

# SAP BusinessObjects BI4.2 SP04

## What's new

Version 1.0

April 20, 2017

PUBLIC



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# About this presentation

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## Target audience

- Intended to be a detail-level product overview of what is new in 4.2 SP04
- Assumes some knowledge of BI 4.2 suite and features

## Scope of the presentation

- Detail-level feature overview of what is new in 4.2 SP04

For more detailed information and features in each area, refer to:

- [What's New in 4.2](#)
- [What's New in 4.1](#)
- [Product Road Map documents](#)

# Previous What's New for BI4.2 Information

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- [What's New in BI4.2 Cumulative Deck](#)
- [What's New for BI4.2 L0](#)
- [What's New for BI4.2 L1](#)
- [What's New for BI4.2 L2](#)
- [What's New for BI4.2 SP03](#)
- [SAP BusinessObjects What's New Collection](#)

# Latest What's New for BI4.2 SP04

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The latest version of What's New for BI4.2 SP04 can be found via :

<PLACEHOLDER>

**SAP BusinessObjects What's New Collection:**

<https://blogs.sap.com/2014/11/24/sap-businessobjects-whats-new-collection/>

# SAP BusinessObjects Analytics portfolio



## Mobile First

Stunning interactive experience



## Lead the Cloud

Deliver new analytics capabilities, built natively on HCP

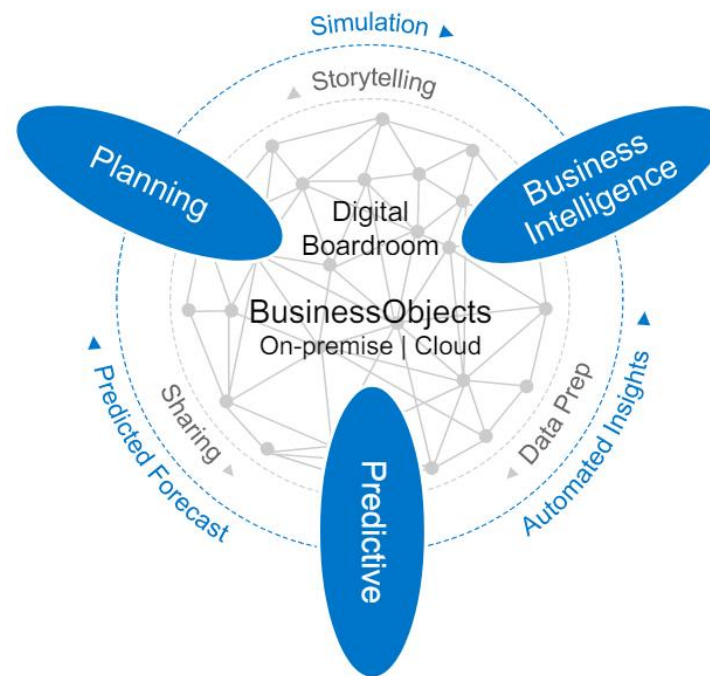


## Interoperability and Support for Hybrid Scenarios



## Innovate the Core

Modern, at scale on-premise deployments



SAP BusinessObjects Business Intelligence platform 4.2 delivers **innovations** that **simplify**, **enhance**, and **extend** the platform value without disrupting existing customer investments.

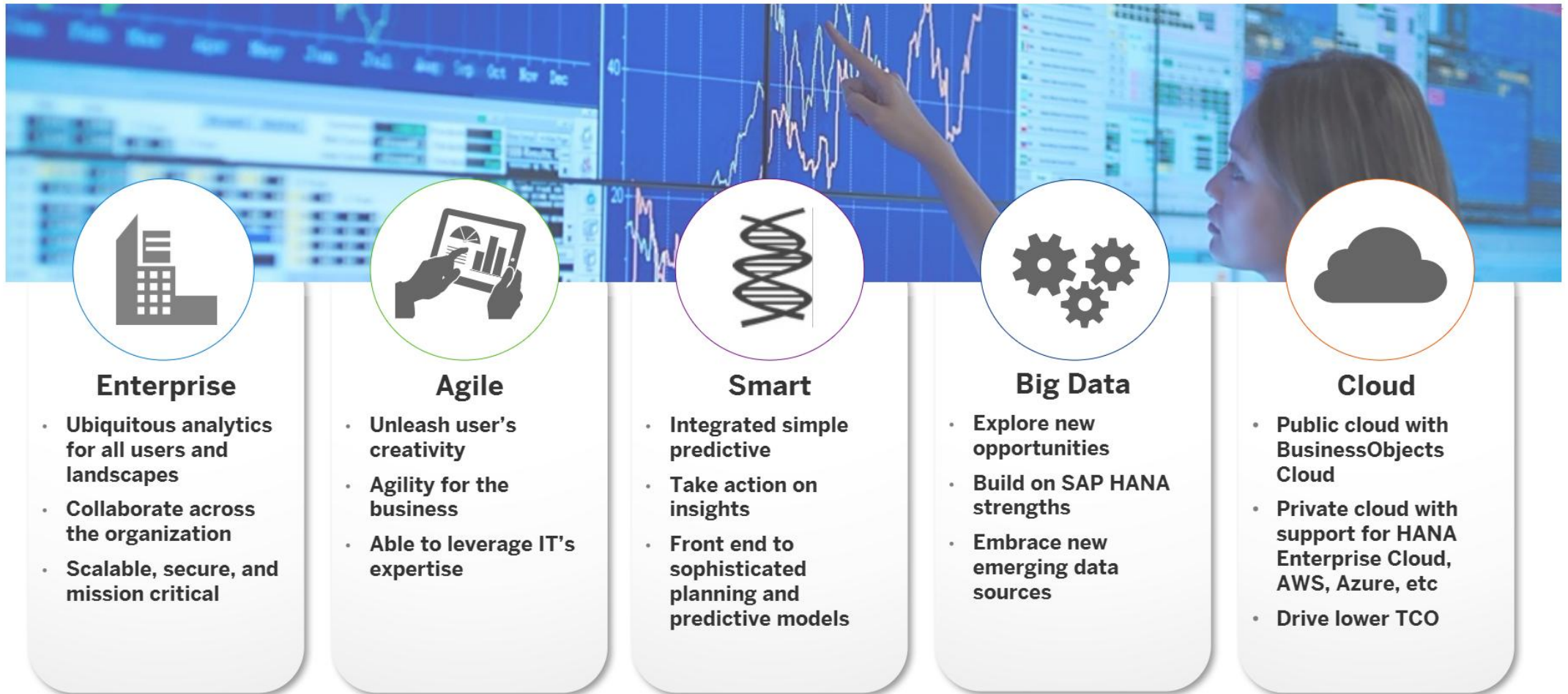
BI 4.2 SP04 offers advancements for all, including designers and analysts using **Web Intelligence**, **Crystal Reports** and **SAP Lumira 2.0**, IT administrators responsible for managing and optimizing the platform, ecosystem and development partners looking to extend the value and capabilities of the **integrated BI Platform**.

These innovations are designed to increase responsiveness, reduce costs and workload, and drive better decision making across the organization.



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# SAP BI Key Investment Areas





# Enterprise - Vision & Strategy

Ubiquitous, collaborative, scalable



## Enterprise

- Ubiquitous
- Collaborative
- Scalable

### Ubiquitous BI for all users and landscapes

- BI on mobile, cloud, on-premise
- Ready for global operation
- Flexible access to Enterprise governed data

### Collaborate across the organization

- For anyone across the organization - individuals, teams, or department
- Active sharing and collaborative decision making
- Consistent and engaging experience

### Scalable

- Scalable, secure, and mission critical
- Open platform to extend and embed
- For any size business, deployment, or organization

# Agile Visualization - Vision & Strategy

## Agility for the business



### Agile Visualization

- Creative
- Agile
- IT Friendly

### Unleash user's creativity

- Unlock hidden patterns in data
- Build beautiful, custom visualizations and stories
- Bring together corporate and personal data

### Agility for the business

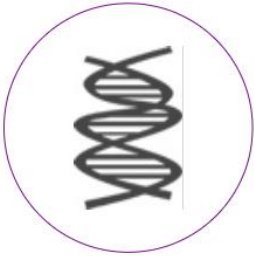
- Download and use quickly – no IT involvement needed
- Access and work with almost any data source independently
- Personal edition for free – both desktop and cloud

### Able to leverage IT's expertise

- Connect back to, and leverage, IT infrastructure
- View, publish and synchronize desktop data and visualizations from SAP Lumira™, fully leveraging SAP HANA
- Optimized for big data

# Smart - Vision & Strategy

## Predict and Act!



### Smart

- Integrated predictive
- Take action on insights
- Front end to sophisticated planning and predictive models

### Increase ROI, Minimize TCO

- Gain the competitive advantage; Get up and running quickly, low learning curve
- Predict to solve difficult business problems
- Application in every industry or Line of Business
- Intuitive for business users, yet robust enough for data scientists

### Predict and act faster than ever before

- Predictive solutions built to leverage big data and SAP HANA in-memory platform
- Open and extendable - leverage custom code or 1,000's of open source predictive workflows

### Deploy Predictive solutions anywhere, anytime

- Leverage existing data sources, from local to the enterprise data warehouse
- Share predictive insights easily within your LOB or with the entire enterprise
- Integration with SAP HANA-based applications and LOB solutions

# Big Data Analytics - Vision & Strategy

## Real-Time Insight with Big Data



### Big Data

- Explore
- Speed
- More Data

#### Explore new opportunities

- Leverage more data to have a comprehensive view of their business by analyzing previously discarded data
- Agile data preparation on big data sources brings Hadoop to the business user.
- Expand the 5 V's of Big Data (Volume, Velocity, Veracity, Variety & Velocity) with a 6th— Visualize
- Capitalize on Gartner's prediction of Big Data Discovery by focusing on interoperability with Predictive Analytics
- Big data analytics on Hadoop alone, or combined with HANA to leverage in-memory capabilities for real-time analytics
- The “whole suite” benefit, from data services thru to SAP HANA, IQ, the BI Suite

#### Embrace new emerging data sources

- SQL-like access via JDBC drivers offer opportunities to embrace emerging big data sources with existing investments
- Extend the support to big data sources based on their technical maturity and market demand with the universe SDK & SAP Lumira's open access SDK being available for sources not supported out of the box
- Tailored user experiences depending on the datasource, makes it easier for end users to navigate structured or semi-structured sources (Graph, NoSQL, etc.)

