tool.

Restrictions:

- InfoSets with "Most Recent Reporting for InfoObjects" are not supported by the BW4 Transfer Tool

- InfoSets with "Left Outer: Add Filter Value On-Condition" are not supported by the BW4 Transfer Tool
- InfoSets without "Additional Grouping Before Join" and without "Join Is Time-Dependent" are not supported by the BW4 Transfer Tool
- InfoSets with only one PartProvider are not supported by the BW4 Transfer Tool
- InfoSets which use navigational attributes from an InfoCube in combination with a temporal join are not supported by the BW4 Transfer Tool.
- InfoSets with fields based on InfoObjects compounded to referenced key figures are not supported by the BW4 Transfer Tool

Related Information

[Creating InfoSets](#)

[CompositeProvider](#)

3.2.5 BW4SL - MultiProviders

SAP Note [2444718](#) - BW4SL - MultiProviders

Version 5 from 2018-09-20

Component: BW-WHM-DBA-MPRO - MultiProvider

Description

The SAP BW MultiProvider is not available in SAP BW/4HANA. It can be converted to a CompositeProvider using the SAP BW/4HANA Transfer Tool.

In the following cases, it is not possible to convert a MultiProvider to a CompositeProvider:

- The setting "Accept Inconsistency During Compounding" is set to true.
- Navigation attributes from InfoObjects based on HANA Model are mapped in a way, that they cannot be used as navigation attributes anymore (see explanation below).

Other Terms

MPRO, DMPR

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA:

See node: Supported by Transfer Tool --> BW4 Transfer Tool (transaction RSB4HTRF).

For the In-place Conversion, your system needs to be on SAP BW 7.5 SP 5, powered by SAP HANA or higher.

Recommendations

Under "Supported by Transfer Tool" --> "BW4 Transfer Tool" --> "TLOGO MPRO (MultiProvider)" the MultiProviders are listed. They can be converted to CompositeProviders either in-place or by remote conversion.

During conversion, it might be necessary to perform an InfoObject mapping. This is necessary because the CompositeProvider requires a consistent mapping of navigation attributes. Navigation attributes therefore always need to be mapped consistently with the characteristic that the navigation attribute belongs to. If A is

mapped to A, A__B needs to be mapped to A__B. If A is not mapped, no mapping is allowed for A__B. If A is mapped to A1, A__B needs to be mapped to A1__B. If A is mapped, A__B must also be mapped. If this is not guaranteed, a new mapping for the navigation attribute to a new characteristic is required.

A new "Compatibility Mode" for the CompositeProvider is now available, which allows an association of fields to navigation attributes (see SAP Notes [2659899](#) and [2666703](#)):

- Avoids more than 90% of the name changing relate to inconsistent navigational attribute mappings in MultiProviders
- Limitation: The transferred CompositeProvider is not reusable in other CompositeProviders and must not include joins

InfoSet-InfoObjects are no longer supported in the CompositeProvider either, so a new mapping is also needed, if InfoSets are using as part of a MultiProvider. If an InfoObject mapping is required, this automatically requires adaptation of queries/query views/aggregation levels and other dependent objects, which are defined on top. Queries, query views and aggregation levels are adapted using the SAP BW/4HANA Transfer Tool.

Related Information

[MultiProvider](#)

[CompositeProvider](#)

3.2.6 BW4SL - VirtualProviders

SAP Note [2444913](#) - BW4SL - VirtualProviders

Version 3 from 2019-01-10

Component: BW-WHM-DBA-ICUB - InfoCubes

Other Components: BW-BEX-OT-VC - Virtual Cube (Remote Cube)

Description

The SAP BW VirtualProvider is not available in SAP BW/4HANA.

Other Terms

CUBE, DCUB, \$VIRT

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA.

Recommendations

There is no tool support to replace an SAP BW VirtualProvider by another InfoProvider. A manual redesign is necessary.

VirtualProvider based on Data Transfer Process:

- We recommend to remodel the VirtualProvider as an Open ODS View.

Virtual Provider based on BAPI:

- We recommend to remodel the VirtualProvider as an Open ODS View.

Virtual Provider based on Function Module:

- We recommend to remodel the logic of the function module in a SAP HANA Calculation View. Afterwards, this Calculation View can be embedded into a CompositeProvider.

Virtual Provider based on SAP HANA Model:

- We recommend to add the SAP HANA Model directly as PartProvider to a CompositeProvider. If data type conversions are necessary, the conversions should be done in calculated attributes in the SAP HANA Model, or the SAP HANA Model should be used as source of an Open ODS View, which generates the necessary conversions.

Related Information

[VirtualProvider Based on the Data Transfer Process](#)

[VirtualProvider with BAPI](#)

[VirtualProviders with Function Modules](#)

[VirtualProviders Based on an SAP HANA Model](#)

[Open ODS View](#)

[CompositeProvider](#)

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3.2.7 BW4SL - HybridProviders

SAP Note [2442730](#) - BW4SL - HybridProviders

Version 1 from 2017-06-26

Component: BW-WHM-DBA-HPR - HybridProvider

Description

The SAP BW HybridProvider is not available in SAP BW/4HANA.

Other Terms

HYBR, DHYB

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA.

Recommendations

Automatic conversion to an available SAP BW/4HANA object is not possible.

As an alternative for the HybridProvider, based on DataStore Object (classic), use the DataStore Object (advanced).

As an alternative for the HybridProvider, based on direct access, use the DataStore Object (advanced) combined with streaming process chain.

Related Information

[SAP BW 7.50 documentation for HybridProvider](#)

[SAP BW/4HANA documentation for DataStore Object \(advanced\)](#)

3.2.8 BW4SL - Aggregates

SAP Note [2470050](#) - BW4SL - Aggregates

Version 3 from 2019-01-11
Component: BW-BEX-OT-AGGR - Aggregates (Definition and Filling)

Description

Aggregates are not available in SAP BW/4HANA.

Other Terms

\$AGGR

Prerequisites and Checks

You can use the SAP BW Checklist Tool for SAP HANA (see SAP Note [1729988](#)) to find configuration related to aggregates.

Recommendations

In-place conversions start on SAP BW powered by SAP HANA and therefore no aggregates should exist in the system. However, sometimes aggregates still exist (see Checklist Tool) and need to be deleted before the system conversion to SAP BW/4HANA is possible. You can use program RSDU_AGGR_GARBAGE_DEL_HDB to drop any remaining aggregates in SAP BW powered by SAP HANA.

Remote conversions simply ignore aggregates.

3.2.9 BW4SL - Semantic Partitioning Objects

SAP Note [2472609](#) - BW4SL - Semantically Partitioned Objects

Version 7 from 2018-08-09
Component: BW-WHM-DBA-SPO - Semantically Partitioned Object

Description

Semantically Partitioned Objects (SPO) are not available in SAP BW/4HANA.

Other Terms

LPOA, LPOD

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are supported or can be converted to SAP BW/4HANA.

See node: Manual Redesign --> BW Object Type

Recommendations

Semantically Partitioned Objects can be converted automatically to DataStore objects (advanced) and Sematic Groups (since Q1/2018).

SPOs were designed for huge SAP BW InfoProviders (InfoCubes or DataStore objects) before SAP HANA was released. One of the main reasons for using SPOs was performance. With SPOs, it was possible to design a logical partition concept in an easy way. For these objects the result set was reduced and you got a better data access performance (due to pruning). This kind of performance oriented data modeling is not as important for SAP BW powered by SAP HANA and SAP BW/4HANA as in systems without SAP HANA. Nevertheless, it could still make sense to use semantically partitioned objects or sematic groups for other reasons like administration or operations.

Related Information

[Using Semantic Partitioning](#)

[Semantic Groups](#)

3.2.10 BW4SL - DataStore Objects (advanced)

SAP Note [2487023](#) - BW4SL - DataStore Object (advanced)

Version 3 from 2018-01-26
Component: BW-WHM-DBA-ADSO - DataStore Object (advanced)

Description

Data Transfer Processes created before SAP BW release 7.5 SP 4 are storing request IDs in as meta data for each data load into DataStore objects (advanced). However, request IDs are not available in SAP BW/4HANA.

Other Terms

ADSO, DDSO

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA.

See node: Supported by Transfer Tool --> BW4 Transfer Tool

Recommendations

DataStore objects (advanced) which include request IDs (old request management) in the meta data have to be processed once using the Scope Transfer Tool to clean-up the meta data. This is a fast process since transaction data is not touched.

Note: The clean-up is not necessary for DTPs created with SAP BW 7.5 SP 4 or higher. This is taken into consideration by the check program mentioned above.

3.2.11 BW4SL - CompositeProviders

SAP Note [2442062](#) - BW4SL - CompositeProvider and Analytical Index

Version 11 from 2019-05-10

Component: BW-WHM-DBA-COPR - CompositeProvider (local version)

Description

The central CompositeProvider created with transaction RSLIMO is not available in SAP BW/4HANA.

The analytical index (AINX), created in the APD (Analysis Process Designer) or directly in transaction RSDD_LTIP, is not available in SAP BW/4HANA.

Other Terms

COPR, DCOP, AINX

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available or can be converted to SAP BW/4HANA:

See node in the application log: Automated Cleanup --> Deletions --> TLOGO AINX (Analytical Index)

See node: Supported by Transfer Tool --> BW4 Transfer Tool --> TLOGO COPR (local CompositeProvider and central CompositeProvider).

Recommendations

In order to replace an existing analytic index (created with BW 7.5 or earlier releases), you can create a new field-based DataStore object (advanced) manually using the BW Modeling Tools.

In order to replace an existing central CompositeProvider (created with SAP BW 7.5 or earlier releases), you can create a new SAP HANA CompositeProvider (TLOGO HCPR) manually using the BW Modeling Tools.

Automatic conversion of the central CompositeProvider to a SAP HANA CompositeProvider is possible and is supported by the BW4 Transfer tool.

Related Information

For local CompositeProvider created within BW Workspaces (TLOGO COPR), see SAP Note [2444273](#) and the documentation:

[Creating CompositeProviders in BW Workspace Designer](#)

For APD, see SAP Note [2444220](#) and the documentation:

[Analysis Process Designer](#)

3.2.12 BW4SL - Analytical Indexes

SAP Note [2442062](#) - BW4SL - CompositeProvider and Analytical Index

See "BW4SL - CompositeProviders".

3.2.13 BW4SL - External SAP HANA Attribute and Analytic Views

SAP Note [2442775](#) - BW4SL - External SAP HANA Attribute and Analytic View

Version 1 from 2017-06-26

Component: BW-WHM-MTD-HMOD - HANA Model Generation in BW

Description

External SAP HANA views of type *Attribute* or *Analytic View* are not available in SAP BW/4HANA.

Other Terms

RS2HANA

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA.

Recommendations

Implement SAP Note [2236064](#) and follow the instructions in the solution section to change all external SAP HANA views to type *Calculation View*.

Related Information

SAP BW/4HANA documentation:

[Generating SAP HANA Views from the BW System](#)

3.2.14 BW4SL - InfoObject Catalogs

SAP Note [2442621](#) - BW4SL - InfoObject Catalogs and InfoObjects

See "BW4SL - InfoObjects".

3.3 SAP BW - Data Staging

3.3.1 BW4SL - Data Transfer Processes

SAP Note [2464541](#) - BW4SL - Data Transfer Processes

Version 9 from 2018-11-07

Component: BW-WHM-DST-DTP - Data Transfer Process

Description

Please note the following limitations on Data Transfer Processes (DTP) in SAP BW/4HANA:

1. The persistent staging area service (PSA) is no longer available in SAP BW/4HANA. As of that, the following limitations apply:
 - a. Data Transfer Processes that use error handling are not available (no error stacks, no error stack maintenance and no error DTPs)
 - b. No distribution of data extracted from source systems to the PSA and from there to several target objects (extract once – deploy many)
 - c. Potential for out of memory situations when using the DTP feature "Semantic Groups" (semantically grouped extraction of data) in combination with ODP DataSources as source objects (the same limitation applies in SAP BW when using the DTP data extraction setting "Directly from source system. PSA not used")
 - d. "SAP HANA Execution" is not possible for DTPs and Transformations that use ODP DataSources as source objects (the same limitation applies in SAP BW when using the DTP data extraction setting "Directly from source system. PSA not used")
2. DTPs of type "Real-time Data Acquisition" or "Direct Access" are not available in SAP BW/4HANA.
3. DTPs using error handling and SAP HANA runtime for transformations are not available in SAP BW/4HANA 1.0

Other Terms

DTPA, DTPD

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available or can be converted to SAP BW/4HANA.

See node: Manual Housekeeping --> Clean-up Error Stacks

See node: Manual Redesign --> BW Object Type

Recommendations

For 1 a): Since SAP BW/4HANA Support Package 04 the new technology "Data Transfer Intermediate Storage (DTIS)" is provided, which covers the DTP error stack functionality (excluding the maintenance of the error stack – see the SAP Knowledge Base Article [2494151](#) – "Display and Edit records of Error DTP is not available (BW/4HANA)").

As no transfer of open error requests into the new DTIS technology is possible, the current error stack tables must be cleared prior to the system conversion, either by deleting the corresponding requests or by processing them with an error DTP.

In addition, the system checks for error DTPs, which have no standard DTP or a standard DTP, which has error handling switched off. These are marked to be deleted in the transfer tool and removed automatically.

For 1 b): Currently, an Advanced DataStore Object (ADSO) must be used as replacement for the Persistent Staging Area (PSA) to allow for "extract once – deploy many" scenarios. The SAP BW/4HANA conversion tools do support this conversion step (See SAP Note [2464367](#) – "BW4SL - InfoPackages and Persistent Staging Areas").

For 1 c): With SAP Note [2497506](#) – "DTP load from ODP source with semantic grouping" packaging of data is introduced for DTPs based on ODP DataSources that use "Semantic Groups". This correction will eliminate out of memory situations on source system level. Memory shortages may however still occur in the SAP BW/4HANA target system.

Alternatively, an Advanced DataStore Object (ADSO) can be used as source object for DTPs that use “Semantic Groups” and would hence replace the Persistent Staging Area (PSA). The SAP BW/4HANA conversion tools do support this conversion step (See SAP Note [2464367](#) – “BW4SL - InfoPackages and Persistent Staging Areas”).

For 1 d): Currently, an Advanced DataStore Object (ADSO) must be used as replacement for the Persistent Staging Area (PSA) to allow for “SAP HANA Execution” on top of data from ODP DataSources. The SAP BW/4HANA conversion tools do support this conversion step (See SAP Note [2464367](#) – “BW4SL - InfoPackages and Persistent Staging Areas”).

For 2): DTPs for "Real-time Data Acquisition" and "Direct Access" need to be redesigned. It's recommended to use streaming process chains and Open ODS Views instead. See also See SAP Note [2447916](#) – “BW4SL - Real-time Data Acquisition (RDA)” for further details.

For 3): It's not possible to convert such DTPs automatically for SAP BW/4HANA 1.0. We plan to support DTPs using error handling and SAP HANA runtime for transformations in SAP BW/4HANA 2.0. For details, see SAP Note [2580109](#).

Related Information

SAP Note [2464367](#) - BW4SL - InfoPackages and Persistent Staging Areas

SAP Note [2447916](#) - BW4SL - Real-time Data Acquisition (RDA)

SAP Knowledge Base Article [2494151](#) – Display and Edit records of Error DTP is not available (BW/4HANA)

SAP Help Documentation: [Process Chains for Streaming](#)

References

SAP Note	Title
2447916	BW4SL - Real-Time Data Acquisition (RDA)
2464367	BW4SL - InfoPackages and Persistent Staging Areas
2497506	DTP load from ODP source with semantic grouping
2580109	Error handling in BW transformations and data transfer processes in SAP HANA runtime

3.3.2 BW4SL - InfoPackages and Persistent Staging Areas

SAP Note [2464367](#) - BW4SL - InfoPackages and Persistent Staging Areas

Version 10 from 2018-05-25

Component: BW-WHM-DST-PSA - Persistent Staging Area

Description

The persistent staging area service (PSA) and InfoPackages are not available in SAP BW/4HANA. Therefore, it is no longer possible to load data via InfoPackage.

Other Terms

ISIP, SHIP

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available or can be converted to SAP BW/4HANA.

