SAP Analytics Cloud
Integrating with SAP BW - Best Practices

ASUG82501
May 7, 2019
The information in this presentation is confidential and proprietary to SAP and may not be disclosed without the permission of SAP. This presentation is not subject to your license agreement or any other service or subscription agreement with SAP. SAP has no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation and SAP’s strategy and possible future developments, products and or platforms directions and functionality are all subject to change and may be changed by SAP at any time for any reason without notice. The information in this document is not a commitment, promise or legal obligation to deliver any material, code or functionality. This document is provided without a warranty of any kind, either express or implied, including but not limited to, the implied warranties of merchantability, fitness for a particular purpose, or non-infringement. This document is for informational purposes and may not be incorporated into a contract. SAP assumes no responsibility for errors or omissions in this document, except if such damages were caused by SAP’s willful misconduct or gross negligence.

All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of their dates, and they should not be relied upon in making purchasing decisions.
Agenda

Best Cloud integration with SAP BW

Technical overview
- Backend version pre-requisites
- Data connectivity options
- Supported BW query concepts

Best practices considerations for SAP BW live connections
SAP Analytics Cloud

Best Cloud integration with SAP Business Warehouse
Preface: BW Live Connectivity

“BW Live” embraces live connectivity to BW, BW/4HANA and S/4HANA

- SAP Analytics Cloud connects to the BW Query Interface (“InA Service”) available in all those systems to consume live data
- In S/4HANA systems, CDS Views are exposed through automatically generated BW Queries for analytical live data consumption
- In this document, for readability, we will use the term “BW Live Connectivity” to denote live connectivity to SAP BW, SAP BW/4HANA and SAP S/4HANA altogether
SAP Analytics Cloud Integration with SAP BW and BW/4HANA
Unique Direct Connectivity With BW Leveraging Best-In-Class SAP Interfaces

- Simply connect to BW Queries or generated HANA views in your on-premise BW systems
- No additional modeling in SAC needed (renaming and grouping of measures and dimensions is possible, but optional)
- No data replication into SAC
- Data remains behind your corporate firewall all the time when running queries and displaying results
- No authorization replication needed: BW authorizations are fully respected

Best Possible End-to-End Integration.
- Use of unique best-in-class query interface (Firefly) to BW and HANA engines
- Ability to access BW and HANA features that cannot be accessed through standard query interfaces (SQL, MDX)
- Firefly interface is continuously enhanced alongside BW and HANA engine enhancements
SAP Analytics Cloud
Value Proposition for SAP BW Customers

- Great looking dashboards with BW live data out-of-the-box
  - Can be created by end-users in a self-service fashion without help from IT and without scripting / coding
  - Linked Analysis: Simply define filter relations between charts and tables without scripting
  - Use Powerful visualizations not available in on-premise clients, e.g. time-series charts, in-line charts in tables (sparklines)
- Powerful options to enrich BW Query data, e.g.
  - Blending of live BW Query data with local / acquired data
  - Restricted Measure calculations on-the-fly
- Consolidation of heterogeneous landscape with SAP on-premise tools such as Bex Web / WAD, Design Studio, Lumira, BI Platform.
Live data connectivity to SAP BW

Technical prerequisites

Supported SAP BW releases
- SAP BW 7.5 SP8+
- SAP BW 7.4 SP17+
- SAP BW/4HANA 1.0 SP4+

Upgrade to SAP BW/4HANA 2.0 and SAP BW 7.5 support is fully recommended for best integration experience. See SAP Note 2715030 for details.

Supported deployments
- SAP BW running on any DB
- SAP BW running on SAP HANA
- SAP BW/4HANA

Support live connection to the BW queries
Live data connectivity to SAP BW
Planning ahead with SAP BW technical prerequisites

Which SAP BW versions are recommended?

- SAP BW/4HANA and SAP BW 7.5 support is recommended over SAP BW 7.4 support.
- Best support for upcoming roadmap features planned for SAP Analytics Cloud will be provided with SAP BW 7.50 SP16 or SAP BW/4HANA 2.0. Customers are recommended to plan for a respective upgrade once those BW versions become available.
- Be aware of certain upcoming roadmap features planned require SAP HANA (i.e. SAP BW on HANA) as part of the overall best support experience.
- Refer to SAP Note 2715030 for more details.

Should I still apply SAP Notes (reference SAP Note 2541557)?