# Cloud - Vision & Strategy

## Exceed Your Business Expectations



### Cloud

- Simple
- Fast
- Flexible

### Faster and more accurate decisions

- SAP BusinessObjects Cloud: a complete SaaS Analytics solution built on the SAP HANA Cloud Platform
- Leverage on-premise pre-aggregated data anywhere, anytime and on any device
- View, publish and synchronize desktop data and visualizations from SAP Lumira, fully leveraging SAP HANA

### Broaden deployment options

- SAP HANA Enterprise Cloud
- Amazon Web Services, Microsoft Azure, IBM Softlayer, Alibaba YSF
- Partner Solutions; Your own hosted environment

### Drive lower TCO

- Turn-key BI Packages
- Multi-tenant private and public cloud support

# SAP BusinessObjects Solutions and Strategy



## LEAD THE CLOUD

Software as a service in the public cloud



Interoperability and Support for Hybrid Scenarios



## INNOVATE THE CORE

On-premise and/or private cloud

### SAP BusinessObjects Roambi

#### SAP BusinessObjects Cloud and SAP Digital Boardroom

All analytics capabilities in one product

Consumer-grade user experience

Embedded and standalone

High-performance, real-time platform

### SAP BusinessObjects Enterprise

#### BI

- SAP BusinessObjects BI 4.2, Mobile BI
- Lumira, Design Studio, Analysis for Office, Webi, Crystal Reports

#### Planning

- SAP BusinessObjects Planning and Consolidation 10.1 + *other solutions*

#### Predictive

- SAP BusinessObjects Predictive Analytics 3.0

On-premise and/or private cloud deployment options

# Building Bridges



## LEAD THE CLOUD

Software as a service in the public cloud

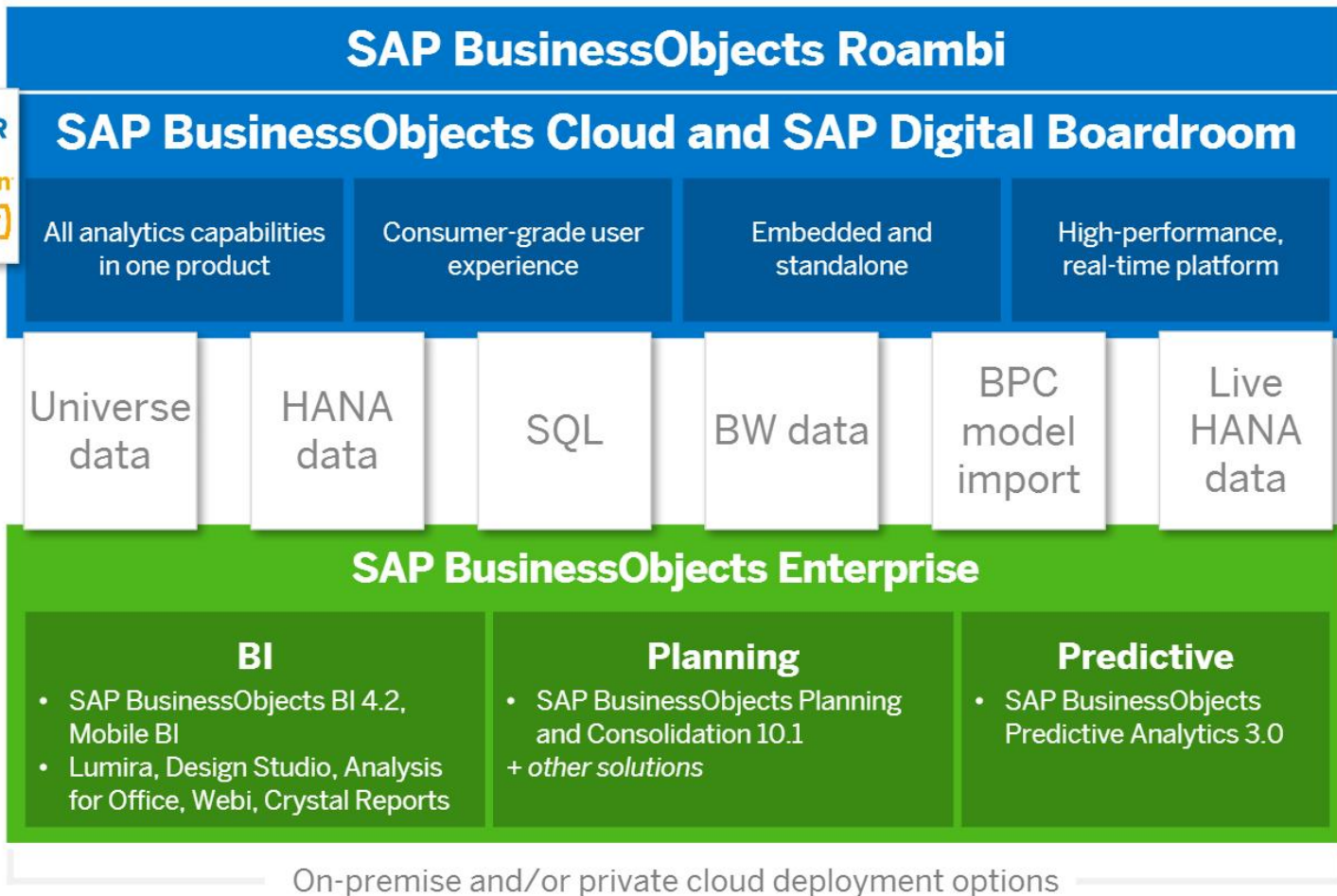


Interoperability and Support for Hybrid Scenarios

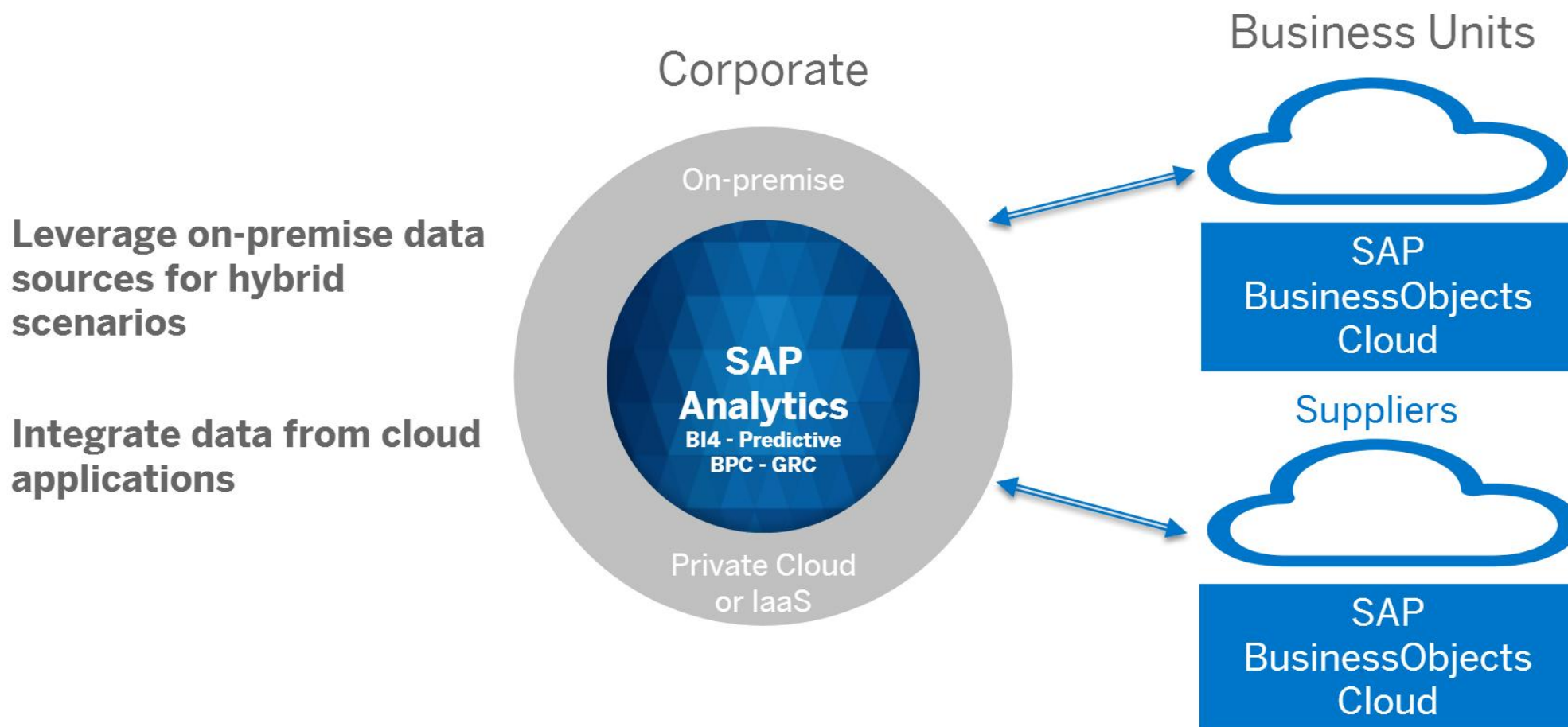


## INNOVATE THE CORE

On-premise and/or private cloud



# Hybrid: SAP BusinessObjects Cloud + BI





# Convergence Principles



**Focus on  
Use Cases**



**Continue to  
support all BI4.x  
content**



**Continue to  
support all BI4.x  
clients**



**No forced  
migrations**

# Convergence Result

Planned as of H1 2017

SAP BusinessObjects Lumira  
SAP BusinessObjects Explorer  
SAP BusinessObjects Analysis for OLAP  
SAP BusinessObjects Design Studio  
SAP BEX Web Application Designer  
SAP BusinessObjects Dashboards

## Lumira 2.x



**Data Discovery  
& Applications**

SAP BusinessObjects Analysis Office  
Live Office  
EPM Add-In  
SAP BEX Analyzer

## Analysis Office



**Office Integration**

SAP Crystal Reports  
SAP BusinessObjects Web Intelligence  
SAP BusinessObjects Set Analysis  
Desktop Intelligence

## Crystal Reports Web Intelligence



**Reporting**

Interoperability

- ✓ Retain simple, business user focused desktop tool & IT focused enterprise dashboard tool
- ✓ Promote business user visualizations to enterprise dashboards
- ✓ Changing requirements doesn't need a tool switch
- ✓ Support for offline applications in designer
- ✓ Combined server side add-on reduces IT administration cost
- ✓ Improved ease of use & adoption with single canvas for both visualization and storyboard authoring.
- ✓ Align with S/4 UI standard

# SAP BusinessObjects BI 4.2 Themes



## ○ Simplify

- Reduced **downtime** for patch upgrade
- Improved **upgrade** process
- Remove **upgrade barriers**
- Improved **collaboration experience**



## ○ Enhance

- Platform & client **enhancements**
- SAP **BW** and SAP **HANA** enhancements



## ○ Innovate

- **Innovation** in platform and clients
- **New Platform** support
- Customization, developer experience



## SAP BusinessObjects BI4.2 SP04 Top 5





# BI Platform

BI4.2 SP04 What's New



# SAP BusinessObjects BI 4.2 SP04 - Platform

## ○ Simplification for IT

- Server Group Exclusivity
- Virus Scan Integration
- openSSL updates
- X.509 Authentication
- Security Updates
- Rest Web Services

## ○ Enhancements for BI Administration

- Fiori Styled BI Launchpad
- NetWeaver Enterprise Portal
- HANA SAML Test Connection
- User Account Status
- Document Instances
- Inbox – Limit number of documents
- CMS DB Driver

## ○ Performance

- Search Enhancements
- Promotion Management
- Upgrade Management
- Installer

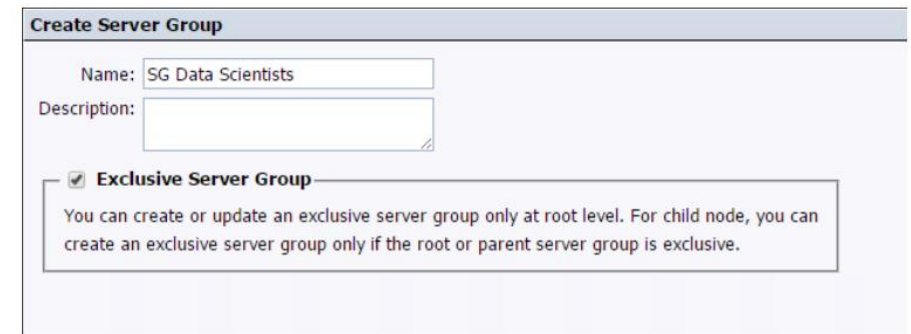
# SAP BusinessObjects BI 4.2 SP04 - Platform