See node: Manual Housekeeping --> Delete PSA

See node: Supported by Transfer Tool --> 3.x Migration

See node: Manual Redesign --> BW Object Type

Recommendations

In SAP BW/4HANA, a data transfer process (DTP) is the only object type to load data into the system. It can access all supported source system types directly without using a PSA. If the PSA has been used in SAP BW to distribute data to several target objects or for a sorted access to the data, or to have a SAP HANA transformation based on the data, then a write-optimized DataStore object (advanced) must be put in between the DataSource and the target DataStore object (advanced). Also, it is required to create an aDSO from the PSA if you have Full-InfoPackages with different filter conditions or file names to be extracted. The different InfoPackages will then be transferred to different Full-DTP's, and Delta can be extracted from the PSA-aDSO using a Delta-DTP. If no aDSO is created from the PSA, there must be only one Full-InfoPackage, which will then be merged into the Delta-DTP.

The Transfer Tool will allow you to either skip the InfoPackage and create the DTP directly on the DataSource, or transfer the PSA to an DataStore object (advanced) and replace the InfoPackage by a DTP.

The following InfoPackages cannot be handled by the Transfer Tool:

- InfoPackages for 3.x DataSources
Migrate the 3.x DataSources and InfoPackage to 7.x DataSources (using transaction RSMIGRATE)
- InfoPackages for Read-time Data Acquisition
See SAP Note [2447916](#) BW4SL - Real-Time Data Acquisition (RDA)
- Push InfoPackage for Web Service Source Systems
See SAP Note [2441826](#) BW4SL - Web Service Source Systems
- Multiple Delta InfoPackages for File Source Systems which read different files for same DataSource (or have different routines to determine the filename)

If a process variant for the deletion of old requests from PSAs is used, please note that there are restrictions on the corresponding process variant for the deletion of old requests from DataStore objects (advanced). See SAP Note [2448086](#) for details.

Related Information

See SAP Note [2464541](#) - BW4SL - Data Transfer Process / Error Stack

See the documentation for more information:

[InfoPackage --> Data Transfer Process](#)

[Persistent Staging Area \(PSA\)](#)

[InfoPackage](#)

[Data Transfer Process](#) in SAP BW/4HANA

[Working with Source Systems](#) in SAP BW/4HANA

References

SAP Note	Title
2441826	BW4SL - Web Service Source Systems
2447916	BW4SL - Real-Time Data Acquisition (RDA)
2464541	BW4SL - Data Transfer Processes

3.3.3 BW4SL - InfoPackage Groups

SAP Note [2487598](#) - BW4SL - InfoPackage Groups

Version 1 from 2017-07-04
Component: BW-WHM-DST - Data Staging

Description

InfoPackage Groups are not available in SAP BW/4HANA.

Other Terms

ISIG, DISG

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA.

See node: Supported by Transfer Tool --> 3.x Migration

Recommendations

InfoPackage Groups have to be replaced by Process Chains manually.

Related Information

[InfoPackage Group --> Process Chain](#)

References

SAP Note	Title
2470352	BW4SL - Data Flows (3.x)

3.3.4 BW4SL - Update Rules

SAP Note [2470352](#) - BW4SL - Data Flows (3.x)

Version 8 from 2018-10-25
Component: BW-WHM-DST-UPD - Update Rules

Description

The following object types related to 3.x data flows are not available in SAP BW/4HANA:

Objects to be replaced:

- Update Rules
- 3.x InfoSources
- Transfer Rules
- 3.x DataSources
- Transfer and Communication Structures

Objects to be adapted:

- InfoPackages
- Process Chains
- Process Chain Variants
- VirtualProviders based on 3.x InfoSource (Cube Type=V, Cube Sub-type=S)

The 3.x data flow migration tool (transaction RSMIGRATE) is therefore also not available in SAP BW/4HANA.

Other Terms

UPDR, DUPD, ISCS, DSCS, ISTD, DSTD, ISTS, SHTR, ISMP, SHMP, ISFS, SHFS, ISIP, SHIP, RSPC, DSPC, RSPV, RSPV, CUBE, DCUB

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available or can be converted to SAP BW/4HANA.

See node: Supported by Transfer Tool --> 3.x Migration

Recommendations

In order to migrate the data flows to objects types compatible with SAP BW/4HANA, transaction RSMIGRATE can be called in order to create migration projects.

However, in releases lower than SAP BW 7.3 the migration has to be performed manually. Also hierarchy DataSources and their associated transfer rules cannot be migrated automatically. See documentation links below.

This migration from 3.x to 7.x data flows has to be performed **before** the SAP BW/4HANA Transfer Toolbox can be used to convert data flows and model to objects compatible with SAP BW/4HANA.

Related Information

See the documentation for details:

	Migrating a Data Flow	Changes to the Data Flow
BW 7.00	Documentation	Documentation
BW 7.01	Documentation	Documentation
BW 7.02	Documentation	Documentation

BW 7.30	Documentation	Documentation
BW 7.31	Documentation	Documentation
BW 7.40	Documentation	Documentation
BW 7.50	Documentation	Documentation

See also [Data Flow Migration - Best Practice](#)

References

SAP Note	Title
1052648	Migration of transfer rules and update rules for BW7.x
1610259	Control of return code behavior in update rules

3.3.5 BW4SL - Transfer Rules

SAP Note [2470352](#) - BW4SL - Data Flows (3.x)

See "BW4SL - Update Rules".

3.3.6 BW4SL - Transfer Structures

SAP Note [2470352](#) - BW4SL - Data Flows (3.x)

See "BW4SL - Update Rules".

3.3.7 BW4SL - DataSources (3.x)

SAP Note [2470352](#) - BW4SL - Data Flows (3.x)

See "BW4SL - Update Rules".

3.3.8 BW4SL - Generic and Export DataSources

SAP Note [2470315](#) - BW4SL - Generic and Export DataSources

Version 5 from 2017-07-05

Component: BW-WHM-DBA-DMA - Data Marts

Other Components: BW-WHM-DST-DS - DataSource

Description

The Service API for DataSources (S-API) is not available in SAP BW/4HANA. Therefore, the following types of DataSources are not available:

- Generic DataSources (maintained in transaction RSO2)
- Export DataSources (8*, generated from transaction RSA1)
- Technical Content DataSources (OTCT*, activated via transaction RSA1)

Other Terms

OSOA, OSOD

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available or can be converted to SAP BW/4HANA.

See node: Manual Redesign --> Check Service API target systems

See node: Automated Cleanup --> Deletion of SAP Delivered Technical Content

Recommendations

To support generic extraction from tables or views, we recommend creating corresponding ABAP CDS views and using source system type ODP with ABAP-CDS context in the target system.

All relevant objects are exposed via the ODP context BW. If you want to load data from a SAP BW/4HANA system into another SAP BW/4HANA or SAP BW system (or load within the same system to another InfoProvider), you need to choose source system type ODP with BW context in the target system.

DataSources from technical content are replaced over time with ABAP CDS views (namespace RV*). These CDS views can be used for real-time monitoring or extraction of system statistics.

Related Information

[Export DataSource --> Data Transfer Process](#)

[Transferring Data from SAP Systems via ODP \(ABAP CDS Views\)](#)

[Transferring Data from SAP BW or SAP BW/4HANA Systems Using ODP \(InfoProviders, Export DataSources\)](#)

[Statistical Analyses of the Data Warehouse Infrastructure](#)

3.3.9 BW4SL - InfoSources (3.x)

SAP Note [2470352](#) - BW4SL - Data Flows (3.x)

See "BW4SL - Update Rules".

3.3.10 BW4SL - Hierarchy DataSources

SAP Note [2480284](#) - BW4SL - Hierarchy DataSources

Version 6 from 2019-04-10

Component: BW-WHM-DST-DS - DataSource

Other Components: BC-BW-ODP - Operational Data Provisioning (ODP) and Delta Queue (ODQ)

Description

Loading hierarchy DataSources via Operational Data Provisioning (ODP) is not available in a SAP NetWeaver 7.0x to 7.3x Source System. This affects the following ODP Provider Contexts:

ODP-BW (Hierarchies from InfoObjects in SAP BW Source Systems) in SAP BW as Source System for releases in between SAP BW 7.0x and SAP BW 7.3x

ODP-SAPI (Hierarchy DataSources / Extractors in any SAP Source System) in an SAP Source System (ERP, CRM, SCM, etc.) that only uses the ODP Data Replication API 1.0 or the ODP Replication API 2.0 in conjunction with PI_BASIS 7.30:

- Information on the availability of the ODP Replication API 1.0: See SAP Note [1521883](#)
- Information on the availability of the ODP Replication API 2.0: See SAP Note [1931427](#)

Other Terms

RSDS

Prerequisites and Checks

There is currently no automated analysis available.

Recommendations

For ODP-BW (Hierarchies from InfoObjects in SAP BW as Source System)

- SAP BW starting from 7.0x but lower than 7.3x:
 - Please implement SAP Note [2418250 - Extraction of hierarchies via ODP in NetWeaver < 7.30 on your SAP BW source system and your target SAP BW and SAP BW/4HANA system](#) in order to extract InfoObject hierarchies via ODP.
- SAP BW 7.3x:
 - Please implement SAP Note [2469120 - ODP & Hierarchies in PI_BASIS 7.30 / BW 7.3x](#) on your SAP BW source system in order to extract InfoObject hierarchies via ODP.

For ODP-SAPI (Hierarchy DataSources / Extractors in any SAP Source System)

- SAP Source Systems (ERP, CRM, SCM, etc.) that only use the ODP Data Replication API 1.0:
 - Please implement SAP Note [2418250 - Extraction of hierarchies via ODP in NetWeaver < 7.30 on your source system and your target SAP BW and SAP BW/4HANA system](#) in order to extract Hierarchy DataSources / Extractors via ODP.
 - Please also note the mandatory manual pre-step required for SAP Note [2418250](#) in a PI_BASIS 7.0-7.11 source system: SAP Note [2768527 - ODP API 1.5 Hierarchie Support UDO](#) (referenced in SAP Note [2418250](#)).
- SAP Source Systems (ERP, CRM, SCM, etc.) with ODP Replication API 2.0 and PI_BASIS 7.30:
 - Please implement SAP Note [2469120 - ODP & Hierarchies in PI_BASIS 7.30 / BW 7.3x](#) on your source system in order to extract Hierarchy DataSources / Extractors via ODP.

As long as the above limitations apply (= the mentioned SAP Notes are not implemented on your SAP Source System or your SAP BW Source System), you can (instead of ODP) use the SAP BW Source System type for loading InfoObject hierarchies or the SAP Source System type for loading Hierarchy DataSources. This applies only for SAP BW target systems on a release 7.3x, 7.4x or 7.5x. In SAP BW/4HANA there is no alternative as ODP is the only source system type for extracting data from SAP Source Systems and SAP BW Source Systems.

As a alternative workaround, the following is possible:

- Load your hierarchy from your SAP Source System to a Hierarchy InfoObject in a SAP BW >= 740 SP5 using the SAP Source System (instead ODP). From this Hierarchy InfoObject, you can load your hierarchy to SAP BW/4HANA using the ODP-BW Source System in SAP BW/4HANA.
- Load your hierarchy to the Embedded BW of you SAP Source System. From there, use an Open Hub Destination to save the hierarchy to a file or DB table and load it from there to SAP BW/4HANA.

Please finally note the following for SAP BW/4HANA remote conversion scenarios from SAP BW >= 7.00 but < SAP BW 7.30: Business Content Hierarchy DataSources that only support the transfer method 'IDoc' (ROOSOURCE-TFMETHODS = '1') can only use the "old" SAP BW 3.x data flow (transfer rules and update rules) in SAP BW target releases >= 7.00 but < 7.30. The "new" data flow (transformations) for such hierarchies is only available with SAP BW >= 7.30. Hence, the respective data flows on SAP BW side need to be removed before conversion to SAP BW/4HANA. After conversion to SAP BW/4HANA, the respective Hierarchy DataSource can get connected again to their target InfoObjects in SAP BW/4HANA using a transformation and the ODP-SAPI Source System (in case the restriction under "Symptom" does not apply).

For general information about availability and functionality of ODP based extractions from SAP Systems to SAP BW or SAP BW/4HANA see SAP Note [2481315](#).

General information on ODP is available in the [Operational Data Provisioning FAQ](#).

References

SAP Note	Title
1521883	ODP Data Replication API 1.0
1931427	ODP Data Replication API 2.0
2469120	ODP & Hierarchies in PI_BASIS 7.30 / BW 7.3x

3.3.11 BW4SL - Transformations

SAP Note [2479567](#) - BW4SL - Transformations

Version 6 from 2017-08-31
Component: BW-WHM-DST-TRF - Transformation

Description

Transformations with rule type "Read from DataStore (classic)" are not available in SAP BW/4HANA.

Transformation containing a rule "Read from DataStore" cannot be activated after a conversion, because not all keys of the DataStore are specified.

Transformations that contain non-conform ABAP Objects (OO) Coding in SAP BW/4HANA, have restricted usage. These Transformations cannot be displayed with the BW Modeling Tools and new features are not available.

Other Terms

TRFN, DTRF, ODSO, DODS

Prerequisites and Checks

There is currently no automated analysis available, if the such transformation rules are used or not.

A SAP BW system was migrated to a SAP BW/4HANA system and transformations contain non-compatible ABAP OO coding or read data from a (classic) DataStore.

Recommendations

When converting classic DataStore objects to advanced DataStore objects, the Transfer Tool will automatically convert the transformation rules to rule type "Read from DataStore (advanced)".

A transformation with a rule "Read from DataStore" can only be activated, if all keys of the DataStore are specified in the rule. If not, the rule has to be changed manually.

Transformations that contain ABAP coding, that is not ABAP OO compatible (e.g. obsolete statements are used like header tables, includes, etc.), cannot be created in a SAP BW/4HANA system and existing transformations can only be opened in SAP GUI and in the BW Modeling Tools. Such transformations can be used and changed in a SAP BW/4HANA system, but it is highly recommended to change the coding to make them ABAP OO compatible. Further enhancements and new features can only be modeled in the BW Modeling Tools and are therefore not available for such transformations.

Related Information

You can use the SAP BW Transformation Finder to scan your system for specific transformation rules (see SAP Note [1908367](#)).

3.3.12 BW4SL - Communication Structures

SAP Note [2470352](#) - BW4SL - Data Flows (3.x)

See "BW4SL - Update Rules".

3.3.13 BW4SL - InfoSources

SAP Note [2755139](#) - BW4SL - InfoSources

Version 1 from 2019-02-19
Component: BW-WHM-DST - Data Staging

Description

In the SAP BW Data Warehousing Workbench, InfoSource (7.x) are organized and authorized by Application Component. In SAP BW/4HANA (and SAP BW Modeling Tools), InfoSources are organized and authorized by InfoArea.

Other Terms

TRCS, DTRC

Prerequisites and Checks

There is currently no automated analysis available, if the InfoSources are assigned to an InfoArea or not. In SAP BW 7.5, you can check field INFOAREA of table RSKSNEW manually.

Recommendations

When converting the system to SAP BW/4HANA, existing InfoSources are by default located in InfoArea "Unassigned Nodes (NODESNOTASSIGNED)". If you want to retain security for InfoSources on a grouped level, then you will have to assign InfoSources to InfoAreas.

For SAP BW 7.5, we recommend to maintain the assignment using the SAP BW Modeling Tools before the technical conversion of the system to SAP BW/4HANA (either the new authorization S_RS_TRCS or the old authorization S_RS_ISNEW are sufficient). There will be no post conversion adjustments of InfoSources and related authorizations necessary (only S_RS_TRCS will be checked).

For SAP BW 7.0 to 7.4 (shell conversion) and 7.3 to 7.4 (remote conversion), the assignment must be performed in the target SAP BW/4HANA system.

Tip: In the SAP BW Modeling Tools, you can select several InfoSources and assign them together to a new InfoArea.

Related Information

SAP Note [2468657](#) - BW4SL - Standard Authorizations

References

SAP Note	Title
2468657	BW4SL - Standard Authorizations

3.3.14 BW4SL - Process Chains and Process Variants

SAP Note [2448086](#) - BW4SL - Process Chains and Process Variants

Version 13 from 2019-05-09

Component: BW-WHM-DST-PC - Process Chains

Description

With SAP BW/4HANA, a number of process types is no longer available or have to be adjusted. The process chains as such are still fully supported, but if a process must be deleted, then the corresponding process chain has to be adjusted accordingly, i.e. the process has to be removed from the chain, and the gap between the preceding and subsequent processes must be closed. In some cases, a process type must be replaced by the corresponding new process type. Here, the process chain also has to be adjusted accordingly.