- Yes, if you are not yet on BW 7.50 SP16 or SAP BW/4HANA 2.0, continue to follow the process of SAP Notes application via the BW Note Analyzer report.
- SAP Note 2541557 will discontinue after BW 7.50 SP16 or SAP BW/4HANA 2.0.
- Be aware upcoming roadmap features will only be available starting from BW 7.50 SP16 or SAP BW/4HANA 2.0.
Data import connectivity to SAP BW

Technical prerequisites

Supported SAP BW Releases

- SAP BW 7.3+
- SAP BW 7.4+
- SAP BW 7.5+
- SAP BW/4HANA 1.0 SP4+ (SP4 requires application of SAP Note 2440670. Not required for SP5+)

Supported deployments

- SAP BW running on any DB
- SAP BW running on SAP HANA
- SAP BW/4HANA

Support data import connection to both the BW queries and BW InfoProviders
Technical overview

Data connectivity options
**SAP Analytics Cloud and SAP BW**

**Data connectivity options**


- No data replication
- Always report on latest information in BW
- Leverage all data authorizations from BW
- Leverage all investments in BW Queries and other meta data such as hierarchies
- Seamless drill-down from aggregated data to lowest data granularity in BW
- Best-in-class query interface to SAP BW: Access SAP BW features that cannot be accessed through standard SQL or MDX query interfaces
- When connecting from the corporate network, data is kept behind your firewall. No sensitive data will be moved to the Internet
- Support of BW Queries with two structures and cell calculations
- Support of all BW variable types
- Support of multiple BW parent-child hierarchies
- Parallel execution of BW Queries

**Import Connectivity**

- Import BW Query data into SAP Analytics Cloud local models
- Use all SAP Analytics Cloud features that are available with local models (e.g. Smart Assist features)
- Might provide a performance edge for overview dashboards with highly aggregated data and limited in-dashboard drill-down (drill-through to dashboards with live connectivity possible)
Live data connectivity to SAP BW
High level architecture

Live access to the BW Queries (*) in SAP BW

(*) Access to SAP BW InfoProviders is possible via a default Query. The default Query is exposed in the Object Services of SAP BW.
**Live data connectivity to SAP BW**

Deployment option: access data behind corporate firewall

Access on-premise data via Cross-Origin Resource Sharing (CORS)

- Best suited for connection to on-premise data behind the corporate firewall.
- No additional hardware requirements to deploy and maintain if public internet access is not required.
- Embedded scenarios are supported.

Authentication

- End to end SSO accomplished via SAML 2.0.
- Data security implemented at the source data is respected.
Live data connectivity to SAP BW
Deployment option: access data from public internet

Access on-premise data via public internet
- Best suited for analytic scenarios based upon mobile.
- Connection to on-premise data required where VPN into corporate network is not available.
- Recommend adding a reverse proxy within the DMZ, in addition to CORS configuration. Sole purpose is to publish the on-premise system to the internet.

Authentication
- End to end SSO accomplished via SAML 2.0.
- Data security implemented at the source data is respected.

Backend systems must be CORS enabled
Live data connectivity to SAP BW
Enabling CORS: Technical prerequisites

With the following NetWeaver AS ABAP versions, SAP provides built-in native support for CORS
- NetWeaver AS ABAP 7.52 SP02
- NetWeaver AS ABAP 7.51 SP06
- NetWeaver AS ABAP 7.50 SP12
- NetWeaver AS ABAP 7.40 SP20

Helpful resources relating to live connectivity setup with CORS
Data import connectivity to SAP BW
High level architecture

SAP BW on AnyDB
- Data Modelling
- Analytic Engine
- Data Management
- Planning

Any supported database

SAP BW/4HANA
- Data Modelling
- Analytic Engine
- Data Management
- Planning

SAP HANA

Pushdown

Data import connectivity to the BW Queries and BW InfoProviders

SAP HANA Cloud Connector

SAP Analytics Cloud Agent

SAP Analytics Cloud
Data import connectivity to on-premise data

Easy installation of Cloud Connector and Cloud Agent via SAP Analytics Cloud Simple Deployment Kit:


SAP HANA Cloud Connector
- Securely transfer data between the on-premise data source and SAP Cloud Platform (TLS encrypted).

SAP Analytics Cloud Agent
- Manage connections, and sending query requests to the on-premise data source.

Supports JCO libraries
- Used for connection to your SAP BW system.
Technical overview

Supported BW query concepts
BW query integration
Live connection vs Data Import connection

Live connection guidelines against BW queries:

SAP Analytics Cloud provides strong product integration with core BW query features:
- Leveraging BW specific concepts: Hierarchies, Time Dependency, Structures, Cell Editor calculations, Data Authorizations, etc.
- Leveraging logic concepts like variable prompting, filtering.
- Investments in key presentation concepts. In many cases, SAP Analytics Cloud will offer equivalent or similar presentation concepts as native functionality.