## ○ SIMPLIFICATION for IT

### Server Group Exclusivity (1)

Enhanced with

- Assignment at Folder level for scheduling
- Assignment at Usergroup for viewing Crystal Reports
- Assignment at Usergroup for viewing Web Intelligence
- Assignment at Folder level for viewing Crystal Reports
- Assignment at Folder level for viewing Web Intelligence



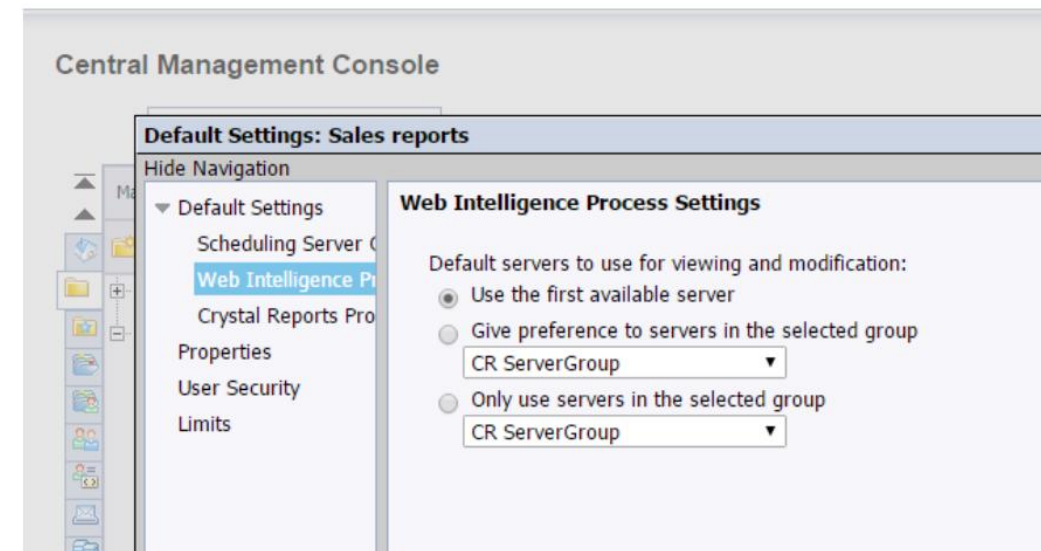
**Create Server Group**

Name: SG Data Scientists

Description:

**Exclusive Server Group**

You can create or update an exclusive server group only at root level. For child node, you can create an exclusive server group only if the root or parent server group is exclusive.



**Central Management Console**

**Default Settings: Sales reports**

Hide Navigation

- Default Settings
  - Scheduling Server C
  - Web Intelligence P**
  - Crystal Reports Pro
- Properties
- User Security
- Limits

**Web Intelligence Process Settings**

Default servers to use for viewing and modification:

- Use the first available server
- Give preference to servers in the selected group
- Only use servers in the selected group

CR ServerGroup

CR ServerGroup

# SAP BusinessObjects BI 4.2 SP04 - Platform

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## ○ SIMPLIFICATION for IT

### Server Group Exclusivity (2)

- With the ServerGroup Exclusivity, it allows to isolate a UserGroup to dedicated resources and hence ensure server availability.
- Offer a lot more flexibility to a BI Administrator.
- Greatly speed up the configuration of a BI system, because previously only possibility was to associate ServerGroups on the report level. Now with new implementation ServerGroup could be associated with Folders as well and for On Demand runtime requests in Web Intelligence and Crystal Reports.

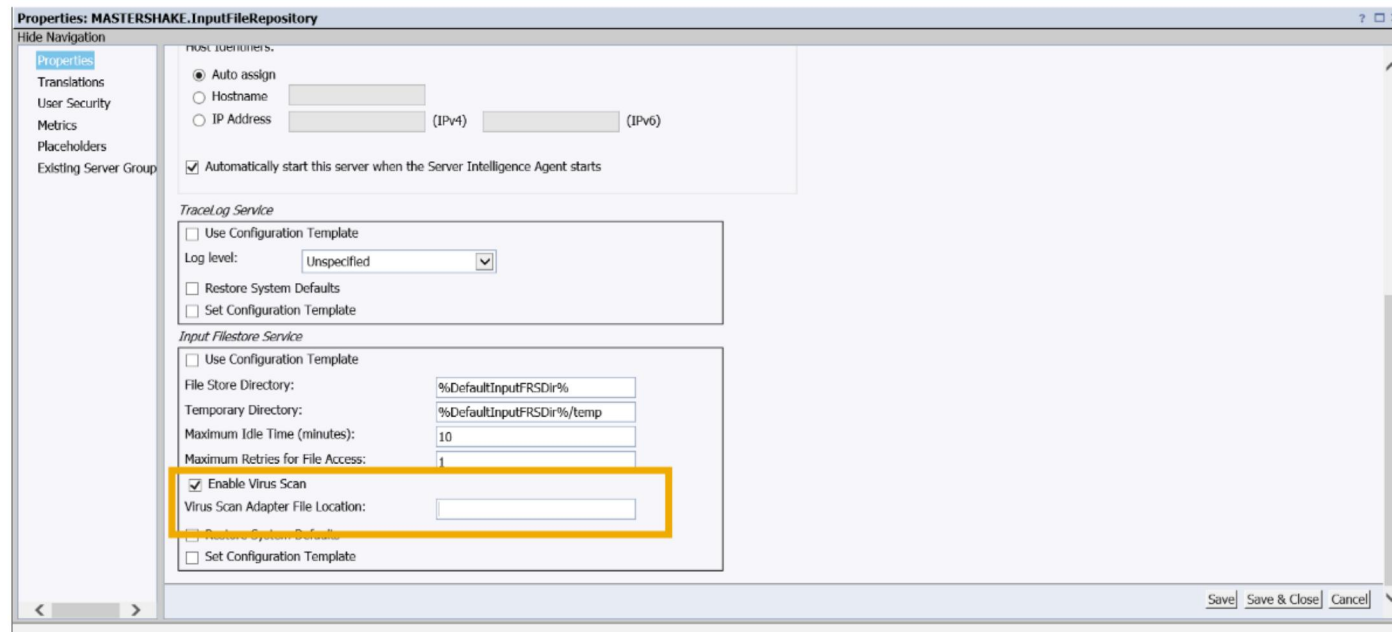


# SAP BusinessObjects BI 4.2 SP04 - Platform

## ○ SIMPLIFICATION for IT

### Virus Scan Integration

- Support the scan of all files committed to the File Repository for viruses
- Directory input of Virus Scan adaptor



# SAP BusinessObjects BI 4.2 SP04 - Platform

## ○ SIMPLIFICATION for IT

### openSSL updates

openSSL enhanced with

- Support for TLS 1.2
- Support for TLS configuration
- Support for TLS Certificate
- Included for SMTP Configuration in Adaptive Job Server Destinations

Destination: MASTERSHAKE.AdaptiveJobServer

Hide Navigation

Properties  
Translations  
User Security  
Metrics  
Destination  
Placeholders  
Existing Server Group

User name:   
Password:   
From:   
To:   
Cc:   
Subject:  Add Placeholder ▼  
Message:  Add Placeholder ▼

Deliver Document(s) as Attachment

Attachment:  
 Use Automatically Generated Name  
 Use Specific Name  Add Placeholder ▼

Enable SSL

SMTP Certificate:   
Connection Security:  ▼  
TLS Version:  ▼

Save | S

# SAP BusinessObjects BI 4.2 SP04 - Platform

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## ○ SIMPLIFICATION for IT

### X.509 Authentication

Authentication enhanced with 2 Factor Authentication

- BI Platform enabled clients to support 2 Factor Authentication (2FA) in combination with SLC and SLS for
- Supported for BI 4.2 SP04 Thin Clients (CMC, BILP)
- Supported for RESTful Web Services
- Supported for SOAP Web Services
- Supported for SSO

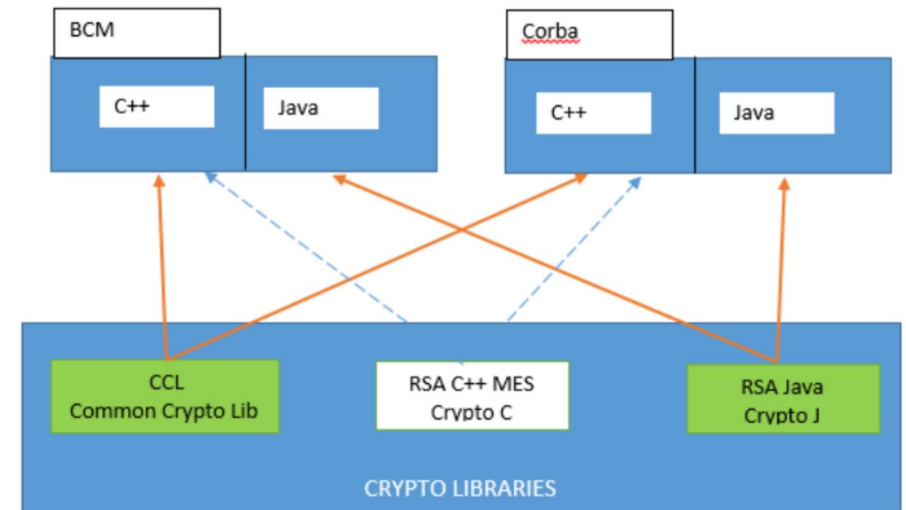
# SAP BusinessObjects BI 4.2 SP04 - Platform

## ○ SIMPLIFICATION for IT

### Security Updates (1)

#### RSA Security enhancements

- RSA Updates
  - RSA Replaced with SAP Crypto (CCL lib) for C++ areas
  - Upgrade from RSA 4.1 to 6.2.1 for JAVA areas
  - Latest Cipher Suits included
  - Minimum Key strength updated to 2048
  - TLS 1.2 and 1.1
  - Deprecation of SSLV3



# SAP BusinessObjects BI 4.2 SP04 - Platform

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## ○ SIMPLIFICATION for IT

### Security Updates (2)

Security enhanced with

- VSU Updates
  - Updated BUILD environment for BI Platform to support the latest development standards
  - Updated .NET Framework and removal of .NET 1.1 and .NET 2.0

# SAP BusinessObjects BI 4.2 SP04 - Platform

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## ○ Enhancements for BI Administration

### Fiori Styled BI Launchpad\* (1)

Rejuvenated BI Launchpad for end users

- Optional Fiori styled BI Launchpad to drive improved experience for end users
- Choice for Tile, List of Folder view
- Developed using SAP UI5 / HTML5

\* This is a first release with limited functionality, further enhancements planned for sub sequential Support Packages

# SAP BusinessObjects BI 4.2 SP04 - Platform

## Enhancements for BI Administration

### Fiori Styled BI Launchpad\* (2)

Rejuvenated BI Launchpad for end users

Title	Type	Last Updated
Charting Samples	Web Intelligence	Mar 13, 2017 3:21 PM
Fold Unfold Sample1	Web Intelligence	Mar 13, 2017 4:01 PM
Formating Sample	Web Intelligence	Mar 13, 2017 3:21 PM
Input Controls And Charts	Web Intelligence	Mar 13, 2017 3:21 PM
Input Controls and variables	Web Intelligence	Mar 13, 2017 3:21 PM
Mobile Samples	Fukder	Mar 13, 2017 3:19 PM

\* This is a first release with limited functionality, further enhancements planned for sub sequential Support Packages

# SAP BusinessObjects BI 4.2 SP04 - Platform

## Enhancements for BI Administration

### Fiori Styled BI Launchpad\* (3)

Enhanced Scheduling experience

- Quick overview of your schedules
- Filter on successful or failed
- Select schedules by date
- Create basic schedules

The screenshot displays the SAP BI Launchpad Fiori interface. The top navigation bar includes 'My Home', 'My Wall', 'Schedule', 'Folders', and 'Deleted Items'. The main content area is titled 'All Schedules' and shows a calendar for December 2015 with the 18th selected. Below the calendar is a 'View Schedule Load' toggle. To the right, a table lists the following schedules:

Title	Owner	Status	Last Run	Destination	***
✓ Revenue and Expense Report	Mike Wise	Running	02.12.15, 10 AM	Category: Sales Revenue	***
✓ Sales Order Volume	Me	Successful	03.12.15, 11 AM	BI Inbox	***
✓ Sales by Region Report	Me	Successful	03.12.15, 11:30 AM	My Folder	***
✓ Category: Sales Channels	Mike Wise	Successful	04.12.15, 10 AM	Category: Sales Channels	***
✗ Total Sales Lead Report	Me	Failed	06.12.15, 10 AM	BI Inbox	***

Below the table is a 'Scheduling Statistics' bar chart showing 04 Successful (green) and 01 Failed (red) schedules.