Other Terms

RSPC, DSPC, RSPV, DSPV

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA.

Recommendations

For the vast majority of process types, this functionality is part of either the SAP BW/4HANA Transfer Tool, or the task list which switches the mode to "Ready for Conversion" state (for in-place conversion). The following table lists all the affected process types, grouped by the tool which must be used to do the adjustment.

3.x Objects

Process Type	Description	Action	Details
HIERSAVE	Save Hierarchy (3.X)	Replacement	3.x process types can be migrated with transaction RSMIGRATE
LPI	Logically Partitioned InfoPackages	Replacement	3.x process types can be migrated with transaction RSMIGRATE
ODSPROCESS	Update DataStore Object Data (Further Update)	Replacement	3.x process types can be migrated with transaction RSMIGRATE

PSAPROCESS	Read PSA and Update Data Target	Replacement	3.x process types can be migrated with transaction RSMIGRATE
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BPC Process Types

Process Type	Description	Action	Details
BPCADMCDM	BPC: Create Dimension	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCADMOTC	BPC: Optimize Application	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCADMVLG	BPC: Validate Logic	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCADTARC	BPC: Archive Audit	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCAPPS	BPC: Application Source	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCBADIRT	BPC: BAdI Retractor	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCCLCUBE	BPC: Delete Application	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCCLEAR	BPC: Delete BPC Tables	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCCMCOVT	BPC: Convert for CM	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCCOMS	BPC: Delete Comments	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCCONVERT	BPC: Convert	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCECHAIN	BPC: Execution of Chain	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCEMAIL	BPC: E-Mail	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCEPURPT	BPC: Generate Equity Pick-up Audit Report	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCFILE	BPC: Data Connection	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCFINOPT	BPC: Complete Optimization	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA

BPCFTP	BPC: FTP	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCIFS	BPC: InfoProvider Source	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCIOBJS	BPC: InfoObject Source	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCJORNAL	BPC: Journal	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCLOAD	BPC: Load	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCMADLOAD	BPC: Master Data Description	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCMALOAD	BPC: Master Data	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCMDDEAL	BPC: Master Data Processing	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCMODIFY	BPC: Modify Dynamically	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCONLINE	BPC: Online Status	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCOWCALC	BPC: Ownership Calculation	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCPSAS	BPC: PSA Source	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCRUNLGC	BPC: Run Logic	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA
BPCTDHVER	BPC: Manage TDH Version	Install BPC or removal	Process type requires SAP BPC, version for SAP BW/4HANA

Supported by Scope Transfer Tool

Process Type	Description	Action	Details
ADSODEL	Deletion of Requests from DataStore Objects (advanced)	Replacement	Replace by process type ADSOREM
AGGRFILL	Initial Fill of New Aggregates	Removal	Converted InfoCubes will be removed from the process variant. When all InfoCubes are removed, the process will be deleted and removed from the process chain.

			Replace by process type ADSOREM.
CHGLOGDEL	Deletion of Requests from Change Log of DSO (classic)	Replacement	Note that the age of the requests to be deleted can only be given relatively (older than x days) but not absolutely (created before mm-dd-yyyy) in process type ADSOREM. The transfer of a variant with absolute date is therefore not possible. Replace by process type ADSOREM.
COMPRESS	Compression of the InfoCube	Replacement	Note that the age of the requests to be activated (i.e. compressed) can only be given relatively (older than x days) but not absolutely (created before mm-dd-yyyy) in process type ADSOREM. The transfer of a variant with absolute date is therefore not possible.
DROPCUBE	Complete Deletion of Data Target Contents	Adjustment	Furthermore, compression with "zero elimination" is currently not available. References to InfoCubes will be replaced by DataStore objects (advanced)
DROPINDEX	Delete Index	Removal	Converted InfoCubes will be removed from the process variant. When all InfoCubes are removed, the process will be deleted and removed from the process chain.
INDEX	Generate Index	Removal	Converted InfoCubes will be removed from the process variant. When all InfoCubes are removed, the process will be deleted and removed from the process chain.
LOADING	Execute InfoPackage	Replacement	Replace by process type DTP_LOAD
ODSACTIVAT	Activate Requests in DataStore Objects (classic)	Replacement	Replace by process type ADSOACT. Newly loaded requests can be activated together or one by one. To activate a certain number of requests or requests older than x days, use process type ADSOREM.
PLSWITCHL	Switch Real-time InfoCube / aDSO to Load Mode	Adjustment	References to InfoCubes will be replaced by DataStore objects (advanced)
PLSWITCHP	Switch Real-time InfoCube / aDSO to Plan Mode	Adjustment	References to InfoCubes will be replaced by DataStore objects (advanced)
PSADELETE	Deletion of PSA data	Removal / Replacement	If the referenced object is transferred into a DataStore object (advanced), the process will be replaced by an ADSOREM process. Otherwise, the process will be removed from the chain.
			Note that the age of the requests to be deleted can only be given relatively (older than x days) but not absolutely (created

before mm-dd-yyyy) in process type ADSOREM. The transfer of a variant with absolute date is therefore not possible.

Deletion of red requests is not possible with process type ADSOREM; therefore, the option for deletion of only successfully loaded requests must be set whereas the option for deletion of only red requests must not be set; otherwise, the variant cannot be transferred. --- If you have the latest version of the revision 9 notes (2748962 and [2751585](#)), then you do not need to change switches for deletion of only successfully loaded requests or deletion of only red requests, but the transfer will nevertheless behave as if these settings were as demanded (option for deletion of successfully loaded requests set, option for deletion of red requests not set).
Replace by process type ADSOOLR.

Note that several options for the selection of the requests to be deleted are no longer available in process type ADSOOLR. In case such options are used, an automatic transfer is not possible. For details, see SAP Note [2723776](#). Although customer routines can still be used in ADSOOLR, they cannot be transferred automatically, because the interface of the routine is different.

Converted InfoCubes will be removed from the process variant. When all InfoCubes are removed, the process will be deleted and removed from the process chain.

Replace by process type ADSOREM.

Note that the age of the requests to be deleted can only be given relatively (older than x days) but not absolutely (created before mm-dd-yyyy) in process type ADSOREM. The transfer of a variant with absolute date is therefore not possible.

REQUDEL	Delete Overlapping Requests from InfoCube	Replacement
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ROLLUP	Roll Up of Filled Aggregates/BWA Indexes	Removal
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WODSODEL	Deletion of Requests from Write-Optimized DSO (classic)	Replacement
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Deleted in Ready for Conversion Task List

Process Type	Description	Action	Details
ANPR	Execute Analysis Process	Removal	Process type is obsolete and will be automatically deleted and removed from the process chains

ATTRIBCHAN	Attribute Change Run	Removal	Process type is obsolete and will be automatically deleted and removed from the process chains
BIA_TPS	Update Explorer Properties of BW Objects	Removal	Process type is obsolete and will be automatically deleted and removed from the process chains
BIAINDEX	Initial Activation and Filling of SAP HANA/BWA Indexes	Removal	Process type is obsolete and will be automatically deleted and removed from the process chains
DATACHANGE	Trigger Event Data Change (for Broadcaster)	Removal	Process type is obsolete and will be automatically deleted and removed from the process chains
DBSTAT	Construct Database Statistics	Removal	Process type is obsolete and will be automatically deleted and removed from the process chains
MDREORG	Reorganize Attributes and Texts for Master Data	Removal	Process type is obsolete and will be automatically deleted and removed from the process chains
MULTIHIER	Load All Hierarchies	Removal	Process type is obsolete and will be automatically deleted and removed from the process chains
OPENHUB	Data Export into External Systems (Obsolete)	Removal	Process type is obsolete and will be automatically deleted and removed from the process chains
RDA_CLOSE	Close Request for an InfoPackage (RDA/Push)	Removal	Process type is obsolete and will be automatically deleted and removed from the process chains
RDA_RESET	Stop Real-Time Data Acquisition (RDA) Load Process	Removal	Process type is obsolete and will be automatically deleted and removed from the process chains
RDA_START	Start Load Process for Real-Time Data Acquisition (RDA)	Removal	Process type is obsolete and will be automatically deleted and removed from the process chains
REPA_BB	Precalculation of Value Sets	Removal	Process type is obsolete and will be automatically deleted and removed from the process chains
REPA_BC	Precalculation of Web Templates	Removal	Process type is obsolete and will be automatically deleted and removed from the process chains
REPA_BP	Print in the Background	Removal	Process type is obsolete and will be automatically deleted and removed from the process chains

REPA_ER	Exception Reporting	Removal	Process type is obsolete and will be automatically deleted and removed from the process chains
RSDASYB_PM	Sybase IQ Partition Monitor	Removal	Process type is obsolete and will be automatically deleted and removed from the process chains
TIMCHNGRUN	Adjustment of Time-Dependent Aggregates	Removal	Process type is obsolete and will be automatically deleted and removed from the process chains

Display Component Hierarchy for Process Chains

In SAP BW/4HANA 1.0, process chains are still organized using a display component hierarchy. With SAP BW/4HANA 2.0, the display components used to organized process chains will be migrated to corresponding InfoAreas. For in-place conversion, the migration will be done automatically during the technical upgrade to SAP BW/4HANA (post conversion XPRA). For shell or remote conversion, we recommend to transport the display component hierarchy to the target SAP BW/4HANA 2.0 system first, before you transfer any process chains. Without transport, process chains will be temporarily transferred to InfoArea NODESNOTCONNECTED. Once the component is there, the process chains get re-assigned to the correct InfoArea. To transport the display component hierarchy, add the program id **R3TR**, object **RSDC**, and object name **RSPC** to your transport request.

Related Information

[Process Types SAP BW 7.5](#)

[Process Types SAP BW/4HANA](#)

[Cleaning Up Requests Using Process Chains](#)

3.3.15 BW4SL - Myself Source System

SAP Note [2479674](#) - BW4SL - Myself Source System

Version 3 from 2019-01-11
Component: BW-WHM-DST-SRC - Source Systems

Description

The "Myself" Source System is not available in SAP BW/4HANA.

Other Terms

LSYS, RSDS

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA.

See node: Automated Cleanup --> Deletions

Recommendations

The Myself Source System needs to be replaced by an ODP Source System with BW context. This will allow transferring data between InfoProviders within the SAP BW/4HANA system.

Any Myself Source Systems left, when executing the switch to "Ready for conversion mode", will be automatically deleted.

Related Information

See also the following SAP Notes:

[2473145](#) - BW4SL - SAP Source Systems

[2483299](#) - BW4SL - Export DataSources (SAP BW/4HANA as Source)

[2443863](#) - BW4SL - S-API DataSources (SAP BW/4HANA as Source)

[Creating an ODP Source System](#)

References

SAP Note	Title
2470315	BW4SL - Generic and Export DataSources
2473145	BW4SL - SAP and BW Source Systems
2480284	BW4SL - Hierarchy DataSources
2481315	Operational Data Provisioning (ODP): Extracting from SAP Systems to SAP BW or SAP BW/4HANA – Availability and Limitations

3.3.16 BW4SL - SAP Source Systems

SAP Note [2473145](#) - BW4SL - SAP and BW Source Systems

Version 11 from 2017-08-23
Component: BW-WHM-DST-SRC - Source Systems

Description

The SAP and BW Source Systems based on Service API (S-API) are not available in SAP BW/4HANA.

Other Terms

LSYS, RSDS

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA.

See node: Manual Redesign --> Replace by HANA or ODP Source System

Recommendations

SAP BW/4HANA does not connect to other SAP systems using the SAP Source System. If you want to transfer data from Extractors / DataSources (Service API) of an SAP system to SAP BW/4HANA, then you can configure a ODP Source System with the "SAP (Extractors) Context". Note: Check for ODP compatibility of DataSources in

SAP Note [2232584](#) - Release of SAP extractors for operational data provisioning (ODP). Alternatively, you can transfer data from SAP source systems using other ODP contexts, like "BW" (also applies to SAP BW/4HANA source systems), "SLT Queue" (for real-time replication), or "ABAP CDS Views" (for SAP S/4HANA source systems).

For further information please also refer to SAP Note [2481315](#) - Operational Data Provisioning (ODP): Extracting from SAP Systems to SAP BW or SAP BW/4HANA – Availability and Limitations and the [Operational Data Provisioning \(ODP\) FAQ](#).

The BW/4HANA Transfer Tool will automatically copy your DataSources which load from as SAPI or BW source system to a corresponding ODP source system of context SAPI or BW, respectively. It will also seamlessly clone the delta queues, so that no delta data is lost or loaded double, and no downtime in the source systems is required. This however requires the implementation of a few notes in the corresponding source system, as given by the BW/4HANA Transfer Tool Note Analyzer.

If you cannot install these notes in your source system for organizational reasons, then you will have to stop any operations in the source system which push data into the Delta Queue (Push extractors), and perform an Init Simulation in the BW after the DataSource has been copied.

If you cannot install the notes in your source system due to technical reasons (system is too old), then you will have to upgrade your source system or search for an individual solution.

Any SAP Source Systems left, when executing the switch to "Ready for conversion mode", will be automatically deleted.

Related Information

[Creating an ODP Source System](#)

[SAP Note 2464541](#) - BW4SL - Data Transfer Processes

References

SAP Note	Title
2443863	BW4SL - S-API DataSources (SAP BW/4HANA as Source)
2470315	BW4SL - Generic and Export DataSources
2479674	BW4SL - Myself Source System
2480284	BW4SL - Hierarchy DataSources
2481315	Operational Data Provisioning (ODP): Extracting from SAP Systems to SAP BW or SAP BW/4HANA – Availability and Limitations
2483299	BW4SL - Export DataSources (SAP BW/4HANA as Source)

3.3.17 BW4SL - DB Connect Source Systems

SAP Note [2447932](#) - BW4SL - DB Connect Source Systems

Version 9 from 2017-06-30

Component: BW-WHM-DST-SRC - Source Systems

Other Components: BW-WHM-DST-DBC - DB Connect

Description

Source systems of type "DB Connect" are not available in SAP BW/4HANA.

Other Terms

LSYS, RSDS

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA.

Recommendations

As of SAP BW 7.5 SP 5, source systems of type *DB Connect* and connection types *One logical system per DB Schema* or *HANA Smart Data Access* can be replaced with source systems of type *SAP HANA* and connection types *Local SAP HANA Database Schema* or *SAP HANA Smart Data Access*. To replace this kind of source system (which refers to the DEFAULT database connection) run program RSDS_HANA_MIGRATE_DBCONNECT.

The above-mentioned program can't migrate DB Connect source systems of connection type *Source System = DB Connection*. Source systems which refer to another ABAP database connection (DBCON) have to be replaced manually with a SAP HANA source system of type *SAP HANA Smart Data Access*, using the corresponding SAP HANA Smart Data Integration Data Provisioning Adapter or SAP HANA Smart Data Access Adapter for the given database.

For an overview on available SAP HANA Smart Data Integration Data Provisioning Adapters see:

SAP HANA 1.0:

- [Data Provisioning Adapters](#)

SAP HANA 2.0:

- [Data Provisioning Adapters](#)

For an overview on available SAP HANA Smart Data Access Adapters see:

SAP HANA 1.0

- [SAP HANA Smart Data Access](#)

SAP HANA 2.0

- [SAP HANA Smart Data Access](#)

Any DB Connect Source Systems left, when executing the switch to "Ready for conversion mode", will be automatically deleted.

Related Information

Refer to [Migrating a DB Connect Source System to a SAP HANA Source System](#) for more details on program RSDS_HANA_MIGRATE_DBCONNECT.

For more information on the SAP HANA Source System see [Transferring Data with an SAP HANA Source System](#) (SAP BW 7.50) or [Creating an SAP HANA Source System](#) (SAP BW/4HANA 1.0).

3.3.18 BW4SL - UD Connect Source Systems

SAP Note [2441884](#) - BW4SL - UD Connect Source Systems

Version 6 from 2019-08-02

Component: BW-WHM-DST-SRC - Source Systems

Other Components: BW-BEX-UDI-UDC - BI UD Connect

Description

Source systems of type "UD Connect" are not available in SAP BW/4HANA.

Other Terms

LSYS, RSDS

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are supported with or can be converted to SAP BW/4HANA.

See node: Automated Cleanup --> Deletions

Recommendations

For the primary UD Connect source system use case (connector type JDBC) as documented with SAP BW >= 7.30 (see p.eg. [Creating a UD Connect Source System in SAP BW 7.50](#)) these source systems have to be replaced manually with source systems of type "SAP HANA".