Data import guidelines against BW queries:

SAP Analytics Cloud is leveraging selective BW query feature concepts relevant to data import:
- Once the data is imported into SAP Analytics Cloud, the calculation engine will be HANA. The BW OLAP engine is no longer tied to the imported data set.
- Imported data can be kept up to date via scheduled refresh.
## Supported BW query concepts (Live vs Data Import)

### Metadata support

<table>
<thead>
<tr>
<th>BW Query Feature</th>
<th>Live connection</th>
<th>Data import</th>
<th>General Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characteristics - NUMC</td>
<td>Yes</td>
<td>Limited</td>
<td>[Data Import] Dimension members imported as data type String, not Number</td>
</tr>
<tr>
<td>Characteristics - CHAR</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Characteristics - DATS</td>
<td>Yes</td>
<td>Limited</td>
<td>[Data Import] Dimension members can be manually mapped as data type Date during import</td>
</tr>
<tr>
<td>Characteristics - TIMS</td>
<td>Limited</td>
<td>No</td>
<td>[Live] Visualizations / input controls do not support sorting based on data type Time. Dimensions of Time data type can not be leveraged in Time Series Charts</td>
</tr>
<tr>
<td>Free Characteristics</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Key Figures - Amount / Quantity</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Key Figures - DATS</td>
<td>Yes</td>
<td>No</td>
<td>[Live] Measures of type DATS can be leveraged as part of Table visualization. Native sorting as DATS data type is not supported</td>
</tr>
<tr>
<td>Key Figures - TIMS</td>
<td>Yes</td>
<td>No</td>
<td>[Live] Measures of type TIMS can be leveraged as part of Table visualization. Native sorting as TIMS data type is not supported</td>
</tr>
<tr>
<td>Restricted Key Figures</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Calculated Key Figures</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
# Supported BW query concepts (Live vs Data Import)

## Metadata support

<table>
<thead>
<tr>
<th>BW Query Feature</th>
<th>Live connection</th>
<th>Data import</th>
<th>General Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Attributes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Navigational Attributes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Characteristic Structure</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Hierarchical Characteristic Structure</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Key Figure Structure</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Hierarchical Key Figure Structure</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>2 Structure Support from BW Query</td>
<td>Yes</td>
<td>No</td>
<td>[Data Import] Import from queries with 2 structures is not allowed [Live] Explorer does not support queries with 2 structures</td>
</tr>
<tr>
<td>Compounded Characteristics</td>
<td>Yes</td>
<td>Yes</td>
<td>There is no option to show the compounded key value</td>
</tr>
<tr>
<td>Static Filters</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Dynamic Filters</td>
<td>Yes</td>
<td>Limited</td>
<td>[Data Import] Dynamic filters are treated like static filters are part of data import</td>
</tr>
</tbody>
</table>
**Supported BW query concepts (Live vs Data Import)**
Variable Types support

<table>
<thead>
<tr>
<th>BW Query Feature</th>
<th>Live connection</th>
<th>Data import</th>
<th>General Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optional Variables</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Mandatory Variables</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Characteristic Value Variables</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Formula Variables</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Hierarchy Variables</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Hierarchy Node Variables</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Hierarchy Version Variables</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Key Date Variables</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Text Variables</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
## Supported BW query concepts (Live vs Data Import)
### Variable Processing Types and Presentation

<table>
<thead>
<tr>
<th>BW Query Feature</th>
<th>Live connection</th>
<th>Data import</th>
<th>General Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Entry / Default Value</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Replacement Path</td>
<td>Yes</td>
<td>Yes</td>
<td>For the variable processing type Replacement Path: Variables with replacement from the query result are not supported when the second query also has variables that are configured as ready for input.</td>
</tr>
<tr>
<td>Customer / SAP Exits</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Authorizations</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Single Value</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Multiple Single Value</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Internal / Range Value</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Selection Option</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Selection Option - Contains Pattern</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Selection Option – Include / Exclude</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Pre-calculated Value Set</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
## Supported BW query concepts (Live vs Data Import)

Variable Processing Types and Presentation

<table>
<thead>
<tr>
<th>BW Query Feature</th>
<th>Live connection</th>
<th>Data import</th>
<th>General Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support for single Key Date</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Support for multiple Key Date</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Cascading Hierarchy / Hierarchy Node variable dependency</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Cascading variables for Compound Characteristics</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Support for Variable default values</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Support for BW Variants</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Support for BW Personalization</td>
<td>Yes</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Support for Manual Entry</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Support for Merge / Un-merge</td>
<td>Yes</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>
# Supported BW query concepts (Live vs Data Import)