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# SAP BusinessObjects BI 4.2 SP04 - Platform

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## ○ Enhancements for BI Administration

### Fiori Styled BI Launchpad\* (4)

#### Known Limitations

- Only basic schedule capabilities available in this version.
- Create/edit of hyperlinks is not possible
- Cannot Sort, filter or resize columns
- Cannot Subscribe/unsubscribe to alerts
- Cannot open a folder using opendoc url
- Customization and Personalization is not supported.
- No support for BI Workspace, or SAP JAM Integration
- Error Messages are generic in a few workflows

\* This is a first release with limited functionality, further enhancements planned for sub sequential Support Packages

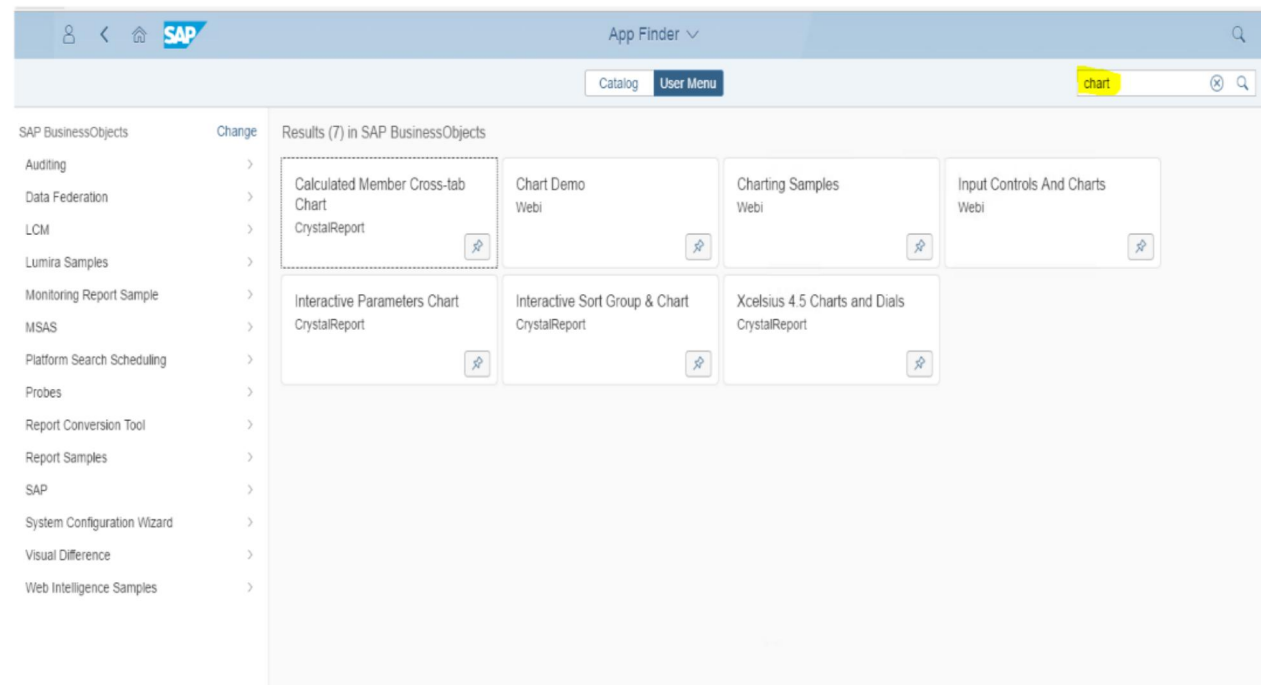
# SAP BusinessObjects BI 4.2 SP04 - Platform

## ○ Enhancements for BI Administration

### NetWeaver Enterprise Portal

Enhanced with

- Supported for NetWeaver 7.50 SP07+
- Fiori Launchpad 1.38 or 1.44
- Web Dispatcher 7.49
- Configuring Active Directory Manual Authentication / SSO Active Directory Manual Authentication / SSO configured
- Servers network name resolution should be verified, either using a DNS or hosts file configuration



# SAP BusinessObjects BI 4.2 SP04 - Platform

## ○ Enhancements for BI Administration

### HANA SAML Test connection

Enhanced with

- Test Connection function on HANA Authentication Connection

**Create HANA Authentication Connection**

Enter connection information for the HANA database. After a certificate is generated, copy it to your HANA deployment's "trust.pem" file.

**Connection Type:**   
SAP HANA HTTP  
SAP HANA HTTPS

**HANA Hostname:**

**HANA Port:**

**Unique Identity Provider ID:**

**Service Provider Name:**

**Identity Provider Base64 Certificate:**

**Test the connection for this user:**

# SAP BusinessObjects BI 4.2 SP04 - Platform

## Enhancements for BI Administration

### User Account Status

- New column in User List to gain quick insight of account status of user

The screenshot displays the SAP Central Management Console interface. The main content area shows a table titled 'User List' with the following columns: Name, Full Name, Type, Account Status, Description, Date Modified, and Tenant. The 'Account Status' column uses a green circle with a checkmark for 'Enabled' and a red circle with a cross for 'Disabled'.

Name	Full Name	Type	Account Status	Description	Date Modified	Tenant
Administrator		User	Enabled	Administrator account	Mar 10, 2017 3:52 PM	
Guest		User	Disabled	Guest account	Mar 10, 2017 3:03 AM	
QaaWSServletPrincipal		User	Enabled	QaaWS User who can generate th	Mar 10, 2017 3:08 AM	
SMAAdmin		User	Disabled	Solution Manager Administrator ac	Mar 10, 2017 3:03 AM	
test	test	User	Enabled		Mar 10, 2017 3:17 PM	

# SAP BusinessObjects BI 4.2 SP04 - Platform

## Enhancements for BI Administration

### Instances Count

- New column in Folders to gain quick insight of number of instances attached to a document

The screenshot shows the SAP Central Management Console interface. On the left is a tree view of folders. The main area displays a table with the following columns: Title, Type, Description, Instances, and Date Modified. The 'Instances' column provides a quick count of instances for each document.

Title	Type	Description	Instances	Date Modified
Xcelsius 4.5 Sample Flash Objects	Folder			Mar 10, 2017 3:26 AM
Calculated Member Cross-tab Chart	Crystal Reports 2016		0	Mar 10, 2017 10:12 AM
Drilldown	Crystal Reports 2016		17	Mar 10, 2017 3:28 AM
Grouping and Sorting	Crystal Reports 2016		1	Mar 10, 2017 10:13 AM
Interactive Parameters	Crystal Reports 2016		0	Mar 10, 2017 3:28 AM
Interactive Parameters Chart	Crystal Reports 2016		0	Mar 10, 2017 3:28 AM
Interactive Parameters Dynamic Group	Crystal Reports 2016		0	Mar 10, 2017 3:28 AM
Interactive Sort Detail	Crystal Reports 2016		0	Mar 10, 2017 3:28 AM
Interactive Sort Group & Chart	Crystal Reports 2016		0	Mar 10, 2017 3:28 AM
Optional Parameter - DCP	Crystal Reports 2016		0	Mar 10, 2017 3:28 AM
Xcelsius 4.5 Charts and Dials	Crystal Reports 2016		0	Mar 10, 2017 3:28 AM
XML Exporting	Crystal Reports 2016		0	Mar 10, 2017 3:28 AM

# SAP BusinessObjects BI 4.2 SP04 - Platform

## ○ Enhancements for BI Administration

### Limit number of documents in Inbox

- Setting added for Inboxes to limit the number of documents by user or usergroup

**Limits: Inboxes**

Hide Navigation

- ▶ Default Settings
- ▶ Properties
- ▶ User Security
- Limits**

Delete excess documents when there are more than N documents:

[Refresh](#) [Update](#) [Cancel](#)

Delete excess documents for the following users/groups [Add](#) [Remove](#)

Remove	Name	Full Name	Description	Maximum document count
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Delete documents after N days for the following users/groups [Add](#) [Remove](#)

Remove	Name	Full Name	Description	Maximum document count per user
--------	------	-----------	-------------	---------------------------------

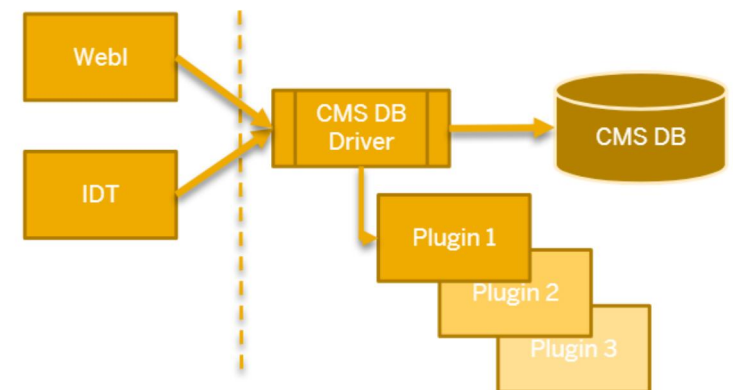
# SAP BusinessObjects BI 4.2 SP04 - Platform

## ○ Enhancements for BI Administration

### CMS DB Driver

Enhanced with

- Universe and Sample Web Intelligence documents part of setup
- Documentation
- New AccessLevels Plugin allowing the retrieval of all rights defined in custom access levels



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# SAP BusinessObjects BI 4.2 SP04 - Platform

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## ○ Performance

### Search

Enhanced with

- Reduced CMS Recourse consumption
  - Fewer queries
  - Fewer InfoObjects updates
  - Fewer IO calls
- Reduced index size (disk)
- Improved Indexing Performance
  - Up to 200 times performance improvements  
Internal system full index reduced from 49 hours to 14 minutes