For other use cases previously documented for UD Connect in SAP BW < 7.30 (see p.eg. [Creating a UD Connect Source System in SAP BW 7.0](#)) such as BI ODBO Connector, BI SAP Query Connector, BI XMLA Connector or SDK_JAVA this approach doesn't apply (no replacement at this time).

Any UD Connect Source Systems left, when executing the switch to "Ready for conversion mode", will be automatically deleted.

Related Information

SAP Help Documentation on UD Connect: [Transferring Data via UD Connect](#)

For additional information on the SAP HANA Source System and available SAP HANA Smart Data Access Adapters or SAP HANA Smart Data Integration Data Provisioning Adapters see SAP Note [2447932](#) - BW4SL - DB Connect Source Systems.

For more information on the SAP HANA Source System see [Transferring Data with an SAP HANA Source System](#) (SAP BW 7.50) or [Creating an SAP HANA Source System](#) (SAP BW/4HANA 1.0).

3.3.19 BW4SL - SAP Data Services Source Systems

SAP Note [2441836](#) - BW4SL - SAP Data Services and External System Source Systems

Version 8 from 2019-05-13

Component: BW-WHM-DST-SRC - Source Systems

Description

Source systems of type "SAP Data Services" or "External System (Partner ETL)" are not available in SAP BW/4HANA.

Other Terms

LSYS, RSDS, BODS, Staging BAPI

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are supported with or can be converted to SAP BW/4HANA.

See node: Automated Cleanup --> Deletions

Recommendations

With SAP BW/4HANA 2.0, there is a new capability "Write Interface" for DataStore Objects allowing to push data into inbound queue tables of Staging DataStore Objects and Standard DataStore Objects. This capability replaces the push capability of PSA tables of DataSources used in SAP Data Services to send data to SAP BW.

SAP Data Services (On Premise) equal or higher version 4.2 SP12 can now use this new (RFC) interface for data integration to SAP BW/4HANA 2.0. Support for SAP Cloud Platform Integration for Data Services is planned for Q3 2019.

Please find more information in the documentation [DataStore Object with Write Interface](#), in the [What's new with SAP BW/4HANA 2.0](#) (page 24) and in the [SAP BW/4HANA Community](#). The "Write Interface" in SAP BW/4HANA 2.0 is **not** an open external interface (no certification scenario) and therefore can not be used by SAP Partners for ETL processing.

Please note that there is no automated conversion path from DataSources of SAP Data Services or External Source Systems in SAP BW to DataStore Objects with "Write Interface" in SAP BW/4HANA 2.0. For a manual conversion, we recommend the following approach:

- In SAP BW, create a Staging or Standard DataStore Object with an existing Data Source as template. Integrate this new DataStore Object as additional source object to the data flows on top of the respective DataSource. Replicate transformation logic if necessary.
- Before conversion, please make sure that all data from the PSA table of your DataSource is distributed to further objects along that data flow.
- In conversion, any "SAP Data Services" or "External System" Source Systems left, when executing the switch to "Ready for conversion mode", will be automatically deleted.
- After conversion to SAP BW/4HANA 2.0, please add the property "Write Interface enabled" to the new DataStore Object and activate it.
- After activation, the respective DataStore Object can be used in SAP DataServices as a data target.

As the "Write Interface" capability is not available in SAP BW/4HANA 1.0, we recommend instead to use SAP Data Services (or external systems) to write to a native SAP HANA database table and then use a SAP HANA Source System with connection type "Local SAP HANA Database Schema" to bring the data into SAP BW/4HANA.

Related Information

SAP Help Documentation on the SAP Data Services Source System: [Transferring Data with SAP Data Services](#)

SAP Help Documentation on the External (Partner) Source System: [Transferring Data Using Staging BAPIs](#)

For more information on the SAP HANA Source System see [Transferring Data with an SAP HANA Source System](#) (SAP BW 7.50) or [Creating an SAP HANA Source System](#) (SAP BW/4HANA 1.0).

3.3.20 BW4SL - Web Service Source Systems

SAP Note [2441826](#) - BW4SL - Web Service Source Systems

Version 10 from 2019-05-09

Component: BW-WHM-DST-SRC - Source Systems

Description

Source systems of type "Web Service" are not available in SAP BW/4HANA.

Other Terms

LSYS, RSDS, XML, SOAP, OData, CPI, SAP NetWeaver PI

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are supported with or can be converted to SAP BW/4HANA.

See node: Automated Cleanup --> Deletions

Recommendations

With SAP BW/4HANA 2.0, there is a new capability "Write Interface" for DataStore Objects allowing to push data into inbound queue tables of Staging DataStore Objects and Standard DataStore Objects. This capability replaces the push capability of PSA tables of DataSources of Web Service Source Systems.

SAP Cloud Platform Integration and SAP NetWeaver Process Integration equal or higher SAP NetWeaver 7.50 Process Integration SP15 (see SAP Note [2757524](#)) can use this new http (REST) interface for data integration to SAP BW/4HANA 2.0. Please find more information in the documentation [DataStore Object with Write Interface](#), in the [What's new with SAP BW/4HANA 2.0](#) (page 24) and in the [SAP BW/4HANA Community](#).

Please note that there is no automated conversion path from DataSources of Web Service Source Systems in SAP BW to DataStore Objects with "Write Interface" in SAP BW/4HANA 2.0. For a manual conversion, we recommend the following approach:

- In SAP BW, create a Staging or Standard DataStore Object with an existing Web Service Data Source as template. Integrate this new object as additional source object to the data flows on top of the respective Web Service DataSource. Replicate transformation logic if necessary.
- Before conversion, please make sure that all data from the PSA table of your Web Service DataSource is distributed to further objects along that data flow.
- In conversion, any Web Service Source Systems left, when executing the switch to "Ready for conversion mode", will be automatically deleted.
- After conversion to SAP BW/4HANA 2.0, please add the property "Write Interface enabled" to the new DataStore Object and activate it.
- After activation, the URIs to be used in SAP Cloud Platform Integration or SAP NetWeaver PI for sending data to SAP BW/4HANA are display in the properties section of the DataStore Object editor in the BW Modeling Tools under "Template URIs".

As the "Write Interface" capability is not available in SAP BW/4HANA 1.0 the following alternatives apply:

- the [SAP HANA Smart Data Integration \(SDI\) OData Adapter](#) and the SAP HANA Source System in SAP BW/4HANA to connect to OData APIs in case of a cloud application integration scenario. Please check, if the cloud application provides an OData API for data extraction of the business data you want to integrate to SAP BW/4HANA.

- the [SAP HANA Smart Data Integration \(SDI\) SOAP Adapter](#) to load data from SOAP based web services into native SAP HANA tables residing on a local HANA schema of your SAP BW/4HANA instance. As of technical restrictions, the SOAP Adapter can't get directly used within the SAP HANA Source System provided in SAP BW/4HANA and has to be consumed using HANA native data provisioning capabilities.

- SAP NetWeaver Process Integration or SAP Cloud Platform Integration to write data from a web service into native SAP HANA tables residing on a local HANA schema of your SAP BW/4HANA instance.

Related Information

[Data Transfer Using Web Services](#)

3.3.21 BW4SL - External Source Systems (Partner ETL)

SAP Note [2441836](#) - BW4SL - SAP Data Services and External System Source Systems

See "BW4SL - SAP Data Services Source Systems".

3.3.22 BW4SL - BW Source Systems

SAP Note [2473145](#) - BW4SL - SAP and BW Source Systems

See "BW4SL - SAP Source Systems".

3.3.23 BW4SL - Open Hub Destinations

SAP Note [2469516](#) - BW4SL - Open Hub Destinations

Version 4 from 2018-09-20

Component: BW-WHM-DBA-OHS - Open Hub Service

Description

The following Open Hub Destinations are not available in SAP BW/4HANA:

- 3.x destinations (InfoSpokes)
- Destination type "Third Party Tool"

The following Open Hub Destinations will require deletion of data in the target table:

- Destination type "Database table" with "Technical Key"

Other Terms

DEST, DDES

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA.

See node: Supported by Transfer Tool --> 3.x Migration

See node: Manual Redesign --> BW Object Type

See node: Manual Redesign --> Delete Data for Open Hub Destinations

Recommendations

3.x or "Third Party Tool" Open Hub Destinations must be deleted or replaced by features available in SAP BW/4HANA like SAP HANA smart data integration. Use a database table in SAP HANA as a target and then SAP HANA smart data integration or for example SAP Data Services to pick up the data from there.

"Database table" Open Hub Destinations with "Technical Key" store data by Request ID. However, SAP BW/4HANA uses a new Request Transaction Sequence Number for storing such data. Therefore, the existing data must be deleted from the target database table.

- If the target database table is located in the same database schema as SAP BW/4HANA (i.e. SAP<SID> schema), then the conversion will be performed automatically when switching from "Compatibility Mode" to "B4H Mode". Since this conversion can take some time especially for larger data volumes, it's recommended to truncate these target database tables before switching modes.
- If the target database table is located in another database schema, then the table must be truncated before switching modes (or the switch will fail with a corresponding error message).

3.3.24 BW4SL - InfoSpokes

SAP Note [2437637](#) - BW4SL - InfoSpokes

Version 3 from 2017-07-05

Component: BW-WHM-DBA-OHS - Open Hub Service

Description

The SAP BW InfoSpoke is not available in SAP BW/4HANA.

Other Terms

SPOK

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in with or can be converted to SAP BW/4HANA:

See node: Automated Cleanup --> Deletions --> TLOGO SPOK (InfoSpoke)

Recommendations

In order to replace existing InfoSpokes (created with SAP BW 7.3 or lower releases), you can create new Open Hub Destinations with Data Transfer Processes (DTPs).

For details about the existing InfoSpokes, use the program RSB_INFOSPOKE_DISPLAY. This information can be used to create equivalent Open Hub Destinations and a corresponding DTPs.

Any InfoSpokes left, when executing the switch to "B4H mode", will be automatically deleted.

Related Information

[InfoSpoke --> Open Hub Destination, Data Transfer Process](#)

3.3.25 BW4SL - Real-Time Data Acquisition (RDA)

SAP Note [2447916](#) - BW4SL - Real-Time Data Acquisition (RDA)

Version 4 from 2017-06-29

Component: BW-WHM-DST-RDA - Realtime Data Acquisition

Description

Real-Time Data Acquisition (RDA) is not available in SAP BW/4HANA.

Other Terms

\$RDA, RDAC

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are supported or can be converted to SAP BW/4HANA.

See node: Manual Redesign --> BW Object Type

Recommendations

In BW/4HANA, Real-time Data Acquisition is not available, but instead streaming process chains have to be used. Currently, there is no automatic transfer available yet, which replaces RDA settings with streaming process chains, so please proceed manually as follows. During the procedure, you will not be able to load data in RDA mode.

The first step is to remove and disable RDA settings in the original BW and replace them with standard BW loading. To do this, proceed as follows: The first step is to remove and disable RDA settings in the original BW and replace them with standard BW loading. To do this, proceed as follows:

- RDA using Service API (S-API)
 - Unassign the RDA daemon in the RDA monitor.
 - Close the open RDA requests in the RDA monitor if needed.
 - Delete all processes referring to the RDA InfoPackage. This can be processes for closing RDA requests (RDA_CLOSE), for stopping RDA load processes (RDA_RESET), or for starting RDA load processes (RDA_START). There is no direct replacement for these process types in SAP BW/4HANA as they are considered obsolete when streaming data.
 - Create a new process chain to replace the RDA process logic which is defined by (a) the RDA InfoPackage, (b) the DTPs assigned to the corresponding DataSource in the RDA monitor, and (c) the subsequent process chains assigned to these DTPs in the RDA monitor.
 - Create a standard delta InfoPackage to replace the RDA InfoPackage (a) and add it to the process chain.
 - Switch all assigned DTPs (b) to standard mode and add them to the process chain after the InfoPackage.
 - Create processes for activating data in the InfoProvider or InfoObject if applicable and add them to the process chain after the corresponding DTP.
 - Add the assigned subsequent process chains (c) to the process chain after the corresponding data-activation process or DTP.
 - Delete the RDA InfoPackage.
- RDA using Web Service Push
 - Refer to SAP Note [2441826](#) on how to deal with source system for Web Service Push.
- RDA using ODP Data Replication API
 - Unassign the RDA daemon in the RDA monitor.
 - Close the open RDA requests in the RDA monitor if needed.

- Delete all processes referring to DTPs for RDA. This can be processes for closing RDA requests (RDA_CLOSE), for stopping RDA load processes (RDA_RESET), or for starting RDA load processes (RDA_START). There is no direct replacement for these process types in BW/4HANA as they are considered obsolete when streaming data.
- Create a new process chain to replace the RDA process logic which is defined by (d) the DTP for RDA, and (e) the subsequent process chains assigned to this DTP in the RDA monitor.
- Switch the DTP for RDA (d) to standard mode and add it to the process chain.
- Create a process for activating data in the InfoProvider or InfoObject if applicable and add it to the process chain.
- Add the assigned subsequent process chains (e) to the process chain after the data-activation process or DTP.

You now have a standard process chain which loads delta data. You can use this process chain, but you should not load it with high frequency. To transfer it to streaming, please do the following:

Run the transfer tool either in In-Place or Remote scenario for your process chain. This will transfer your InfoPackage to DTP (if required) and the SAPI DataSources to ODP DataSources. The resulting chain then can be switched to streaming mode and scheduled accordingly.

Related Information

Refer to [Process Chains for Streaming](#) for more details.

References

SAP Note	Title
2441826	BW4SL - Web Service Source Systems

3.3.26 BW4SL - Near-line Storage (NLS) Partner Solutions

SAP Note [2441922](#) - BW4SL - Near-line Storage (NLS) Partner Solutions

Version 2 from 2017-07-03

Component: BW-WHM-DST-ARC - Archiving

Description

SAP BW Nearline Storage (NLS) Partner Solutions are not available in SAP BW/4HANA.

Other Terms

DAPA, DAPD, NW-BI-NLS certification, NW-BW-NLS certification

Prerequisites and Checks

There is currently no automated analysis available, if Partner NLS solutions are used or not.

Check transaction RSDANLCON, if any NLS connections are configured other than "SAP IQ (former Sybase IQ)" or "Hadoop".

Recommendations

There is no automated conversion from Partner NLS to an SAP NLS solution (SAP IQ) available from SAP.

Please check with your NLS vendor if they offer a conversion to SAP NLS based on SAP IQ.

Alternatively, consider using Data Tiering Optimization (DTO) in SAP BW/4HANA for managing hot, warm, and cold storage.

Related Information

[Information Lifecycle Management](#) in SAP BW/4HANA (including Data Tiering Optimization)

[Creating Near-Line Storage Connections](#)

See also [SAP NLS Solutions for SAP BW](#)

3.3.27 BW4SL - Data Archiving (3.x)

SAP Note [2469514](#) - BW4SL - Data Archiving (DAP) / Near-line Storage (NLS)

Version 10 from 2019-03-28

Component: BW-WHM-DST-ARC - Archiving

Description

There is no tool for migrating the following data archives (DAP) and near-line storage (NLS) to SAP BW/4HANA:

- 3.x data archiving
- Data archiving processes with only 'ADK-Based Archiving'
- Data archiving processes belonging to Semantically Partitioned Objects
- Data archiving processes which have a non-key characteristic for time slice, which is still to be used in archive as primary partitioning characteristic. Please find additional information on this case in [SAP Note 2767207](#).

Other Terms

DAP, ADK, SPO, RSARCHIPRO, RSARCHIPROLOC, RSDADAP

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA:

See node: Manual Redesign --> Archives

For Data archiving processes belonging to InfoCubes with non-cumulative key figures see the prerequisites in SAP Note [2618005](#).

Recommendations

There is no tool for migrating the cases mentioned above to data archiving processes based DataStore objects (advanced). Reload all data for the InfoProviders described above. Afterwards, you can convert the InfoProviders to DataStore objects (advanced). You can then archive data again using the new concept, use near-line storage, or data tiering features available in SAP BW/4HANA (Data Tiering Optimization, DTO).