## BW query functionality

<table>
<thead>
<tr>
<th>BW Query Feature</th>
<th>Live connection</th>
<th>Data import</th>
<th>General Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currency / Unit Conversion</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Conditions in Rows</td>
<td>Yes</td>
<td>Limited</td>
<td>[Data Import] Once the BW dataset is acquired to SAP Analytics Cloud, the OLAP engine is no longer involved. Hence, the user must be careful in dealing with the BW dataset in SAP Analytics Cloud, as the context of the BEx condition support is no longer applied.</td>
</tr>
<tr>
<td>Conditions in Columns</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Conditions for fixed set of characteristics</td>
<td>Yes</td>
<td>Limited</td>
<td>[Data Import] See above note for Conditions in Rows</td>
</tr>
<tr>
<td>Conditions for independent characteristics</td>
<td>Yes</td>
<td>Limited</td>
<td>[Data Import] See above note for Conditions in Rows</td>
</tr>
<tr>
<td>BEx Exceptions</td>
<td>No</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Constant Selection</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Cell Editor Calculation</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Local calculations</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Exception Aggregation</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Zero Suppression</td>
<td>Yes</td>
<td>Limited</td>
<td>[Data Import] Zero suppression defined along the rows is applied at time of data import. Zero suppression along the columns is not supported.</td>
</tr>
</tbody>
</table>
## Supported BW query concepts (Live vs Data Import)

### Display settings

<table>
<thead>
<tr>
<th>BW Query Feature</th>
<th>Live connection</th>
<th>Data import</th>
<th>General Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scaling Factor</td>
<td>Limited</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Reverse Sign (+/-)</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Number of Decimals</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Hide / Show the Element</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Sort Characteristics</td>
<td>Yes</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Display Options for Characteristics (Key, Key &amp; Text, Text)</td>
<td>Yes</td>
<td>Yes</td>
<td>[Data Import] Can be achieved through metadata mapping upon import of data</td>
</tr>
<tr>
<td>Result Rows (Show, Suppress)</td>
<td>Yes</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Placement of subtotal (Above / Below nodes)</td>
<td>Yes</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>
Best practices considerations for SAP BW live connections
Tips and Tricks
Backend considerations

Query Read Mode

- Configuration setting in BW where the Read mode determines how the OLAP processors handles data during navigation
  - Recommend setting “Query to read when you navigate”
- Run T.code RSRT
  - Read mode can be configured through the Query “Properties”
Tips and Tricks
BW query design considerations (1/2)

BW query consumption guidelines:

- Continue to leverage existing BW query assets with SAP Analytics Cloud. No query re-design as the objective for seamless consumption.
- SAP Analytics Cloud does not leverage the “Allow External Access to this Query” flag in the BW query. This setting is not relevant to SAC.
- Continue to follow existing best practices with BW query design: minimize downstream development.
- Consider the advantage of leveraging variables as part of your BW query:
  - Story based input controls can not be shared across
- Leverage all necessary complex calculations, restricted measures, calculated measures as part of your BW query: minimize downstream development
  - Allows for sharing across multiple Stories
  - Take advantage of the horsepower in your BW system
- Leverage the data level security in your BW system
  - Use BI authorizations
Tips and Tricks
BW query design considerations (2/2)

Units and scaling

- Stories in SAP Analytics Cloud currently allows users to configure the following scaling options:
  - Thousand
  - Millions
  - Billions

- User would expect that already configured scaling factors in the BW query are transferred to SAP Analytics Cloud in case of a Live / Import data set. However, this can only happen for supported scaling factors:
  - The raw number is shown for un-supported scaling factors
  - Take into consideration it may make sense to set the KPI / measures in the BW query as un-scaled, to avoid user confusions
Tips and Tricks
Story building performance considerations for live connections

Enhance Story Building performance

▪ By default, modification to your table or chart during Story design will send a query to the BW server, resulting in an immediate update to the table or chart.