# SAP BusinessObjects BI 4.2 SP04 - Platform

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## ○ Performance

### Search (2)

Performance improvements include

- Bypass queues for metadata only indexing
  - driving up to 100x faster indexing
- Faster InfoObject ancestor path computation
  - Using fewer CMS queries and more caching driving up to 2x faster indexing
- Faster Content Store readiness notification
  - Last done store object notifies readiness (instead of background thread)

# SAP BusinessObjects BI 4.2 SP04 - Platform

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## ○ Performance

### Search (3)

Enhanced with

- New Search experience via Fiori Styled BI Launchpad
- Support for new metadata formats such as user full name

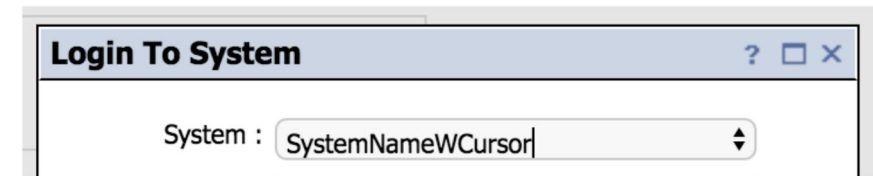
# SAP BusinessObjects BI 4.2 SP04 - Platform

## ○ Performance

### Promotion Management (1)

Enhanced with

- UI Improvements
  - Free entry for adding system at Job creation
  - Special Character handling in Job name
- Further improved performance for Dependencies management
- Improved error handling



# SAP BusinessObjects BI 4.2 SP04 - Platform

## ○ Performance

### Promotion Management (2)

Enhanced with

- Command Line (CLI) Improvements
  - Clean up of parameters and improved documentation
  - Added selectUser and selectGroup to improve selection for Third Party Users and UserGroups
  - Support for new objects such as Lumira 2.0, bookmarks of Lumira 2.0 and Server Groups

```
exportQuery1=  
SELECT TOP 10000 static, relationships, SI_PARENT_FOLDER_CUID,  
SI_OWNER, SI_PATH  
FROM CI_INFOOBJECTS,CI_APPOBJECTS,CI_SYSTEMOBJECTS  
WHERE (SI_KIND='User' OR SI_KIND='UserGroup') AND NOT (SI_ID in  
(11,12, 501, 1, 2, 3))  
# selectUser selectGroup parameters  
# all: all users will be included (DEFAULT)  
# onlyTP: only third party users/groups will be included  
# excludeTP: third party users/groups won't be included  
# none:  
selectUser=all  
selectGroup=all
```

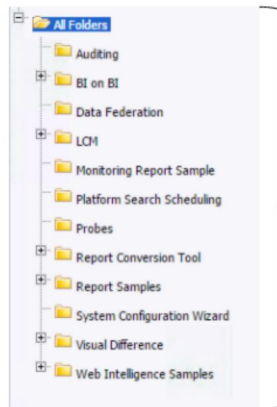
# SAP BusinessObjects BI 4.2 SP04 - Platform

## Performance

### Promotion Management (3)

Enhanced with

- Command Line (CLI) Improvements
  - batchJobQuery parameter enabling multiple smaller queries to run a a single job reducing load and increase success rate



12 folders  
+  
sub content } 1 Properties File } 12 Promotion Jobs

```
batchJobQuery=
SELECT SI_ID, SI_CUID, SI_NAME
FROM CI_INFOOBJECTS,CI_APPOBJECTS,CI_SYSTEMOBJECTS
WHERE DESCENDENTS("SI_NAME='Folder Hierarchy'",
"SI_ID in (23)") AND SI_KIND='Folder' and
SI_PARENTID=0
```

```
exportQuery1=
SELECT TOP 10000 static, relationships,
SI_PARENT_FOLDER_CUID, SI_OWNER, SI_PATH
FROM CI_INFOOBJECTS,CI_APPOBJECTS,CI_SYSTEMOBJECTS
WHERE DESCENDENTS("SI_NAME='Folder Hierarchy'"
,"SI_CUID='$CUID$")
```

# SAP BusinessObjects BI 4.2 SP04 - Platform

---

## ○ Performance

### Upgrade Management Tool

Enhanced with

- Splash screen added to provide information to user
- Removal of libraries that are not needed at startup time

# SAP BusinessObjects BI 4.2 SP04 - Platform

---

## ○ Performance

### Installer

Enhanced with

- Combine Installer
  - Ability to combine installer of Support Package and Patch into a single package
  - Reduce installed time if there is a need to deploy Support Package + Patch
- Support for special characters in Administrator password during install
- Support for SAP MaxDB for CMS and Audit Schema



# Web Intelligence

BI4.2 SP04 What's New





# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## ○ Trusted Foundation

- Custom Elements Enhancements
- Security Enhancements
- Server Group Enhancements
- Calculation Extensions
- REST Web Services
- Mass change of UNV to UNX

## ○ Enable the Business

- Rejuvenated Interface (Viewer)
- DHTML Catch-Up
- Enhanced Chart Library
- References Enhancements
- Variables Enhancements
- Grouping Enhancements
- New and Enhanced Functions
- BI Variants Enhancements

## ○ SAP Backend Integration

- SAP HANA HTTP Support
- Complex selection support for BEx Variables

**This is the current state of planning and may be changed by SAP at any time.**

# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## ○ TRUSTED FOUNDATION

### Custom Elements Enhancements

Enhanced with

- Enhanced API's
  - New API to define Custom Elements visualization thumbnails
  - Extended the Render API to identify Custom Element instances
- Extend Custom Elements with Extension Points
  - BIP CMC : Deploy Custom Elements service as a Extension Point
  - Use Extension Points API's from Custom Elements
  - Full interactivity between Custom Element visualizations and Extension Points in Web Intelligence DHML Client

Dedicated Service

Service Name

Service URL

Extension Point

Extension Name

Test the connection to configure the Service formats

# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## ○ TRUSTED FOUNDATION

### Security Enhancements

- Added security settings for consuming relational connections with FHSQL

Specific Rights for Relational Connection	Implicit Value	Allowed	Forbidden	Warning
Use connection for Free-Hand SQL scripts	Granted	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Use connection for Free-Hand SQL scripts (owner right)	Not Specified	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

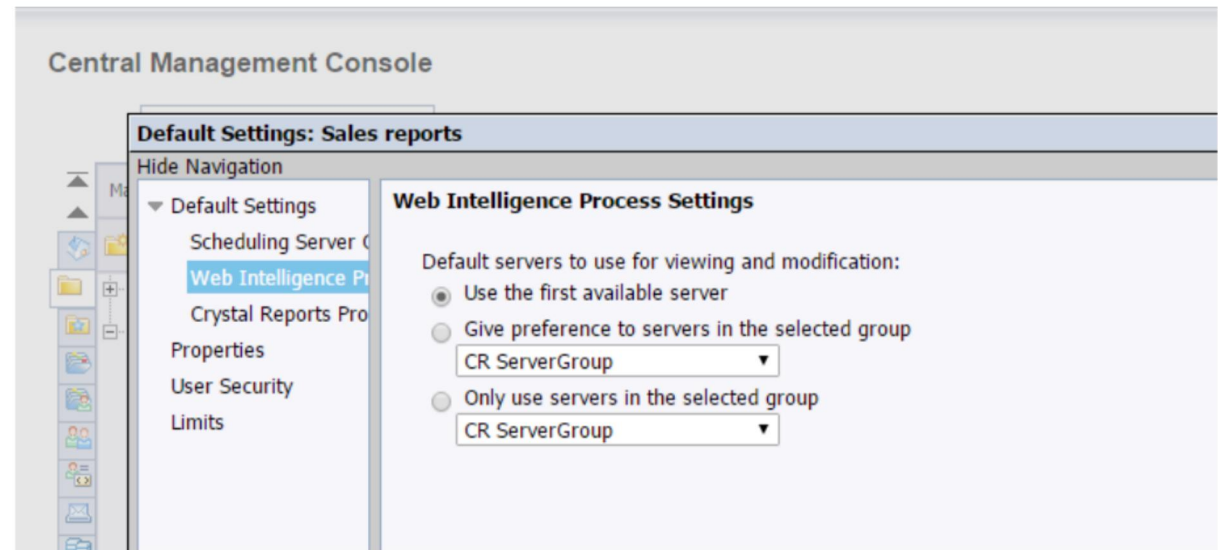
# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## ○ TRUSTED FOUNDATION

### Server Group Enhancements

Web Intelligence Processing Server Enhanced with

- Support for Server Group Exclusivity while refreshing reports on demand
  - On User / Usergroup level
  - On Folder level



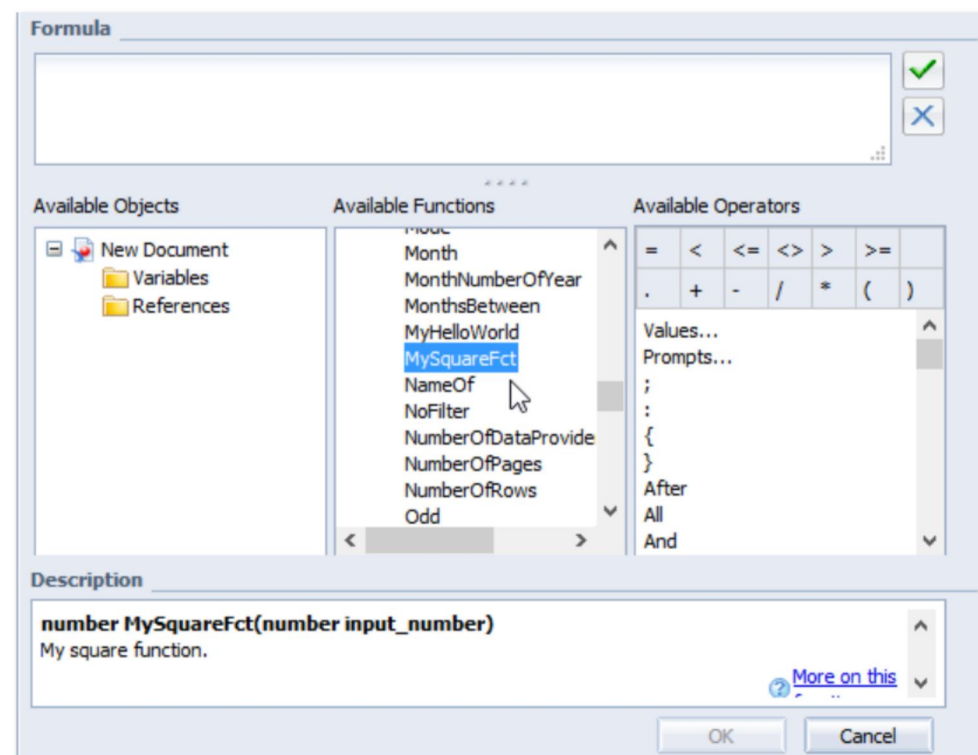
# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## TRUSTED FOUNDATION

### Calculation Extensions

Extend the Web Intelligence Calculation Engine

- Enablement for Custom Functions
  - Visual Studio 2015 project with samples provided
  - Updated User Guide



# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

---

## ○ TRUSTED FOUNDATION

### Web Intelligence REST Web Services

Enhanced with

- Dynamic Input Control / Group Input Control
- Read Comments
- Support Fold-Unfold Section, Break, Axis, Block
- Return parameters/prompts summary
- Element Linking (support block as input control)
- For SAP HANA data sources: Multiple Ranges, Interval variables

# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## ○ TRUSTED FOUNDATION

### Mass change of UNV to UNX

Sample solution provided to drive mass adoption of UNX universe

- With BI 4.2 SP4 you can massively change the source of Web Intelligence documents from UNV to UNX universes
- The solution is provided as a .biar file in the BI platform server (\$BOE\_INSTALL\_DIR\$\Samples\WICS\)
- Solution provided as *unsupported* SAMPLE

The screenshot shows the SAP BusinessObjects Web Intelligence interface. A table titled 'geSource\_Worklist / WebI-Change-List' is displayed, listing documents with their Id, CUID, and Document Name. A 'Folder selection' dialog is open, showing a tree view of folders. A 'Document selection' dialog is also open, showing a list of documents. A 'List of selected documents' dialog is also open, showing a list of selected documents.