Related Information

[Old Data Archiving Concept](#)

References

SAP Note	Title
2618005	Archiving advanced Data Store Objects with non-cumulative key figures
2767207	Allow Data Archiving Process conversion with non-key partition characteristic

3.3.28 BW4SL - Data Archiving Processes

SAP Note [2469514](#) - BW4SL - Data Archiving (DAP) / Near-line Storage (NLS)

See "BW4SL - Data Archiving (3.x)".

3.3.29 BW4SL - Request and Status Management

SAP Note [2482164](#) - BW4SL - Request and Status Management

Version 5 from 2019-07-16

Component: BW-WHM-DST-RSPM - BW Request Status and Process Management

Description

The classic request and status management (RSSM) based on Request IDs (OREQUID) is not available with SAP BW/4HANA. Therefore, interfaces relying on RSSM are not available either (like APO write interface, open "yellow" requests, BAPI_ISREQUEST_GETSTATUS, etc.). The same applies to functionality associated with it such as archiving request administration data via archiving object BWREQARCH.

Other Terms

\$RSSM, OREQUID, OREQTSN

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA.

InfoObjects, Open Hub Destinations, and DataStore Objects (advanced) which are still using classic request management are displayed in the log.

Recommendations

SAP BW/4HANA has a new request status and process management (RSPM) based on Request Transaction Sequence Numbers (OREQTSN). The following corner stones were defined for RSPM:

- Completeness
All operations are using the status manager
- Granularity
Every independent set of changed data is reflected in the status manager separately
- Consistency
Lock management is realized via status management
- Unification
All changes are stored in the same model (including logging and data package management)
- Performance
Status and lock checking are fast

RSPM is used in data staging, distribution, streaming, and planning processes for InfoObjects, DataStore objects (advanced), and Open Hub Destinations. Please also note that monitoring RSPM requests happens with a new

monitoring transaction (RSPM_MONITOR) that is integrated with all objects and processes in SAP BW/4HANA using RSPM.

The Request Transaction Sequence Number (TSN) is based on a time stamp of the enqueue server with collision number (23 digits with 9 decimals). It has a conversion exit to display the time stamp in local time zone. Example: 99991231235959.000009900 (internal view of TSN), {9999-12-31 23:59:59 0000099 CET} (user view of TSN). Request TSN has two navigational attributes: User (OAUSER) and Source of Data (OASOURCE) which are populated at creation time of the Request TSN and available as metadata in BW queries.

Planning scenarios do not use "open" (yellow) requests anymore. Each user transaction - a save of plan data - is associated with its own Request TSN.

When converting from SAP BW to SAP BW/4HANA, the request metadata is converted automatically by the Transfer Toolbox (for in-place as well as for remote conversions).

Before Revision 10 all requests of an InfoProvider, and all inbound delta DTP Requests in InfoObjects and Open Hub Destinations were converted into new TSN based Requests (in a TSN Range starting with 01.01.1900 and ending roughly in the year 1968).

With Revision 10 of the Transfer Toolbox a new optimized Request Transfer is introduced. This alternative request transfer is based on a preliminary processing of the data in the InfoProviders before transfer. Thus, compared with the old approach, it results in a reduced number of TSN based Requests in the resulting ADSOs, InfoObjects and Open Hub Destinations.

Therefore, the optimized request transfer is between 5 and 100 times faster, depending on your system (hardware, model complexity). This means that instead between 5 and 100 Requests per Minute, now between 500 and 1000 Requests can be transferred per Minute.

This also means that it is not necessary to reduce the requests before the transfer, only a reduced number of requests will be transferred, which in turn will minimize the exposure to follow up problems in the life cycle of the transferred requests.

In detail, this alternative procedure consists of the following:

Switching on the optimized request-transfer

With revision 10, in the selection screen of the start objects a toggle box "use optimized request transfer" will be introduced. It will be switched off by default. Once the scope is collected, the flag can not be changed anymore.

New Checks and activities during the prepare phase

Inplace-Transfer

- all 3.5 DataFlows must be converted into 7.0 DTP based DataFlows
- all closed loops consisting of only delta DTPs must be interrupted:
 - a closed loop may consist of an delta DTP having the same object as source and target. It may, of course consist of multiple delta DTPs, in which one DTP extracts from the target of its predecessor and the target of the last one is the source of the first one
 - in each loop, one of this deltas DTPs must be logically deleted with the help of the report RSBK_LOGICAL_DELETE_DTP
- all 'yellow' or 'red' requests, in all InfoProviders contained in the scope must either be deleted, or their overall Status set to 'green'
- all delta DTPs, which have as source an object in scope and themselves are not part of the scope, must also be logically deleted with the help of the report RSBK_LOGICAL_DELETE_DTP
- all active delta DTPs in scope must be executed. All source data must be transferred by this delta DTPs prior to the transfer. This must be done also for DTPs extracting from the PSA of DataSources.

- all DataMart Scenarios originating from the BW System must either be transferred to ODP BW Context, or be deleted
 - all the resulting or existing delta ODP BW Scenarios, based on InfoProviders in Scope, must be executed in the corresponding target BW systems so that all data is extracted
- all requests in Standard DSOs must be activated
- all requests in InfoCubes must be compressed. Exception: Cubes of the Inbound Layer, i.e. which receive data directly from DataSources can have 20 uncompressed requests

Remote-Transfer

- 3.5 DataFlows Objects cannot be taken into the scope (they will get the Special Option Flag 'Object will be skipped')
- all closed loops consisting of only delta DTPs must be interrupted:
 - a closed loop may consist of an delta DTP having the same object as source and target. It may, of course consist of multiple delta DTPs, in which one DTP extracts from the target of its predecessor and the target of the last one is the source of the first one
 - in each loop, one of this deltas DTPs must be skipped
- all 'yellow' or 'red' requests, in all InfoProviders contained in the scope must either be deleted, or their overall Status set to 'green'
- Caution: All DTPs, which have as source or target an object in scope, and themselves are not part of the scope, cannot be included later in another scope
- all active delta DTPs in scope must be executed. All source data must be transferred by this delta DTPs prior to the transfer. This must be done also for DTPs extracting from the PSA of DataSources. This is true also for outbound delta DTPs not in scope.
- all requests in Standard DSOs must be activated
- all requests in InfoCubes must be compressed. Exception: Cubes of the Inbound Layer, i.e. which receive data directly from DataSources can have 20 uncompressed requests

During Request Transfer:

- For all resulting Objects (ADSOs, InfoObjects and Open Hub Destinations) a transfer request will be created for each inbound delta DTP. This request which is marked as delta init, will ensure the delta consistency (i.e. that each record of the source is transferred exactly once). This Requests cannot be deleted individually as they have the status 'Moved', a renewed initialization of the delta DTPs is possible only if the whole content of the object is deleted. Their TSN is based on the Date 31.12.1899.
- For ADSOs created from write-optimized ODSOs:
 - each Request is transferred 1:1 into TSN based Request
 - the resulting requests lose their connection to the DTP from which they resulted. Deleting this requests will NOT cause the renewed propagation of the source records by the corresponding DTP
- For ADSOs created from InfoCubes:
 - An activation Request is created for the compressed data
 - if the InfoCube was part of the Inbound Layer, a maximum of 20 uncompressed Requests will be transferred 1:1 into TSN based Request. Again, this requests lose their connection to the DTP from which they resulted.
- For ADSOs create from standard ODSOs:
 - An activation Request is created for the active data. This request has the status 'Moved' in the change log, so it cannot be rolled back.

Related Information

[InfoObject Management](#)

[Managing DataStore Objects \(advanced\)](#)

[Managing Open Hub Destinations](#)

3.3.30 BW4SL - Hierarchy/Attribute Change Run

SAP Note [2526218](#) - BW4SL - Hierarchy/Attribute Change Run

Version 1 from 2017-08-31
Component: BW-WHM-DST - Data Staging

Description

The Hierarchy/Attribute Change Run is not required in SAP BW/4HANA.

Other Terms

\$ACR, CHANGERUNMONI

Prerequisites and Checks

SAP BW/4HANA does not store pre-aggregated data (i.e. aggregated or materialized views).

Recommendations

There is no need for Hierarchy/Attribute Change Run in SAP BW/4HANA.

3.4 SAP BW - Analytic Manager

3.4.1 BW4SL - BW Queries

SAP Note [2479683](#) - BW4SL - BW Queries

Version 6 from 2018-11-07
Component: BW-BEX-OT-OLAP - Analyzing Data

Description

Certain SAP BW Queries are not available in SAP BW/4HANA:

- Queries in 3.x Format
- Queries with Calculations Before Aggregation
- Queries with Constant Selection with Append
- Queries that reference technical characteristic Request ID (OREQUID)
- Queries using audit dimension/characteristics (OAMODE, OASOURCE, OATIMSTMP, OAUSER)
- Queries using navigational attributes directly on persistency (DSO or InfoCubes)

The RSADMIN parameter 'RSROA_CL_FORM_SWITCH' has no relevance in SAP BW/4HANA since its corresponding feature is not implemented in SAP BW/4HANA.

Other Terms

ELEM, DELM, RSROA_CL_FORM_SWITCH, conditional formula,

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA.

See node: Automated Cleanup --> Deletions

See node: Automated Cleanup --> Adjustments

See node: Manual Redesign --> BW Object Type

For SAP BW systems below release 7.4, check all queries using program SAP_QUERY_CHECKER_740.

The parameter RSROA_CL_FORM_SWITCH only works for SAP BW 7.5 SP 4 and following, SAP BW 7.51 and SAP BW 7.52. Before SAP BW 7.5 SP 4 the default behavior in formula calculation was 0 * N MIXED = 0. With SP 4 it was changed to 0 * N MIXED = 0 MIXED. With the parameter RSROA_CL_FORM_SWITCH switched to 'ON' the old behavior was re-enabled.

Recommendations

When executing the switch to "B4H Mode", the system will check and generate all BW queries in 3.x format. Queries in 3.x format will be automatically adjusted to 7.x format. Queries that are inconsistent (i.e. cannot be read) or raise errors during generation have to be adjusted manually or will be deleted automatically.

Queries identified using program SAP_QUERY_CHECKER_740 or queries referencing Request ID (OREQUID) have to be adjusted manually.

Queries referencing Request ID (OREQUID) have to be adjusted manually after the system conversion to SAP BW/4HANA (since OREQUID is not supported anymore).

Queries using audit characteristics have to be adjusted manually to use attributes of the new Request TSN (OREQTSN, OASOURCE, OAUSER).

Queries using navigational attributes on DataStore objects or InfoCubes (without a MultiProvider) will be converted by the SAP BW/4HANA Transfer Cockpit to corresponding queries on a CompositeProvider. This will change the name of the query (since the InfoProvider changes). Therefore, configuration or tools referencing such queries must be pointed to the new query.

Related Information

See SAP Note [1911469](#) - Check report for discontinued query features in SAP NetWeaver BW 7.4 and beyond (including SAP BW/4HANA)

See SAP Note [2470572](#) - Switch RSROA_CL_FORM_SWITCH for enabling 0 * N MIXED = 0 (no unit/cur)

3.4.2 BW4SL - VirtualProvider and Query Snapshots

SAP Note [2442781](#) - BW4SL - VirtualProvider and Query Snapshots

Version 1 from 2017-06-26
Component: BW-BEX-OT-VC - Virtual Cube (Remote Cube)

Description

The SAP HANA Index for a VirtualProvider and SAP HANA Index for a Query (Snapshot) created via transaction RSDDDB are not available in SAP BW/4HANA

Other Terms

ICS, ICV, QPO

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA.

Recommendations

Snapshots created in transaction RSDDDB will be deleted automatically when switching to B4H mode in a dedicated task.

Related Information

SAP BW 7.5 documentation:

[Indexing BW Data in the SAP HANA Database](#)

3.4.3 BW4SL - Currency Translations

SAP Note [2443281](#) - BW4SL - Currency Translations, Quantity Conversions, Key Date Derivations

Version 1 from 2017-06-15

Component: BW-BEX-OT-OLAP-CUR - Translation of Currencies or Units

Description

Currency translation types, unit conversion types, or key date derivations that are using a field/InfoObject from an InfoSet in their definition (name contains three underscores), are not available in SAP BW/4HANA (since InfoSets are not available).

Unit conversion types that are based on a classic DataStore object are not available in SAP BW/4HANA.

Other Terms

CTRT, DCRT, UOMT, DUOM, THJT, DTHJ

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are supported or can be converted to SAP BW/4HANA.

See node: Manual Redesign --> BW Object Type

See node: Supported by Transfer Tool --> BW4 Transfer Tool

Recommendations

The currency translation types, unit conversion types, and key date derivations based on InfoSets have to be adapted manually or deleted.

Unit conversion types based on classic DataStore objects can be converted to use DataStore objects (advanced) using the Transfer Tools.

Related Information

[Currency Translation Types](#)

3.4.4 BW4SL - Unit of Measure Conversions

SAP Note [2443281](#) - BW4SL - Currency Translations, Quantity Conversions, Key Date Derivations

See "BW4SL - Currency Translations".

3.4.5 BW4SL - Key Date Derivations

SAP Note [2443281](#) - BW4SL - Currency Translations, Quantity Conversions, Key Date Derivations

See "BW4SL - Currency Translations".

3.4.6 BW4SL - Personalization

SAP Note [2487535](#) - BW4SL - Personalization

Version 2 from 2017-07-04

Component: BW-BEX-OT-OLAP-VAR - Using Variables

Description

Personalization in SAP Business Explorer (BEx) is not available in SAP BW/4HANA. The corresponding classic DataStore Objects (OPERS*) are not available.

Trying to activate Personalization in SAP BW/4HANA ends with error message "activation failed".

Other Terms

ODSO, DODS, OPERS_VAR, OPERS_VR1, OPERS_BOD, OPERS_WTE, RS_PERS_ACTIVATE

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA.

See node: Automated Cleanup --> Adjustments

Recommendations

When executing the switch from Compatibility Mode to B4H Mode, the system will save the personalization settings (for example user-specific variable values) to transparent tables:

Description	DataStore Object (classic) in SAP BW	Database Table in SAP BW/4HANA
Data for Variable Values	OPERS_VAR/OPERS_VR1	RSPERS_VAR
Data for BEx Open Dialog	OPERS_BOD	RSPERS_BOD
Data for Web Templates	OPERS_WTE	RSPERS_WTE

Related Information

[Personalization in BEx](#)

References

SAP Note	Title
2451013	BW4SL - DataStore Objects (classic)
2487597	BW4SL - Conversion of DataSource Field into InfoObject

3.4.7 BW4SL - Data Federator Facade

SAP Note [2444890](#) - BW4SL - Data Federator Facade

Version 3 from 2018-02-01

Component: BW-BEX-OT-DBIF - Interface to Database

Other Components: BI-BIP-DF - Data Federation Service

Description

The SAP BW Data Federator Facade is not available in SAP BW/4HANA.

Other Terms

\$DF, Data Federator, RSDRI_DF_..., RSDRI_INFOPROV_READ_DF, RSDRI_DF_GET_SYSTEM_INFO

Prerequisites and Checks

There is currently no automated analysis available, if the Data Federator Facade is used or not.

You may check your systems for usage of function module RSDRI_INFOPROV_READ_DF (RFC calls) and RSDRI_DF_GET_SYSTEM_INFO.

Recommendations

Instead of the Data Federator Facade, you can use the external SAP HANA views of the SAP BW/4HANA InfoProviders. This allows direct SQL access to SAP BW/4HANA data. The external SAP HANA views need to be generated for all objects where a SQL access is necessary.

Related Information

[Data Federator](#)

[Generating SAP HANA Views from the BW System](#)

3.4.8 BW4SL - Report-Report-Interface

SAP Note [2739095](#) - BW4SL - Report-Report-Interface

Version 1 from 2019-01-11

Component: BW-BEX-OT-RR1 - BW Query Jump Targets (Report to Report Interface)

Description

The report-report-interface (RRI) is still available in SAP BW/4HANA. However, RRI was primarily supported for and used by the SAP Business Explorer front-end which is not available with SAP BW/4HANA.

Other Terms

RRCA, RRQA

Prerequisites and Checks

There is currently no automated analysis available, if the RRI is used by front-end tools for SAP BW. You can check in tables RSBBSUBCUBEDIR and RSBBSQUERYDIR, if RRI is configured in the SAP BW backend.

Recommendations

If you have configured the report-report-interface for your end-user tools, you should check if those tools are still available with SAP BW/4HANA and are supporting RRI. If not, then there might be an alternative feature available in the tool of your choice.