▪ Use option “Optimize Story Builder Performance” in the Model in situations where response time is slow
  – Network bandwidth is slow
  – BW server is under heavy load
**Tips and Tricks**
Reduce metadata retrieval in Model for live connections

**Dimension Hide / Show settings in Model**
- BI Administrators can determine which business metadata will be made available in Models for content creators

- For BW queries with large number of dimensions, it may make sense to limit showing only the metadata that is important to the business
  - Hidden dimensions in Model will not be retrieve as part of metadata load while opening a Story
Tips and Tricks
Manage business metadata in Models

Dimension and Measure Settings in Model
- BI Administrators can organize, and harmonize business metadata without dependence on IT
  - Dimension grouping
  - Dimension rename
  - Dimension hide / show
  - Measure rename
  - Measure scale and decimal configuration

- Facilitate business users need for easy downstream development of BI content
Tips and Tricks
Story rendering performance considerations for live connections

Parallel processing of BW queries

- BI Administrators can configure the number of parallel sessions allowed on your SAP BW system.
- Stories containing multiple BW queries will be executed in parallel.

Recommended guidelines

- Parallel sessions will introduce additional overhead on SAP BW server resources. Ensure BW server is properly sized to handle increase in session processing.
- Use this option where performance improvement is absolutely required.
Questions?
Thank you
SAP Analytics Cloud

Integration roadmap with SAP BW
Live connections to SAP BW

Q2/2019

Enhanced analytic capabilities
- Browser-based data blending: SAP BW live data models with imported data models
- Waterfall chart
- Variance chart (measure-based)
- Geo maps (except choropleth layers) (1)
- Custom ordering of measures in Table
- Tuple filters: chart to chart filtering based on multiple dimensions (flat presentation) (1)

Integration with BW concepts
- Charts: leverage default text presentation defined in BW query (short / middle / long)

Performance Improvements

Q3/2019

Enhanced analytic capabilities
- Data blending
  - SAP BW live with SAP BW live
- Enhanced variance chart (version- and time-based)
- Enhanced Geo maps: Support choropleth layers (1)
- Enhanced tuple filters: Support for hierarchies (1)
- Prompting enhancements: Date Picker
- Standard pivot-style analysis of BW queries

Integration with BW concepts
- Enhanced support of Queries with two structures
  - Sorting
  - Thresholds based on individual structure member combinations

Performance Improvements

Future Direction

Enhanced analytic capabilities
- Enhanced data blending scenarios
  - Blending of BW Live with HANA Live
  - Blending in BW HANA or other on-premise HANA engine
  - Blending on date dimension
- Custom grouping of dimension members
- Custom ordering of dimension members
- Calculation enhancements: Aggregation calculation (1)
- Enhanced standard pivot-style analysis

Integration with BW concepts
- Ad-hoc currency conversion
- Prompting: Ability to create and edit Variants
- Display of images in table based on BW XXL attributes
- Linked Nodes support in hierarchies

Performance Improvements

Note: Most features on this slide require SAP BW 7.50 or higher and will not be supported with SAP BW 7.40. For more details on feature support see SAP Note 2715030.

(1) Requires SAP HANA

This is the current state of planning and may be changed by SAP at any time.
Key links relating SAP Analytics Cloud integration with SAP BW
For customers and partners

Key links

• System Requirements & Technical Prerequisites
  https://help.sap.com/doc/00f68c2e08b941f081002fd3691d86a7/2018.12/en-US/11b4e5ff76eb4747bc255d7037be1f01.html

• Data Import Connections to SAP BW

• SAP Analytics Cloud (BW Support Matrix)
  • Live connection to BW queries
    https://help.sap.com/doc/00f68c2e08b941f081002fd3691d86a7/release/en-US/ba7ee8dc6dcd4069b210ec712be52a31.html
  • Data import connection to BW queries
    https://help.sap.com/doc/00f68c2e08b941f081002fd3691d86a7/release/en-US/780967ff44294c01b7f66ef837695f2b.html

• Generating SAP HANA views from SAP BW
  • Generating views from SAP BW 7.4
    https://help.sap.com/viewer/04030263a0d041309a039fa3ea586720/7.4.19/en-US/6633d851345c4770bd4e523701b9f5b0.html
  • Generating views from SAP BW 7.5
    https://help.sap.com/viewer/04030263a0d041309a039fa3ea586720/7.5.11/en-US/6633d851345c4770bd4e523701b9f5b0.html

• General Story design best practices for SAP Analytics Cloud
  https://www.sapanalytics.cloud/resources-bi-performance-best-practices/
Key links for more information
For customers and partners

Key links

- Road maps on sap.com  
  www.sap.com/roadmaps
- SAP Community Network  
  http://www.sdn.sap.com/
- SAP Innovation Discovery  
  http://www.sap.com/innovationdiscovery
- SAP Analytics Cloud Help  

Where to go to provide product feedback and ideas

- SAP Idea Place  
  https://ideas.sap.com
- Influence programs  
  http://service.sap.com/influence
- SAP User Groups  
  http://www.sapusergroups.com/