Id	CUID	Document Name
5261	AXb0JR1xevFLIX5hpPUGu.4	Input Controls and variables
5262	AW4AVT1AUhVAogA6P7OQv9c	Charting Samples
5263	AVOEBpPXOvpGhcrzE_RAeY	Input Controls And Charts
5264	AQIkbbSqN4NOj3ydf.Sw1IY	Formatting Sample

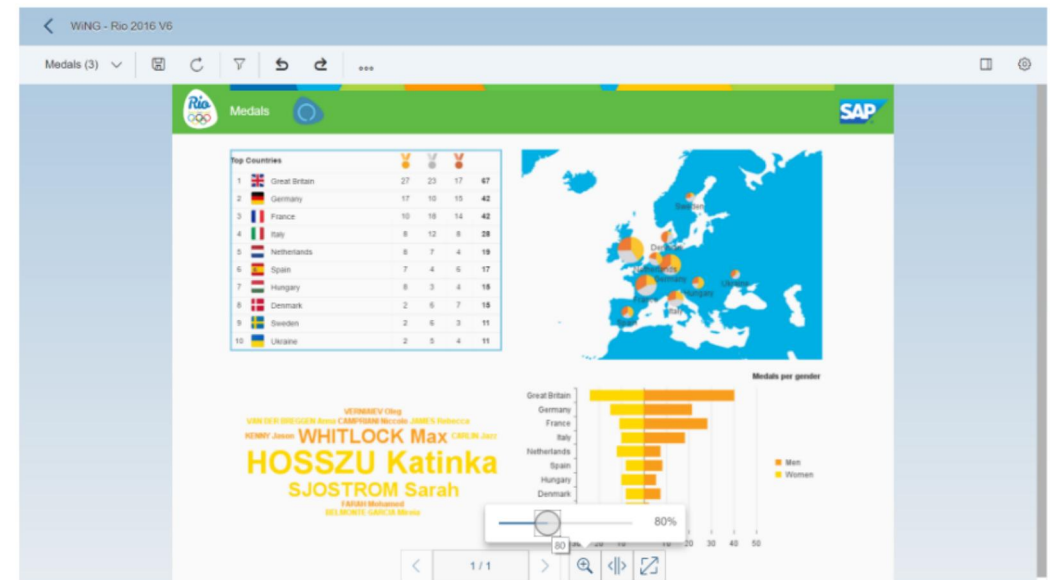
# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## Enable the Business

### Rejuvenated Interface for viewing Web Intelligence documents\* (1)

Enhanced end user experience

- Simplified reading and analysis workflow
- Fiori styled Web Intelligence viewer
- Integrated in Fiori BI Launchpad
- Touch Screen ready



\* This is a first release with limited functionality, further enhancements planned for sub sequential Support Packages



# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## Enable the Business

### Rejuvenated Interface for viewing Web Intelligence documents\* (2)

Viewer support for

- All existing Web Intelligence documents\*
- Navigation by report, section or page
- Refresh any existing WebI document
- Drill if saved in Drill Mode
- Collapse / Expand Hierarchies
- Save As, Export as PDF, Export as Excel
- Send to

The screenshot displays the SAP BusinessObjects BI 4.2 SP04 Web Intelligence interface. The top navigation bar includes 'BI Launch Pad' and search icons. Below the navigation bar, there are filters for 'Principals' (2), 'Sport' (All Values), 'Country' (All Values), and 'Gender' (All Values). The main content area is titled 'Results' and features a green header with the SAP logo. The results are organized into two sections: 'Archery' and 'Artistic Gymnastics'. Each section displays a table of results with columns for medal type (Gold, Silver, Bronze) and athlete information. A 'Select all' dropdown menu is visible over the 'Sport' filter.

Medal	Sport	Country	Athlete Name
Gold	Archery	KOR	KU Dongchan
Silver	Archery	FRA	VALLADONT Jean Charles
Bronze	Archery	USA	ELLISON Brady
Gold	Archery	KOR	Republic of Korea
Silver	Archery	USA	United States
Bronze	Archery	AUS	Australia
Gold	Archery	KOR	CHANG Hyjin
Silver	Archery	GFR	UNRUH Lisa
Bronze	Archery	KOR	Kim Bora
Gold	Archery	KOR	Republic of Korea
Silver	Archery	RUS	Russian Federation
Bronze	Archery	TPE	Taipei (Ch Taipei)
Gold	Artistic Gymnastics	GER	WHITLOCK Max
Silver	Artistic Gymnastics	BRA	HYPODITO Diego
Bronze	Artistic Gymnastics	BRA	MARIBANO Arthur
Gold	Artistic Gymnastics	GLB	HAMRUFORFN Fabian
Silver	Artistic Gymnastics	USA	LEYYA Daniel
Bronze	Artistic Gymnastics	GUR	WILSON Nile
Gold	Artistic Gymnastics	JPN	UCHIMURA Kohi
Silver	Artistic Gymnastics	UKR	VERNAIEV Oleg
Bronze	Artistic Gymnastics	GUR	WHITLOCK Max
Gold	Artistic Gymnastics	UKR	VERNAIEV Oleg
Silver	Artistic Gymnastics	USA	LEYYA Daniel
Bronze	Artistic Gymnastics	RUS	BILYAVSKIY David
Gold	Artistic Gymnastics	GUR	WILLILOG
Silver	Artistic Gymnastics	USA	NADOCUR Alexander

\* This is a first release with limited functionality, further enhancements planned for sub sequential Support Packages

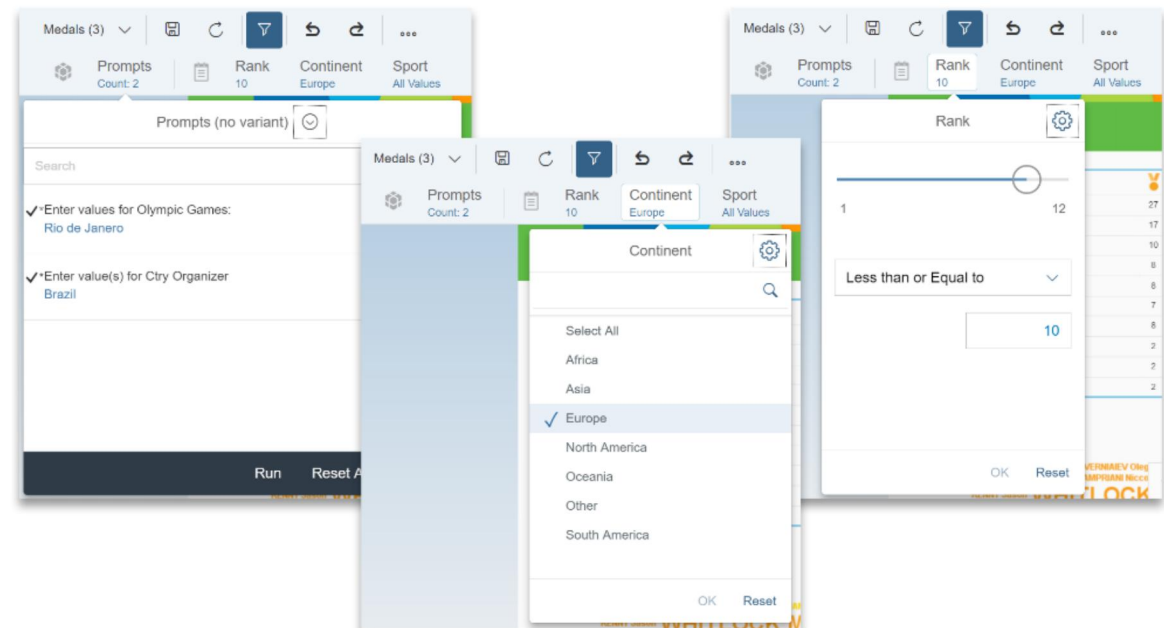
# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## Enable the Business

### Rejuvenated Interface for viewing Web Intelligence documents\* (3)

Viewer support for

- Unified Toolbar and Icons
- Refresh Reports with Prompts
- Aggregated Filters Bar for Prompts, (Group) Input Controls, Filters and Ranking



\* This is a first release with limited functionality, further enhancements planned for sub sequential Support Packages

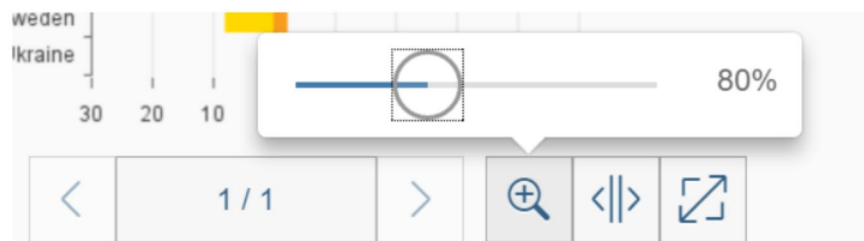
# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## Enable the Business

### Rejuvenated Interface for viewing Web Intelligence documents\* (4)

Viewer support for

- Display, Edit, Insert Comments
- Fading Navigation / Zoom Bar



\* This is a first release with limited functionality, further enhancements planned for sub sequential Support Packages

# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## Enable the Business

### Rejuvenated Interface for viewing Web Intelligence documents\* (5)

Viewer support for

- “Action in Place” such as Sort and Ranking
- Element Linking

Top Countries					↑↓	🏆
1		United States	46	37	38	121
2		China	26	18	26	70
3		Great Britain	27	23	17	67
4		Russian Federation	19	18	19	56
5		Germany	17	10	15	42
6		France	10	18	14	42
7		Japan	12	8	21	41
8		Australia	8	11	10	29
9		Italy	8	12	8	28
10		Canada	4	3	15	22

Medals (4) | Prompts 2 | Rank ≤ 10 | Continent All Values | Sport All Values

Rank

1 50

Less than or Equal to 10

OK Reset

Gold	Silver	Bronze	Total
46	37		
26	18		
27	23		
19	18		
17	10		
10	18		
12	8		
8	11		
8	12		
8	12		

\* This is a first release with limited functionality, further enhancements planned for sub sequential Support Packages

# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

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## ○ Enable the Business

### Rejuvenated Interface for viewing Web Intelligence documents\* (6)

#### Viewer Known Limitations

- Create / Reply on Comments
- Fold/ Unfold Breaks and Sections
- Freeze Header
- Create / Edit Web Intelligence Document (edit will trigger existing Web Intelligence Designer Mode)

\* This is a first release with limited functionality, further enhancements planned for sub sequential Support Packages

# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

---

## ○ Enable the Business

### DHTML Catch-Up (1)\*

Enabling all users

- Remove dependency on Java Applet
- Enable all supported browsers for Editing with full functionality
- All new Web Intelligence Features by default in both JAVA and DHTML