Related Information

[Using the Report-Report-Interface](#)

3.5 SAP BW - Agile Information Access

3.5.1 BW4SL - Local Provider and Local CompositeProvider in BW Workspaces

SAP Note [2444273](#) - BW4SL - Local Provider and Local CompositeProvider in BW Workspaces

Version 2 from 2018-01-18

Component: BW-BEX-OT-WSP - BW Workspace

Other Components: BW-WHM-DBA-COPR - CompositeProvider (local version)

Description

SAP BW Workspaces are a fully supported functionality for agile information access in SAP BW/4HANA.

Other Terms

COPR, DCOP, AINX

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA:

See node: Automated Cleanup --> Deletions --> TLOGO AINX (Analytical Index)

See node: Supported by Transfer Tool --> BW4 Transfer Tool --> TLOGO COPR (local CompositeProvider)

It is not possible to convert BW Workspace scenarios by means of remote conversion, as BW Workspace scenarios are completely local and cannot be transported.

In-place conversion is generally possible however as of release SAP BW 7.5 SP 5, powered by SAP HANA or higher.

Recommendations

What the in-place conversion does:

- If a MultiProvider is used as the main provider in a BW Workspace, it is replaced by a CompositeProvider in the BW Workspace metadata.
- An InfoCube or DataStore Object (classic) used in a main provider is replaced by a DataStore Object (advanced).
- The metadata of the local CompositeProvider is also adjusted (InfoCube replaced by DataStore Object (advanced) and so on).
- Local analytic indexes created in a BW Workspace are not affected.

Restrictions:

- Any central analytic indexes (created in APD for example) used in BW Workspaces are deleted during the conversion process. Please have a look at your scenarios first to identify cases, where this should occur and replace the central analytic indexes manually with DataStore Objects (advanced) in BW Workspaces (exchange manually in local CompositeProvider)

Remote conversion:

- Local objects used in BW Workspaces cannot be transferred to the SAP BW/4HANA target system.

Related Information

[Agile Information Access: BW Workspace](#)

3.6 SAP BW - Front-end Tools

3.6.1 BW4SL - BEx Workbooks

SAP Note [2444138](#) - BW4SL - BEx Objects (to be redesigned)

Version 14 from 2018-04-20

Component: BW-BEX-ET-WB - Queries in Workbooks

Description

The following SAP Business Explorer (BEx) objects are not available in SAP BW/4HANA:

- BEx Workbooks
- BEx Web Item (Format SAP BW 7.x)
- BEx Web Template (Format SAP BW 7.x)
- BEx Broadcast Settings
- BEx Precalculation Server

The following SAP Business Explorer (BEx) settings are not available in SAP BW/4HANA:

- BEx Web Design Time Item and Parameter Metadata
- BEx Themes
- BEx Conversion Services

Other Terms

XLWB, DXLW, BITM, DBIT, BTMP, DBTM, BRSE, DBRS, WWIB, DWIB, WWPA, DWPA, THEM, THED, BIXP, DBIX, RSPRECADMIN, RSPRECALCADMIN

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are supported with or can be converted to SAP BW/4HANA.

See node: Manual Redesign --> BEx

Caution: Neither this pre-check (program RS_B4HANA_CONVERSION_CONTROL) nor the SAP Readiness Check take BEx Workbooks stored external to the SAP BW system (for example, on local PCs or network drives) into consideration!

Recommendations

The above-mentioned objects can be used for a manual redesign before deleting them. The exception are BEx Web Templates and Items (7.x format), which can be retained in preparation for optimized support of front-end tools (see below).

Recommendations

For a redesign of BEx workbooks, we recommend to use SAP BusinessObjects Analysis, edition for Microsoft Office.

- Semi-automated transition of SAP BEx Analyzer Workbooks to SAP Analysis Office is available as a service offering
- For more details, see the following [blog](#)

For BEx Web scenarios, we recommend to use SAP Lumira Designer or SAP Analytics Cloud.

- Planned support for temporary use of the existing SAP BEx Web Applications in SAP BW/4HANA through a dedicated pilot program
- Exclusively available with the In-Place Conversion to SAP BW/4HANA 1.0 SP 6 or higher (support for a limited time until end of 2019)
- For more details, see SAP Note [2496706](#)

For Broadcasting scenarios, we recommend to use SAP Crystal Reports for publishing and distribution.

Deletion

All objects listed above - with the exception of BEx Web Templates and Items (in 7.x format) - are deleted in the following cases:

- In-place Scope Transfer:
BEx objects related to objects processed by the Scope Transfer Tool will be deleted as part of the corresponding task list in task "Delete unsupported objects". For example, when transferring an InfoCube to a DataStore object (advanced), any BEx Workbooks related to this InfoCube will be deleted.
- Switch of Operating Mode:
Any remaining BEx objects will be automatically deleted when executing the switch "B4H mode".
- Manual Deletion:
You can delete BEx objects using program RS_DELETE_TLOGO.

Related Information

[SAP BusinessObjects Analysis, edition for Microsoft Office](#)

[SAP BusinessObjects Design Studio](#)

[SAP Lumira](#)

[SAP Analytics Cloud](#)

[SAP Crystal Reports](#)

References

SAP Note	Title
2444136	BW4SL - BEx Objects (to be deleted)
2496706	BEx Web Application Add-on for SAP BW/4HANA - Deployment and Limitations

3.6.2 BW4SL - BEx Web Templates (3.x)

SAP Note [2444136](#) - BW4SL - BEx Objects (to be deleted)

Version 6 from 2017-07-03

Component: BW-BEX-ET-WEB - BEx Web ABAP Runtime

Description

The following SAP Business Explorer (BEx) objects are not available in SAP BW/4HANA:

- BEx Web Item (Format SAP BW 3.x)
- BEx Web Template (Format SAP BW 3.x)
- Reporting Agent Scheduling Package
- Reporting Agent Setting

Other Terms

ITEM, DITM, TMPL, DTMP, RAPA, RASE

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are supported or can be converted to SAP BW/4HANA:

See node: Automated Cleanup --> Deletions

Recommendations

Any of the above-mentioned objects will be automatically deleted when executing the switch "B4H mode".

For BEx Web scenarios, we recommend to use SAP BusinessObjects Design Studio or SAP Lumira. For Reporting Agent scenarios, we recommend to use SAP Crystal Reports for publishing and distribution.

Related Information

[Reporting Agent](#)

[BEx Web](#)

[SAP BusinessObjects Design Studio](#)

[SAP Lumira](#)

[SAP Crystal Reports](#)

References

SAP Note	Title
2444138	BW4SL - BEx Objects (to be redesigned)

3.6.3 BW4SL - BEx Web Templates (7.x)

SAP Note [2444138](#) - BW4SL - BEx Objects (to be redesigned)

See "BW4SL - BEx Workbooks".

3.6.4 BW4SL - BEx Reporting Agent

SAP Note [2444136](#) - BW4SL - BEx Objects (to be deleted)

See "BW4SL - BEx Web Templates (3.x)".

3.6.5 BW4SL - BEx Broadcast Settings

SAP Note [2444138](#) - BW4SL - BEx Objects (to be redesigned)

See "BW4SL - BEx Workbooks".

3.6.6 BW4SL - BEx Web Design Time Item Metadata

SAP Note [2444136](#) - BW4SL - BEx Objects (to be deleted)

See "BW4SL - BEx Web Templates (3.x)".

3.6.7 BW4SL - BEx Web Design Time Parameter Metadata

SAP Note [2444136](#) - BW4SL - BEx Objects (to be deleted)

See "BW4SL - BEx Web Templates (3.x)".

3.6.8 BW4SL - BEx Themes

SAP Note [2444136](#) - BW4SL - BEx Objects (to be deleted)

See "BW4SL - BEx Web Templates (3.x)".

3.6.9 BW4SL - BEx Precalculation Server

SAP Note [2444138](#) - BW4SL - BEx Objects (to be redesigned)

See "BW4SL - BEx Workbooks".

3.6.10 BW4SL - Crystal Reports

SAP Note [2478346](#) - BW4SL - Other Front-end Objects

Version 5 from 2018-10-11
Component: BW-BEX-ET-FR - Crystal Reports

Description

The following front-end objects are not available in SAP BW/4HANA:

- SAP Crystal Reports (published to SAP BW)
- SAP Xcelsius Dashboards (published to SAP BW)
- BW Enterprise Reports

Other Terms

CRWB, DCRW, XCLS, DXCL, ERPT, DRPT

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are supported with or can be converted to SAP BW/4HANA.

See node: Manual Redesign --> BEx

Recommendations

The above-mentioned objects can be used for a manual redesign before deleting them.

Recommendations

While SAP Crystal Reports and SAP Xcelsius Dashboards cannot be published (persisted) in SAP BW/4HANA, you are still able to publish these objects to the SAP BusinessObjects Business Intelligence platform.

For Enterprise Reporting scenarios, we recommend to use SAP Crystal Reports for publishing and distribution.

Deletion

The objects listed above are deleted in the following cases:

- In-place Scope Transfer:
BEx objects related to objects processed by the Scope Transfer Tool will be deleted as part of the corresponding task list in task "Delete unsupported objects".
- Switch of Operating Mode:
Any remaining BEx objects will be automatically deleted when executing the switch "B4H mode" using task list RS_COMPATIBILITY_TO_B4H (you can run the tasks related to the objects mentioned above also individually).
- Manual Deletion:
You can delete BEx objects using program RS_DELETE_TLOGO (for deleting SAP Xcelsius Dashboards and BW Enterprise Reports, check SAP Note [2705147](#)).

Related Information

[SAP Crystal Reports](#)

References

SAP Note	Title
2444136	BW4SL - BEx Objects (to be deleted)
2444138	BW4SL - BEx Objects (to be redesigned)
2705147	740SP12: 'RS_DELETE_TLOGO' minor Enhancements

3.6.11 BW4SL - Xcelsius Dashboards

SAP Note [2478346](#) - BW4SL - Other Front-end Objects

See "BW4SL - Crystal Reports".

3.6.12 BW4SL - Enterprise Reports

SAP Note [2478346](#) - BW4SL - Other Front-end Objects

See "BW4SL - Crystal Reports".

3.6.13 BW4SL - Easy Query

SAP Note [2470206](#) - BW4SL - Easy Query

Version 5 from 2017-06-29

Component: BW-BEX-OT-BICS-EQ - BICS Easy Query

Description

The Easy Query interface is not available in SAP BW/4AHANA.

Other Terms

OData, easy consumption, \$EASY

Prerequisites and Checks

There is currently no automated analysis available, if the Easy Query is used or not.

You can check table RSEQ_DIR to see a list of all queries released for Easy Query access.

Recommendations

Easy Query has been replaced by OData Query in SAP BW/4HANA. Accessing BW Queries via OData is more flexible than Easy Query:

- Ability to handle free characteristic and dynamically change query result set
- Hierarchy handling
- Optimized performance
- Optimized lifecycle – it is a transportable object (EQ was regenerated in each system transported to)
- Support for CDS based queries

OData Query is consequently optimized for OData consumption (for example, by SAP Fiori clients) and therefore no longer offers RFC and SOAP access. Since the Easy Query was RFC and a not http based protocol, we decided to substitute it with the OData Query. The OData Query is a more open standard using OData protocol based on REST services.

Note: There are still some restrictions left like key figure on columns, characters on rows – see documentation for more details.

Related Information

[Lightweight Consumption of Queries](#)

[Architectural Overview of Easy Queries and OData Queries](#)

3.7 SAP BW - Planning Tools

3.7.1 BW4SL - Business Planning & Simulation

SAP Note [2468702](#) - BW4SL - Business Planning & Simulation

Version 3 from 2019-02-07

Component: BW-PLA-BPS - Business Planning and Simulation

Description

SAP BW Business Planning & Simulation (BW-BPS) applications are not available in SAP BW/4HANA.

Other Terms

\$BPS, SEM, PLA

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA.

See node: Required actions for switch to B4H mode --> BW Planning --> BW-BPS

y planning area(s) in client xxx and/or z planning level(s) in client xxx

Recommendations

A conversion of BPS applications is not available. To set the system to Ready-for-Conversion status, which is a prerequisite for an in-place conversion to SAP BW/4HANA, it is necessary to delete all BPS applications.

In transaction BPS01, it is only possible to delete one application at a time. To simplify the deletion, you can use the attached program. The program deletes all BPS applications (planning areas and dependent levels, packages, etc.). There's no option to select any subset of the applications. After a confirmation prompt, the program will delete all applications without further prompt. There is no option to reverse the deletion!

InfoCubes and InfoObjects will not be deleted.

Attachments

File Name	File Size
Z_DELETE_BPS.txt	1 MB

3.7.2 BW4SL - Aggregation Levels

SAP Note [2443001](#) - BW4SL - Aggregation Levels

Version 7 from 2018-07-25

Component: BW-PLA-IP - Integrated Planning

Description

Planning scenarios with aggregation levels (BW Integrated Planning or BPC embedded), which are created on top of a plannable InfoCube or on top of an DataStore object directly (i.e. without a MultiProvider or CompositeProvider in between), cannot be converted automatically into a SAP BW/4HANA compatible scenario if navigational attributes should be used

Other Terms

ALVL, DALV

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are supported or can be converted to SAP BW/4HANA.

Recommendations

Such scenarios need to be remodeled by introducing a MultiProvider or a CompositeProvider on top of the plannable InfoCube or DataStore object and creating the aggregation levels on top.

Furthermore, for a particular type of models, the manual post-conversion efforts can be reduced, if the following models are modified before a conversion: If a MultiProvider, which is used as the basis for an aggregation level, contains a mapping where the navigational attribute of a characteristic is mapped from some characteristic in a provider, i.e. if a MultiProvider has a field which technically looks like a navigation attribute but which semantically is a characteristic, then the conversion will result in a CompositeProvider containing additional characteristics. These additional characteristics must be taken into account in modelling objects like the aggregation levels and the functions on top, and any automated conversion can only use heuristics for that. So, if these MultiProviders are remodeled before the conversion, the post-conversion efforts can be reduced.

Related Information

[InfoProviders](#)

[Editing Aggregation Levels](#)

3.7.3 BW4SL - Planning

SAP Note [2443189](#) - BW4SL - Business Planning & Consolidation

Version 2 from 2017-10-19

Component: BW-PLA-IP - Integrated Planning

Description

Objects related to Business Planning & Consolidation functionality are not available with core SAP BW/4HANA. This includes:

- SAP BW Integrated Planning (BW-IP)
- Planning Application Kit (PAK)
- SAP Business Planning & Consolidation (embedded)
- SAP Business Planning & Consolidation (standard)

To use planning functionality with SAP BW/4HANA, you will need to install the SAP BPC add-on, version for SAP BW/4HANA.

Other Terms

AABC, AADT, AAPP, AAPS, ABPC, ABPF, ABRU, ACGA, ACGP, ACGS, ACLB, ACTR, ADAF, ADEE, ADEI, ADEL, ADIM, ADMC, ADMD, ADMF, ADMG, ADML, ADMP, ADMS, ADTG, AFLC, AFLD, AFLE, AFLG, AJUT, AKPI, AMBR, AMPF, APPS, ARTP, ASPD, ASPF, ASPR, ATEM, ATPF, AWSS, BAOE, ALVL, BBPF, BDAP, ENVM, MODL, PLCR, PLDS, PLSE, PLSQ, PLST, TEAM, WKSP

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are supported with or can be converted to SAP BW/4HANA.

See node: Required actions for switch to B4H mode --> BW Planning --> BPC Embedded / BPC Standard

Recommendations

Objects related to Business Planning can be used with SAP BPC 11.0, version for SAP BW/4HANA (or higher). Install the SAP BPC add-on (technical name BPC4HANA) on the target SAP BW/4HANA system.

Related Information

[SAP BPC, version for SAP BW/4HANA documentation](#)

References

SAP Note	Title
2343286	Planning on BW/4HANA
2450774	SAP Business Planning and Consolidation 11.0 SP00, version for SAP BW/4HANA Central Note
2510414	Conversion to SAP Business Planning and Consolidation 11.0, version for SAP BW/4HANA Central Note

3.8 SAP BW - Custom Developments

3.8.1 BW4SL - Interfaces and Customer-Specific ABAP Development

SAP Note [2462639](#) - BW4SL - Interfaces and Customer-Specific ABAP Development

Version 18 from 2019-03-01

Component: BW - SAP Business Warehouse

Other Components: BC-ABA - ABAP Runtime Environment - ABAP Language Issues Only

Description

Converting from SAP BW to SAP BW/4HANA might have an impact on customer-specific ABAP development. Custom Code Migration might be required.