\* 1<sup>st</sup> phase started with BI4.2 SP03, Final completion planned for subsequent Support Packs

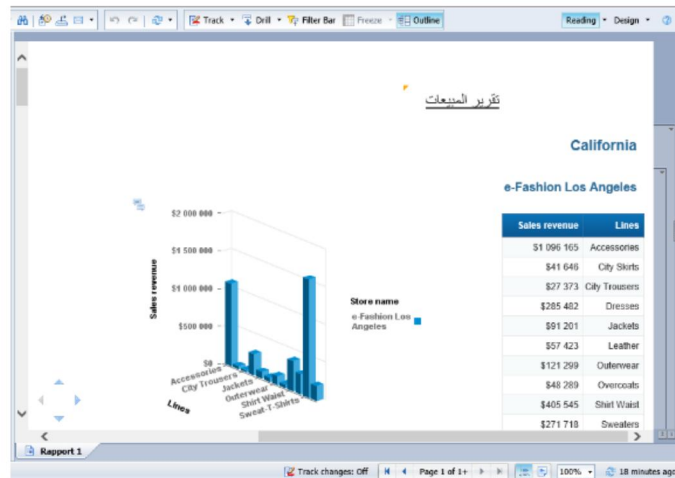
# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## Enable the Business

### DHTML Catch-Up (2)\*

Web Intelligence DHTML Client enhanced with

- Free-Hand SQL Editor
- Right to Left (RTL) Language support



Query Panel

Object Properties

Name: Revenue

Qualification: Measure

Type: Number

Aggregate function: Sum

Associated dimension: [ ]

Query Properties

Name: Query 1 on Oracle Evalkit

Connection: oracle\_evalkit\_dbc

Max Rows Retrieved (s): 5000

Max Retrieval Time (s): 60

Query Definition

Edit SQL...

Result Objects

Country Region City Revenue

Query Script viewer

```

SELECT
  COUNTRY.COUNTRY,
  REGION.REGION,
  CITY.CITY,
  sum( INVOICE_LINE.DAYS * INVOICE_LINE.NB_GUESTS * SERVICE.PRICE )
FROM
  COUNTRY INNER JOIN REGION ON (REGION.COUNTRY_ID=COUNTRY.COUNTRY_ID)
  INNER JOIN CITY ON (CITY.REGION_ID=REGION.REGION_ID)
  INNER JOIN CUSTOMER ON (CUSTOMER.CITY_ID=CITY.CITY_ID)
  INNER JOIN SALES ON (SALES.CUST_ID=CUSTOMER.CUST_ID)
  INNER JOIN INVOICE_LINE ON (INVOICE_LINE.INV_ID=SALES.INV_ID)
  INNER JOIN SERVICE ON (SERVICE.SERVICE_ID=INVOICE_LINE.SERVICE_ID)

WHERE
  COUNTRY.COUNTRY = 'US'
GROUP BY
  COUNTRY.COUNTRY,
  REGION.REGION,
  CITY.CITY
  
```

\* 1<sup>st</sup> phase for BI4.2 SP03, Final completion planned for subsequent Support Pack

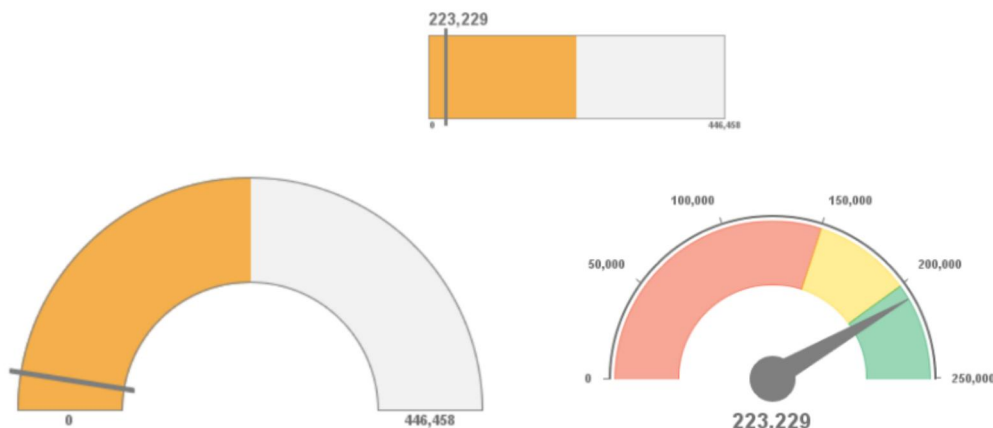
# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## Enable the Business

### Enhanced Chart Library (1)

Added to the Chart Library

- Gauges : Lineao, Speedometer and Angular
- Tiles for KPI display



The screenshot shows the 'Turn Into' dialog box in SAP BusinessObjects BI. It includes a list of chart types on the left, a preview area in the center, and configuration options on the right.

- Chart Types List:** Tables, Bar, Box, Column, Gauge, Geographic, Line, Map, Pie, Point, Radar, Tag Cloud, **Tile** (selected), Waterfall.
- Preview Area:** Shows two 'Revenues' tiles. The first is a simple 'Tile' with the value '37.58k'. The second is a 'Tile with deviation' showing '37.58k' with a green upward arrow.
- Configuration Panel:**
  - Title Values:** A dropdown menu set to 'Revenue' with '+' and '-' buttons.
  - Title target values:** A dropdown menu set to 'Number of guests' with '+' and '-' buttons.
  - Title previous period values:** A dropdown menu set to '(optional)' with '+' and '-' buttons.
- Tile with deviation description:** Deviation Tiles are used to display only the actual value of a measure. You can enable semantic coloring by...

Below the dialog box, two KPI tiles are shown:

- White Tile:** Revenue Year over Year, 835.9M Euro (with a green upward arrow).
- Blue Tile:** Revenue, 835.9M Euro.



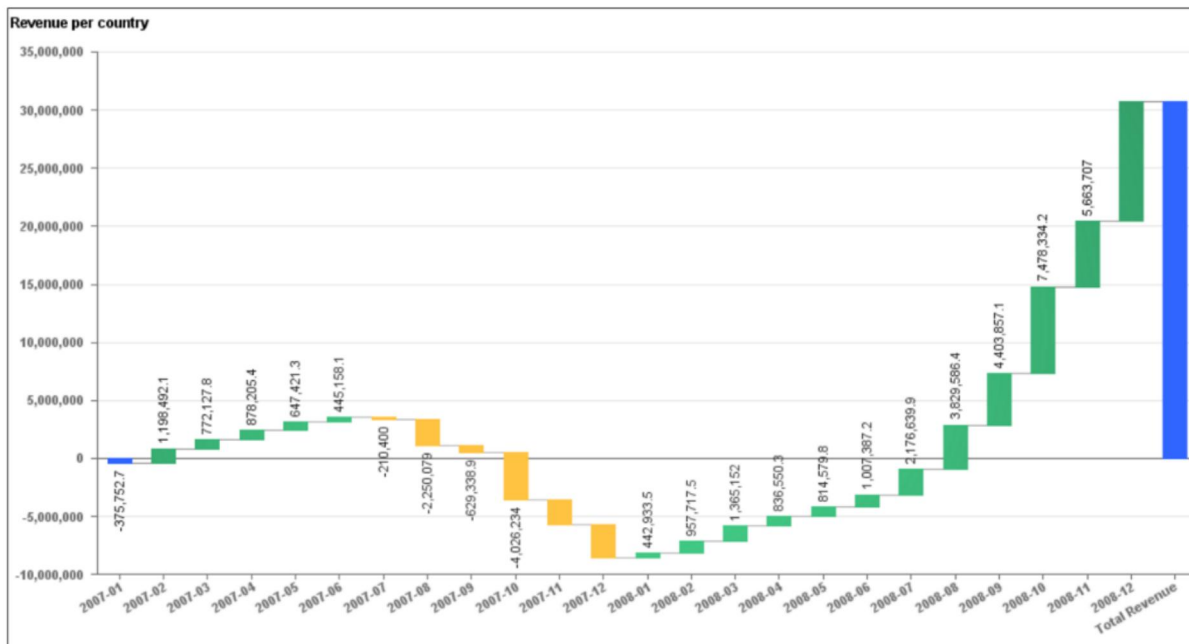
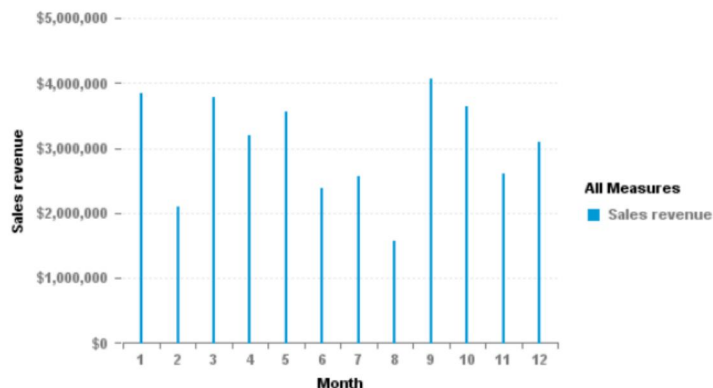
# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## Enable the Business

### Enhanced Chart Library (2)

Enhanced charts

- Modify "Total Value" Label for Waterfall Chart
- Set Width for Bar and Column Charts



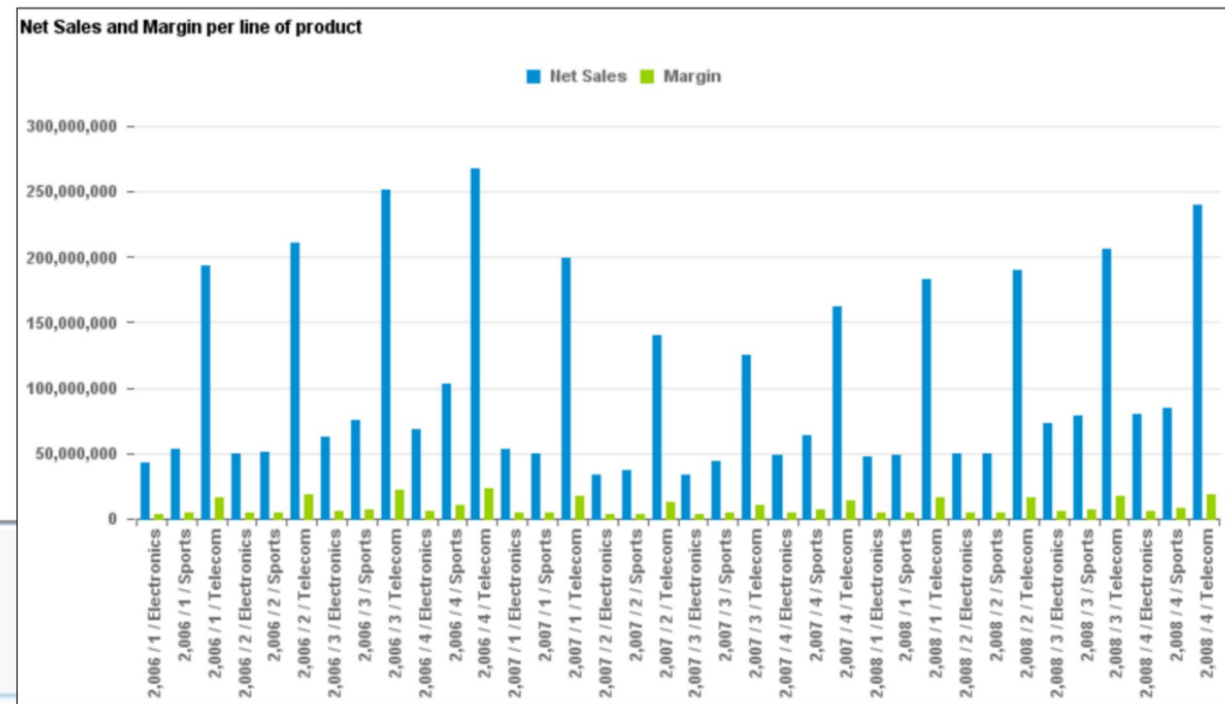
# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## Enable the Business