Other Terms

\$CUST, ABAP

Prerequisites and Checks

This SAP Note lists changes to system software that could have an impact on custom code.

Custom Code Migration describes the tools that help you with the migration of custom code – for example, if you want to migrate your current database to SAP HANA and/or convert your SAP Business Warehouse system to SAP BW/4HANA. In this SAP Note, you will find information about the tools that support you in this process.

The SAP BW/4HANA Transfer Cockpit provides a Code Scan Tool to check custom code objects as well as code embedded in transformations and many other locations in SAP BW. For more details, see the [Conversion Guide for SAP BW/4HANA](#). A list of DDIC and ABAP objects that are **not** available in SAP BW/4HANA is included in the Code Scan Tool (see class CL_RS_B4HANA_CODE_SCAN method GET_BLACKLIST_WITH_TLOGO).

Note: SAP Readiness Check for SAP BW/4HANA and the Pre-check Tool of the SAP BW/4HANA Transfer Cockpit do **not** scan or check any custom code.

Recommendations

Impact Due to Change of Database

When converting to SAP BW/4HANA running on SAP HANA from SAP BW running a different database platform, specific ABAP coding needs to be investigated, revisited, and possibly adapted. Functional adjustments and SQL performance tuning might be required.

Impact Due to Simplification of Application Functionality

As documented in other simplification items, SAP BW/4HANA provides many simplifications of application functionality compared to SAP BW. Therefore, many programs, function modules, and classes (millions of lines of standard code) and thousands of standard dictionary objects of SAP BW are not available in SAP BW/4HANA. Any use of such objects needs to be replaced in custom code. It's recommended to use only documented standard interfaces (API). See [SAP Documentation](#).

Impact Due to Change of Application Technology

SAP BW-specific customer enhancements (often called "customer exits", transaction CMOD) are not available in SAP BW/4HANA. For several SAP BW releases, SAP has offered corresponding enhancement spots. If customer enhancements are used in SAP BW, the code will have to be adjusted and converted to enhancement spots in SAP BW/4HANA.

The following customer exists are not available with SAP BW/4HANA:

<i>Customer Exits</i>	<i>Description</i>	<i>Enhancement Spots</i>
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AIBW0001, AIBW0002	IM-BCT: Assignment of Actual Values to Budget Categories / Corporate IM: Settings for Group Currency	n/a
RSR00001, RSR00002	BI: Enhancements for Global Variables in Reporting / BI: Virtual Characteristics and Key Figures in Reporting	RSROA_VARIABLES_EXIT and RSROA, see SAP Note 2458521 for details on how to switch to the enhancement spot
SEMBPS01, SEMBPS02	SEM-BPS: Enhancement for checking characteristic value combinations / Enhancement for characteristic derivation	Corresponding functionality in Integrated Planning or SAP Business Planning and Consolidation (BPC)

Impact Due to Simplification of Object Types

Several types of objects are not available in SAP BW/4HANA. Depending on the type of object, active versions of obsolete object types can be converted to objects that are compatible with SAP BW/4HANA. For example, the InfoCubes or classic DataStore objects can be converted to DataStore objects (advanced). If unavailable object types are used in custom code, the code might have to be adjusted.

For example, if custom code contains a lookup of a classic DataStore object (SELECT ... FROM /Bix/ATESTDS000 ...), the lookup might fail after converting to an advanced DataStore object which has a different database representation (SELECT ... FROM /Bix/ATESTDS02 ...). After implementing SAP Note [2539205](#) (or the equivalent support package), the system will generate compatibility views corresponding to the activation queue and the active data table of the classic DSO reducing the effort to adjust custom code significantly. Nevertheless, note that depending on the type of object, there might also be different technical fields, like "Request TSN" instead of "Request ID" in change logs and there is no compatibility view for the change log itself.

See the other object-specific simplification items, for recommendations on how to deal with custom code embedded in object types unavailable in SAP BW/4HANA (like Virtual InfoCubes).

Impact Due to Simplification of Content Objects

Several BI Content and SAP BW Technical Content objects are not available in SAP BW/4HANA. Depending on the type of object, active versions of the content can be taken over or converted to objects that are compatible with SAP BW/4HANA (see "simplification of object types" above). If content that is used in custom code is not available in SAP BW/4HANA, the code will have to be adjusted.

For example, InfoObject "Request ID" (OREQUID) is not used in SAP BW/4HANA (except for the transition period). Therefore, any custom code built around "Request ID" will not work with SAP BW/4HANA. Instead "Request Transaction Sequence Number" (OREQTSN) should be used.

Another example is reusing logic provided by BI Content like SAP exit variables in custom code (CALL FUNCTION 'RSVAREXIT...'). Since some SAP exit variables are not available, custom code might have to be adjusted.

For more details, see SAP Note [2673734](#).

Impact Due to Change of Personalization Objects

DataStore objects (OPERS_*) for persistency of personalization data are not available in SAP BW/4HANA. Instead the system uses transparent tables (RSPERS*). Custom code using these DataStore objects needs to be adjusted.

Impact Due to Simplification of Authorization Objects

Several authorization objects, for example S_RS_ICUBE, are not available in SAP BW/4HANA. In case these objects are used for authorization checks in custom code, the code will have to be adjusted. See SAP Note [2468657](#), for details.

Impact Due to Changes of Application Interfaces

Usage of standard application interfaces in custom code or external applications needs to be evaluated and in some cases adjusted. The following table contains the most prominent changes that have been made in SAP BW/4HANA:

<i>SAP BW Interface</i>	<i>Description</i>	<i>SAP BW/4HANA Interface</i>
RSNDI_MD_ATTRIBUTES_UPDATE RSDMD_WRITE_ATTRIBUTES_TEXTS RSNDI_MD_TEXTS_UPDATE RSNDI_MD_...	APIs for Master Data	RSDMD_API_ATTRIBUTES_UPDATE RSDMD_API_ATTR_TEXTS_MAINTAIN RSDMD_API_DELETE RSDMD_API_TEXTS_UPDATE RSDMD_API_XXL_ATTR_UPDATE See SAP Documentation and SAP Note 2362955 for details
RSNDI_SHIE_ACTIVATE RSNDI_SHIE_CATALOG_GET RSNDI_SHIE_DELETE RSNDI_SHIE_MAINTAIN RSNDI_SHIE_STRUCTURE_GET3 RSNDI_SHIE_STRUCTURE_UPDATE3 RSNDI_SHIE_SUBTREE_DELETE RSNDI_SHIE_...	APIs for Hierarchies	RSDMD_API_HI_ACTIVATE RSDMD_API_HI_BW_NODENMCREATE RSDMD_API_HI_DELETE RSDMD_API_HI_EX_NODENMCREATE RSDMD_API_HI_HEADER_GET_ALL RSDMD_API_HI_NODENAME_CREATE RSDMD_API_HI_STRUCTURE_GET RSDMD_API_HI_STRUCTURE_UPDATE RSDMD_API_HI_SUBTREE_DELETE See SAP Documentation and SAP Note 2362955 for details
BAPI_ODSO_READ_DATA_UC RSDRI_ODSO_INSERT RSDRI_ODSO_INSERT_RFC RSDRI_ODSO_MODIFY RSDRI_ODSO_MODIFY_RFC RSDRI_ODSO_UPDATE RSDRI_ODSO_UPDATE_RFC RSDRI_ODSO_DELETE_RFC RSDRI_ODSO_ARRAY_DELETE RSDRI_ODSO_ARRAY_DELETE_RFC	APIs for DataStore Objects	RSDSO_WRITE_API RSDSO_WRITE_API_RFC RSDSO_ACTIVATE_REQ_API_RFC RSDSO_DU_WRITE_API RSDSO_DU_WRITE_API_RFC RSDSO_DU_DELETE_API_RFC RSDSO_DU_CLEANUP_API_RFC See SAP Documentation
BAPI_...	APIs for other object types like InfoCube, MultiProvider, etc. which are not available in SAP BW/4HANA	Functions still exist but will raise an error message when called in SAP BW/4HANA
BAPI_REP... RSCRM... CL_RSCRM...	CRM Tools and CRM BAPI are not available in SAP BW/4HANA	n/a, see SAP Note 2463800

RSDRI_DF_... RSDRI_INFOPROV_READ_DF	Data Federator Facade is not available in SAP BW/4HANA	n/a, see SAP Note 2444890
RSSEM_... CL_RSSEM...	SEM APIs are not available in SAP BW/4HANA	n/a, see SAP Note 2526508
RRW3_GET_QUERY_VIEW_DATA	Web Service API	Functions still exist but is not supported with SAP BW/4HANA. The functionality has been replaced by the OData interface for BW Queries. See SAP Documentation

Impact Due to Enhanced Data Types for Characteristics and Constants

When converting to SAP BW/4HANA from a SAP BW release below 7.4, data types and lengths for characteristics will be changed. Previously, the maximum length of characteristic values was 60 characters. The maximum length is now 250 characters, which corresponds to 500 bytes. Domain RSCHAVL has therefore been changed from CHAR60 to SSTRING.

For details, see [SAP Documentation](#) and SAP Note [1823174](#).

Impact Due to Change of Front-end Technology

SAP Business Explorer is not available with SAP BW/4HANA. Any custom code build on SAP BEx Web Templates or SAP BEx Workbooks (in 3.x as well as 7.x versions) will not work with SAP BW/4HANA.

Data Federator Façade is not available in SAP BW/4HANA. Instead, generated SAP HANA views can be used. Easy Query is not available in SAP BW/4HANA. Instead, OData queries can be used. Custom code using either Data Federator Façade or Easy Query needs to be adjusted.

Impact Due to Changes in Other Software Components

SAP BW/4HANA 1.0 is delivered with the following software components and version:

Software Component	Release
SAP_BASIS	750
SAP_ABA	75A
SAP_GWFND	750
SAP_UI*	750 / 752
DW4CORE	100

* Starting with SAP BW/4HANA 1.0 SP 8, SAP_UI 7.52 is required.

SAP BW/4HANA 2.0 is delivered with the following software components and version:

Software Component	Release
SAP_BASIS	753
SAP_ABA	75D
SAP_GWFND	753
SAP_UI	753
DW4CORE	200
UIBAS001	400

When converting to SAP BW/4HANA, these components can undergo a release upgrade, which could therefore impact custom code. SAP_ABA release 75A and higher, for example, supports long material numbers (CHAR 40 instead of CHAR 18). Custom code which uses OMATERIAL - or variations thereof - should be checked for compatibility with long material numbers. See also SAP Note [2635167](#) - Handling of Material InfoObjects with Conversion to SAP BW/4HANA.

See the following SAP Notes for details:

SAP Note [2215424](#) - Material Number Field Length Extension - General Information

SAP Note [2215852](#) - Material Number Field Length Extension: Code Adaptions

SAP Note [2267140](#) - S4TWL - Material Number Field Length Extension

SAP Note [2272014](#) - Code Inspector check for field length extensions

Impact on System Modifications and Enhancements

Modifications and enhancements need to be adapted using the standard transactions SPDD, SPAU and SPAU_ENH. This is the same process as in previous upgrades of SAP BW, only the tools SPDD and SPAU have been renewed. Especially when moving from older system to SAP BW/4HANA many modifications and enhancements can be removed or set to SAP standard. For this purpose, the UI was invented for SPAU, which supports mass activities in order to adjust modifications and enhancements or reset objects to SAP standard more easily. The general recommendation is to reset as many objects as possible to SAP standard.

SAP Custom Development Projects (CDP)

If the SAP BW system contains any Custom Development Projects - customer-specific implementations done by SAP -, please contact SAP to ensure that the solution is properly evaluated and transitioned to SAP BW/4HANA.

Partner Development Projects

If the SAP BW system contains solutions developed by Partners, please contact the original vendor to see if the solution can be transitioned to SAP BW/4HANA.

Recommended Process for Custom Code Adjustments

The custom code adjustment process consists of two major phases. **Before SAP BW/4HANA system conversion** – during discovery and preparation phase – we recommend to get rid of old unused custom code (custom code evaluation) and then analyze remaining custom ABAP code (based on the Simplification List) and find out which objects need to be changed to get adapted to the SAP HANA and SAP BW/4HANA. **After SAP BW/4HANA system conversion** – during the realization phase – you need to adapt custom ABAP code to the new SAP BW/4HANA software (functional adaptation) and optimize performance for SAP HANA database (performance tuning).

Related Tools

The following table gives you an overview of how to detect potential functional, application, and performance-related issues during transition and of the relevant tools in the context of conversion to SAP BW/4HANA:

<i>Use Case</i>	<i>Description</i>	<i>Tools</i>
Custom code evaluation	<p>For this purpose, we recommend to turn on the Usage Procedure Log (UPL) in your productive system to find out, which custom ABAP objects are used within your running business processes. You can also use this step for prioritization: to find out which objects are more important as the others.</p> <p>An alternative is to use the ABAP Call Monitor (SCMON). The advantage compared to the UPL is that using this tool you not only collect the usage data (how often a specific ABAP object was called), but also the information about the calling context.</p> <p>Solution Manager Custom Code Lifecycle Management (CCLM) can retrieve the usage data from your productive system and visualize them for your convenience. Based on the graphical presentation you get better transparency of the usage of your custom ABAP code and can easier analyze it then using only UPL or SCMON technical data.</p>	<p>Usage and Procedure Logging (UPL)</p> <p>ABAP Call Monitor (SCMON)</p> <p>Custom Code Management Decommissioning</p>
Functional adaptations	<p>The ABAP Test Cockpit (ATC) and the Code Inspector provide static code checks that enable you to detect ABAP code which relies on database-specific features.</p> <p>Example: ABAP source code that relies on the sort order of the result of an SQL statement.</p>	<p>ABAP Test Cockpit and Code Inspector in Context of HANA Migration</p>
SQL performance optimization	<p>The SQL Monitor allows you to monitor all SQL statements and operations that are executed by running ABAP applications. The collected SQL Monitor data then enables you to detect performance hot spots.</p>	<p>SQL Monitor</p>
Runtime checks	<p>The Runtime Check Monitor allows you to execute a limited range of runtime checks in your productive system. You can use the check results to identify issues that lead to poor performance or high memory consumption.</p>	<p>Runtime Check Monitor</p>
Functional adaptation and optimization of custom code embedded in generated programs	<p>The SAP BW/4HANA Transfer Cockpit (since the March 2018 update) can be used to scan the system for custom code embedded in SAP BW configuration like update and transfer rules, transformations, planning functionality, analysis process designer, as well as SAP BW-specific customer exits, business add-ins, and enhancement spots. The Transfer Cockpit scans for usage of incompatible BW objects and obsolete ABAP code.</p> <p>In addition, you can use the SAP BW ABAP Routine Analyzer, which will perform a similar scan but focus on best practices and performance optimization.</p>	<p>Conversion Guide for SAP BW/4HANA > Custom Code Scan</p> <p>SAP BW ABAP Routine Analyzer (part of SAP BW Migration Cockpit)</p>

References

SAP Note	Title
1823174	BW 7.4 changes and customer-specific programs
2362955	Interface for data exchange of master data and hierarchies RSDMD_API
2444890	BW4SL - Data Federator Facade
2458521	Conversion of obsolete customer exits (CMOD) to enhancement spots in SAP BW
2463800	BW4SL - Customer Relationship Management (CRM) BAPI & Customer Segmentation
2468657	BW4SL - Standard Authorizations
2526508	BW4SL - Strategic Enterprise Management (SEM) APIs
2635167	Handling of Material InfoObjects with Conversion to SAP BW/4HANA
2719160	Uninstallation of software component SAP_BW during the BW/4HANA 2.0 Conversion
2749804	Support Package levels of SAP BW/4HANA installations/upgrades

3.8.2 BW4SL - Customer Relationship Management (CRM) BAPI

SAP Note [2463800](#) - BW4SL - Customer Relationship Management (CRM) BAPI & Customer Segmentation

Version 4 from 2019-03-04

Component: BW-BCT-CRM - please use CRM-ANA (Customer Relationship Management)

Description

The CRM tools and CRM BAPI are not available in SAP BW/4HANA.

Furthermore, the following functionality to perform high data volume CRM customer segmentation is not available in SAP BW/4HANA:

- [Segmentation with High Data Volume from SAP NetWeaver BW](#)
- [Distinction Between BWA and BW High-Volume Segmentation with HANA](#)

Other Terms

\$CRM, BAPI, BAPI_REP..., RSCRM..., RSDRCRM, RSDRCRM_SEG

Prerequisites and Checks

There is no analysis available, if the CRM tool, BAPI, or customer segmentation are used or not.

Recommendations

Instead of the CRM BAPI, you can use the external SAP HANA views of the SAP BW/4HANA InfoProviders. This allows direct SQL access to SAP BW/4HANA data. The external SAP HANA views need to be generated for all objects where a SQL access is necessary.

There is currently no replacement for the other CRM-related features.

Related Information

3.8.3 BW4SL - Strategic Enterprise Management (SEM) APIs

SAP Note [2526508](#) - BW4SL - Strategic Enterprise Management (SEM) APIs

Version 1 from 2017-08-31
Component: FIN-SEM - Strategic Enterprise Management

Description

The SEM APIs are not available in SAP BW/4HANA.

Other Terms

\$SEM, BAPI, RSSEM..., CL_RSSEM...

Prerequisites and Checks

You can use the SAP BW ABAP Routine Analyzer to check if SEM APIs are used in custom code embedded in SAP BW objects (see SAP Note [1847431](#)). However, there is no standard tool available to scan other custom developments.

Recommendations

Instead of SEM APIs, you should use standard APIs provided by SAP BW/4HANA. See SAP Note [2462639](#) - BW4SL - Interfaces and Customer-Specific ABAP Development.

References

SAP Note	Title
2462639	BW4SL - Interfaces and Customer-Specific ABAP Development

3.9 SAP BW - Security

3.9.1 BW4SL - Standard Authorizations

SAP Note [2468657](#) - BW4SL - Standard Authorizations

Version 10 from 2019-07-16
Component: BW-BEX-ET-AUT - Authorizations
Other Components: BW-WHM-DST-AUT - Authorizations

Description

Several standard authorizations objects used in SAP BW are not available in SAP BW/4HANA.

Other Terms

\$STDAUTH, Authorizations, Profiles, Roles, PFCG

Prerequisites and Checks

The simplification of object types in SAP BW/4HANA has an impact on authorization objects. When converting a SAP BW system to SAP BW/4HANA, authorizations for object types that are not available in SAP BW/4HANA (like InfoCubes) have to be replaced by authorizations for corresponding object types (like DataStore Objects (advanced)).

The SAP BW/4HANA Transfer Cockpit includes a tool to automatically transfer roles and standard authorizations.

Recommendations

The attached file contains a list of authorization objects available in SAP BW and shows if they are available in SAP BW/4HANA or need to be replaced with a different authorization object.

Adjust your security profiles and roles accordingly. To do so, you can use the Authorization Transfer Tools included in the SAP BW/4HANA Transfer Cockpit (programs RS_B4HTAU_*). You first perform an initial run to analyze the existing authorization usage. Then you convert the data model and flow objects. And finally, you perform a delta run to adjust the standard authorizations according to the attached rules. For more details, see [Conversion Guide](#).

The column "Treatment" in the attached file has 4 values:

- Assume:
Nothing do to. This authorization objects will work 1:1 after the SAP BW/4HANA conversion.
- Adjust:
Check and adapt the values. If there are Cube/DSO/... names in use, please change it to the new ADSO name.
- Replace:
A **manual task** is necessary and a new authorization object ("Replacement" column) instead of the old one ("Technical Name" column) must be included in the roles.
- Obsolete:
The authorization object is not needed anymore.

For Remote and Shell Conversion, you either maintain new roles in the SAP BW/4HANA target system (see SAP Note [2468657](#)) or you transport the original roles to the target system and use the Authorization Transfer Tool (Report "RS_B4HTAU_CREATE_RUN") to make the required adjustments in the target system.

Attachments

File Name	File Size
BW4_Authorisation 20170613.pdf	142 KB

3.9.2 BW4SL - Reporting Authorizations

SAP Note [2478384](#) - BW4SL - Reporting Authorizations

Version 2 from 2017-07-05

Component: BW-BEX-OT-OLAP-AUT - Authorizations

Description

SAP BW Reporting Authorizations (3.x format) are not available in SAP BW/4HANA.

Other Terms

\$REPAUTH

Prerequisites and Checks

There is no analysis available, if the Reporting Authorizations are used or not.

Recommendations

Reporting authorizations are obsolete since SAP BW 7.3. If you are converting from lower SAP BW releases to SAP BW/4HANA and are still using reporting authorizations, you have to switch to Analysis Authorizations.

Related Information

[Reporting Authorizations --> Analysis Authorizations](#)

[Analysis Authorizations](#)

[Migration of Reporting Authorizations to the New Concept](#)

References

SAP Note	Title
820183	New authorization concept in BI
964905	New concepts and generation of analysis authorizations
1125108	Use of obsolete 3.x authorizations in BW 7.x

3.10 SAP BW - Content

3.10.1 BW4SL - BI Content

SAP Note [2400585](#) - Collective Note: SAP BW/4HANA Content 1.0 (BW4CONT 100 & BW4CONTB 100)

Version 22 from 2019-06-26

Component: BW-BCT - BW only - Business Content and Extractors

Description

This is a Collective SAP Note for **SAP BW/4HANA Content 1.0**.

Important: For **SAP BW/4HANA Content 2.0** there exists an own Collective SAP Note: [2785525 - Collective Note: SAP BW/4HANA Content 2.0 \(BW4CONT 200 & BW4CONTB 200\)](#).

Other Terms

SAP BW/4HANA Content Basis Add-On, SAP BW/4HANA Content Add-On, SAP BW/4HANA, BW4CONT, BW4CONTB, SAP HANA-optimized BW Content

Prerequisites and Checks

You are using SAP BW/4HANA Content 1.0 (BW4CONTB 100 and/or BW4CONT 100).

Recommendations

This is a collective SAP Note for the SAP BW/4HANA Content 1.0 (BW4CONT 100 and BW4CONTB 100).

In the section **References** all relevant SAP Notes concerning the SAP BW/4HANA Content 1.0 are listed.

For an overview about the shipped content for SAP BW/4HANA 1.0 please see the following online documentation:

SAP Online Help

SAP BW/4HANA Content

<http://help.sap.com/bw4content>

Frequently Asked Questions:

[2785514 - FAQ: SAP BW/4HANA Content \(BW4CONT & BW4CONTB\)](#)

References

SAP Note	Title
2289424	S4TWL - SAP S/4HANA and SAP Business Warehouse Content - BI_CONT / BW4CONT
2393067	Release strategy for the ABAP add-on BW4CONT / BW4CONTB
2395579	SAP BW/4HANA Content - Additional information on delivered variables
2395613	SAP BW/4HANA Content - Additional information on delivered InfoObjects
2397520	SAP BW/4HANA Content - Differences to SAP HANA optimized BI Content delivered with BI CONT 7.57
2398990	ORT_WRF1_ATTR missing when trying to collect or activate BW4CONT infoobject OPLANT
2400685	SAP BW/4HANA Content 1.0 - Recommended SAP BW/4HANA 1.0 support package and SAP Notes
2404023	Syntax Error in CL_RSMD_RS_UTILITIES - RSRTS_CDS_VAR_F4_BADI conversion
2433354	Missing Business Content DataSources or Transformations when using ODP framework
2448371	SAP HANA-optimized BW Content for Inventory Management: OCUSTOMER wrongly mapped (2LIS_03_BF)
2500202	S4TWL - BW Extractors in SAP S/4HANA
2548065	SAP HANA-optimized BI Content and SAP S/4HANA
2678507	Composite SAP Note for SAP ERP / S/4HANA Inventory Management in SAP BW/4HANA
2808613	Creation of DTP for extraction from OC_BILLINGDOCUMENTITEMBASICDEX to /IMO/D_SD431 fails

3.10.2 BW4SL - Administration Cockpit and Technical Content

SAP Note [2467074](#) - BW4SL - Administration Cockpit and Technical Content

Version 4 from 2017-07-03

Component: BW-BCT-TCT - BW only - Technical Content and BW Administration Cockpit

Description

SAP BW Administration Cockpit and Technical Content (OBWTC*, ORSTT*, OTCT* name ranges) are not available in SAP BW/4HANA. Also, VirtualProviders for change log of Analysis Authorizations (OTCA* name range) are not available in SAP BW/4HANA.

Note: Central InfoObjects are still shipped with SAP BW/4HANA (see attachment for list as of release 1.0 SP 4).

Other Terms

\$TCT, OTCT, \$TCA, OTCA

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA.

See node: Manual Redesign (take the necessary action) --> BW Object Type --> TLOGO CUBE (InfoCube, but not VirtualProviders), TLOGO ODSO (DataStore Object), TLOGO MPRO (MultiProvider), TLOGO IOBJ (InfoObjects)

See node: Automated Clean-up --> Deletion of SAP Delivered Technical Content --> All other technical content objects

Recommendations

Technical content objects can be deleted using program RS_DELETE_TECHNICAL_CONTENT. Executing that program with default parameters will not process objects related to persistency and reporting. This will allow customer to preserve the data models and statistical data by converting the models to SAP BW/4HANA compatible objects. If you do not need these objects, execute the report with option "Include ODSO/CUBE/MPRO".

In general, SAP BW Technical Content is being replaced by ABAP CDS views. For more details, see [CDS Views for Data Warehouse Monitoring](#).

Attachments

File Name	File Size
SAP_BW4HANA_OTC_InfoObjects.xlsx	32 KB

3.10.3 BW4SL - Conversion of DataSource Field into InfoObject

SAP Note [2487597](#) - BW4SL - Conversion of DataSource Field into InfoObject

Version 1 from 2017-10-18

Component: BW-BCT-GEN - BW Only - BI_CONT/BI_CONT_XT + BW4CONTB/BW4CONT

Description

Conversion of DataSource Field into InfoObject for Business Content is not available in SAP BW/4HANA. The corresponding classic DataStore Object (OGN_CONV) is not available.

Trying to activate Conversion of DataSource Fields in SAP BW/4HANA end with error message "activation failed".

Other Terms

ODSO, DODS, OGN_CONV, RS_CONV_ACTIVATE, RS_BCT_GN_CONVERT_IOBJ

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA.

See node: Automated Cleanup --> Adjustments

Recommendations

Although function module RS_BCT_GN_CONVERT_IJOB exists SAP BW/4HANA, it cannot be used to convert field to InfoObject values because the corresponding DataStore Object is not available in SAP BW/4HANA.

As an alternative, you can use standard transformation rules or a look-up using a customer DataStore Object (advanced).

Related Information

[Conversion of DataSource Field into InfoObject](#)

References

SAP Note	Title
2451013	BW4SL - DataStore Objects (classic)
2487535	BW4SL - Personalization

3.10.4 BW4SL - BI Content Analyzer

SAP Note [2526601](#) - BW4SL - BI Content Analyzer

Version 1 from 2017-08-31
Component: BW-BCT-ANA - BW only - BI Content Analyzer

Description

The BI Content Analyzer is not available in SAP BW/4HANA.

Other Terms

\$BICA, RSBICA

Prerequisites and Checks

There is no analysis available, if the BI Content Analyzer is used or not.

Recommendations

Currently, there is no function equivalent available. You can use SAP Information Steward to perform metadata analysis.

3.10.5 BW4SL - Change Documents for Analysis Authorizations

SAP Note [2467074](#) - BW4SL - Administration Cockpit and Technical Content

See "BW4SL - Administration Cockpit and Technical Content".

3.11 SAP BW - Other

3.11.1 BW4SL - Analysis Process Designer

SAP Note [2444220](#) - BW4SL - Analysis Process Designer

Version 4 from 2018-11-06
Component: BW-EI-APD - Analysis Process Designer

Description

The SAP BW Analysis Process Designer (APD) is not available in SAP BW/4HANA.

Other Terms

ANMO, DANM, ANPR, DANP, ANSO, DANS, RSANWB

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA:

See node: Automated Cleanup --> Deletions --> TLOGO ANMO, ANPR, ANSO (Analysis Process Designer)

Recommendations

The objects related to APD are deleted when converting to SAP BW/4HANA. There is no 1:1 replacement for all the features contained in APD in one place, but there is a set of features available in SAP BW/4HANA which make it possible to cover the important features and functions even more efficiently.

Four main use cases are often covered with the APD as a very generic tool-kit:

1. Analysis processes for data mining / predictive
2. (Lightweight) data staging / transformation, including query result downloads
3. Local, ad hoc analysis
4. Combine data (several sources) with unions/joins

Use case 1. should mainly be covered with the SAP product SAP Analytics Cloud. Some lightweight/straight-forward scenarios can be built with SAP HANA Analysis Processes in SAP BW/4HANA (i.e. a few PAL/AFL functions are implemented such as ABC Analysis, K-means and others).
See also [Creating a SAP HANA Analysis Process](#)

Use case 2. should mainly be covered by modeling Data Flows
See also [Modeling Data Flows](#)

Use case 3. should mainly be covered with BW Workspaces.

Use case 4. should mainly be covered by using the regular SAP BW/4HANA staging capabilities or modelling virtually in a CompositeProvider (with Open ODS View for the integration of external sources).

This is always a case-by-case decision however, depending on the customer scenario.

Some examples and ideas:

- For ad-hoc analysis you want to write files to a DataStore Object (advanced) --> use the local provider in BW Workspaces (load file or query result to local provider)

- Write a query result to persist it in SAP BW/4HANA or externally --> use a Query (Query is used as InfoProvider) as source of a DTP and load the data to a DataStore Object (advanced) or use an Open Hub Destination

- Join with master data --> use "Read master data" in transformations (mass data enabled)

- Writing data output to a file --> use an Open Hub Destination

For semi-automated conversion of APD processes to Process Chains You can use the **APD Transfer Tool**. The Tool is part of the SAP BW/4HANA Conversion Toolbox, Revision 7 (SAP Note **2383530**). Detailed information incl. user guide You will find in the document "Conversion Guide for SAP BW/4HANA" -> https://help.sap.com/doc/c3f4454877614bc7b9e85ae1f9d1d2c7/1.0/en-US/SAP_BW4HANA_10_Conversion_Guide.pdf

Related Information

[Analysis Process Designer](#)

3.11.2 BW4SL - Analytical Model

SAP Note [2444220](#) - BW4SL - Analysis Process Designer

See "BW4SL - Analysis Process Designer".

3.11.3 BW4SL - Analytical Data Source

SAP Note [2444220](#) - BW4SL - Analysis Process Designer

See "BW4SL - Analysis Process Designer".

3.11.4 BW4SL - Data Mining Model

SAP Note [2444220](#) - BW4SL - Analysis Process Designer

See "BW4SL - Analysis Process Designer".

3.11.5 BW4SL - Other Unavailable Objects

SAP Note [2470123](#) - BW4SL - Other Unavailable Objects

Version 3 from 2017-10-04

Component: BW - SAP Business Warehouse

Description

The following object types are not available in SAP BW/4HANA:

- Analytical Service
- Analytical Service Types
- Data Access Service
- Data Mining Model
- Inspection Plan
- KPI Catalog Entry
- KPI Definition
- Hierarchy Object
- Enhancement Object

These object types are obsolete already in SAP BW.

The following object types are related to objects not available in SAP BW/4HANA:

- Call Package
- Transfer InfoSource master data
- Intelligent Services
- Intelligent Services Classes
- Operational Data Provider (Enterprise Search-Based)
- BPC Application
- BPC Web documents - LiveReport
- BPC Member Access Profile
- BPC Appset
- BPC Web document category
- BPC Web document folder
- BPC Web document - workspace
- BPS Excel Templates
- BPS STS Documents
- BI Conversion Services

Other Terms

ANSE, ANST, DDAS, DDDA, DMMO, DDMM, INSP, DINS, KPCE, DKPC, KPDF, DKPD, HIER, ISCP, DISC, ISMT, ISRV, ISVC, 1APP, ALPT, AMPF, APPS, AWDC, AWFD, AWKP, BRCL, PSRO, SWHL, SWHP, SWHR, SWKL, SWKP, SWKR, BIXP, DBIX, ENHO

Prerequisites and Checks

Run program RS_B4HANA_CONVERSION_CONTROL to determine which objects are available in or can be converted to SAP BW/4HANA.

See node: Automated Cleanup --> Deletions

Recommendations

The objects will be automatically deleted when switching to "B4H mode". If you need any of the related functionality, then you must replace it before the switch to "B4H mode".



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