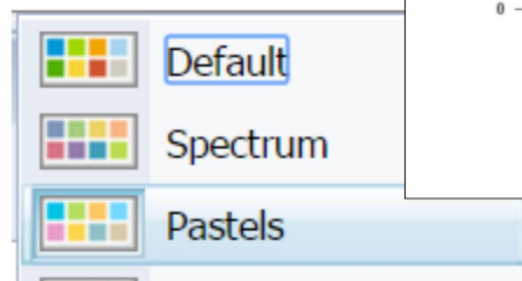
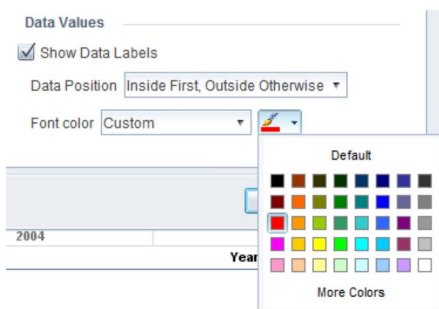
### Enhanced Chart Library (3)

#### Enhanced charts

- Change Color of each data label
- Pastels Color pallet added
- Stacked dimensions to be displayed as tree, flat or grid



Flat Layout for stacked dimensions



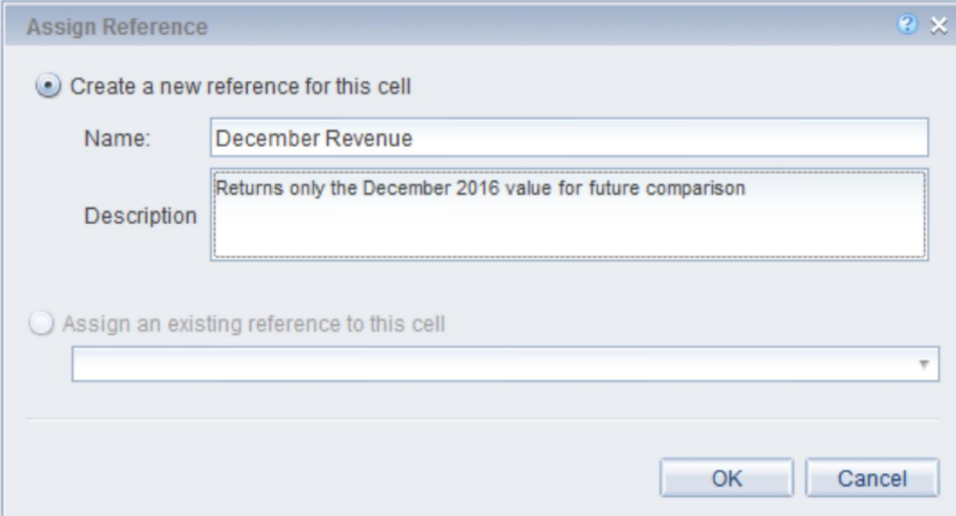
# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## ○ Enable the Business

### References Enhancements

References values enhanced with

- Description Field



The image shows a dialog box titled "Assign Reference" with a question mark icon and a close button in the top right corner. It contains two radio button options. The first option, "Create a new reference for this cell", is selected. Below it, there is a "Name:" label followed by a text input field containing "December Revenue". Below that is a "Description" label followed by a text area containing "Returns only the December 2016 value for future comparison". The second option, "Assign an existing reference to this cell", is unselected and has a dropdown menu below it. At the bottom right of the dialog are "OK" and "Cancel" buttons.

# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## ○ Enable the Business

### Variables Enhancements

Variables enhanced with

- Description Field

The screenshot shows the 'Create Variable' dialog box with the following details:

- Variable Definition:**
  - Name: StateReference
  - Description: Cleansed state name
  - Qualification: Dimension
  - Type: Unknown
- Formula:**
  - Formula: =Trim([State])
  - Status: Formula has not been validated.
- Available objects:**
  - New Document
  - Lines
  - Month
  - State
  - Year
  - Sales revenue
  - Variables
  - References
- Functions:**
  - fx Pos
  - fx Replace
  - fx Right
  - fx RightPad
  - fx RightTrim
  - fx Substr
  - fx Trim
  - fx Upper
- Operators:**
  - = < <= > >= .
  - + - / \* ; ( )
  - Values...
  - Prompts...
  - :
  - After
  - All
- State:**
  - State located.

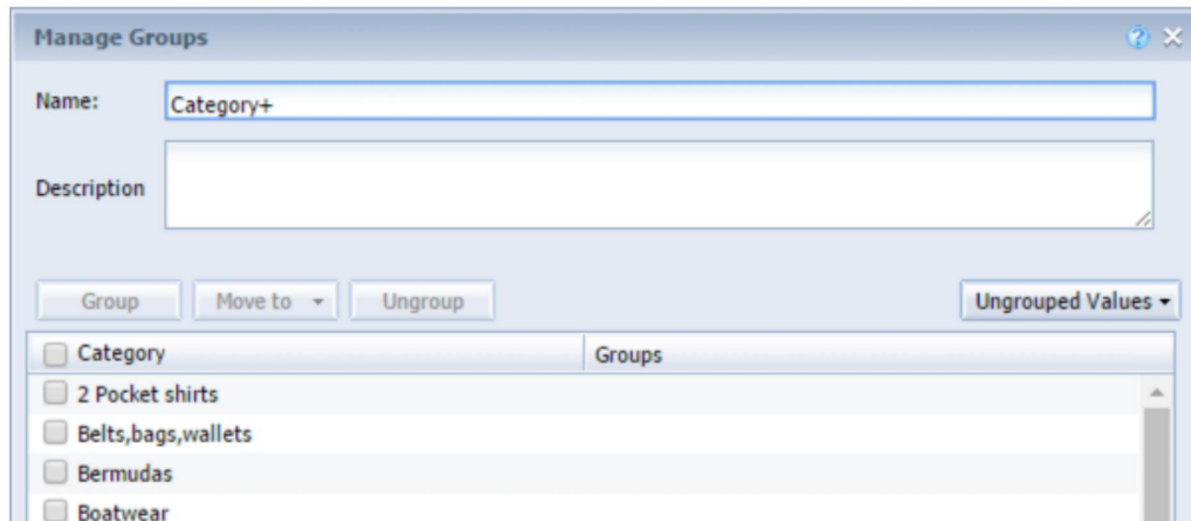
# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## ○ Enable the Business

### Grouping Enhancements

Grouping Values enhanced with

- Description Field



# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

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## ○ Enable the Business

### New and Enhanced Functions

Functions list enriched / enhanced with

- TimeBetween()
- DateBetween()
- PromptSummary()  
New parameters to sort the result and show BEx definitive prompts

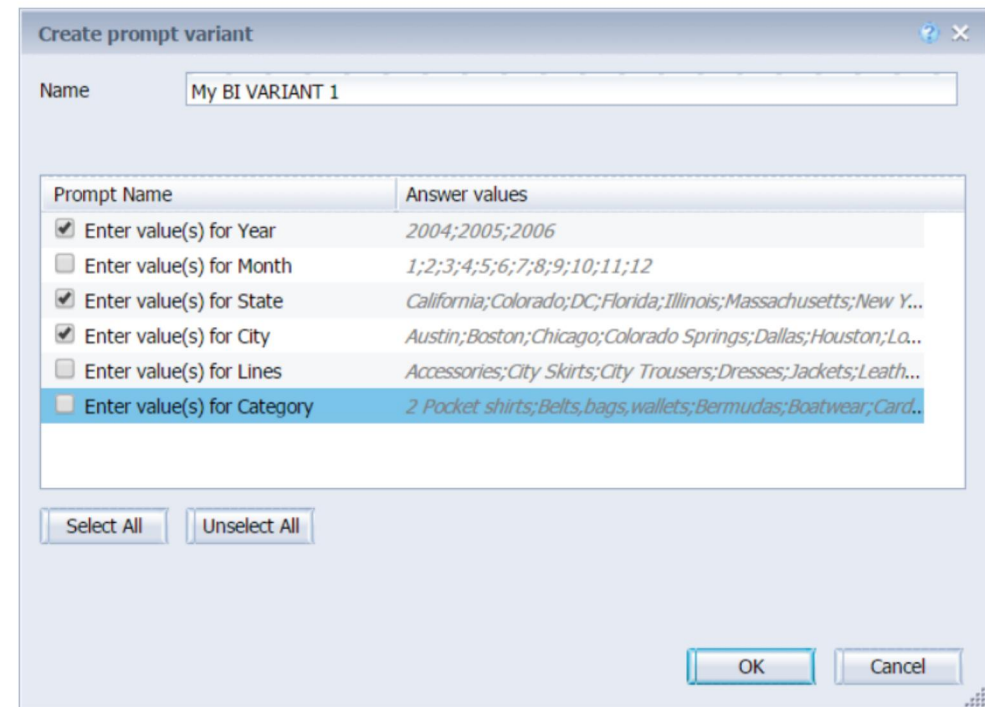
# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## Enable the Business

### BI Variants Enhancements

BI Variants enhanced with

- Select the prompts answer saved in BI Variant  
You can now exclude some prompts to be part of the BI Variant

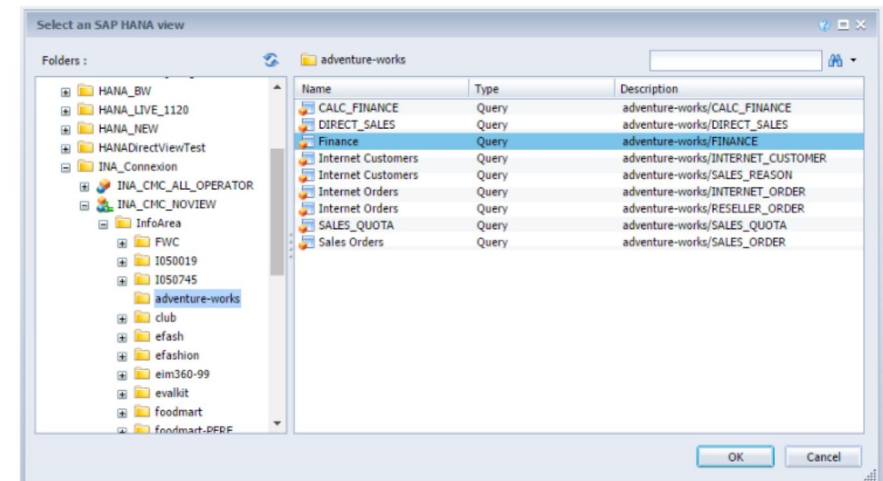


# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## ○ SAP Backend Integration

### SAP HANA HTTP Support

- Multi-dimensional support with HANA hierarchies
- Support for the Direct Access on HANA HTTP
- Support for authored universes based on HANA HTTP



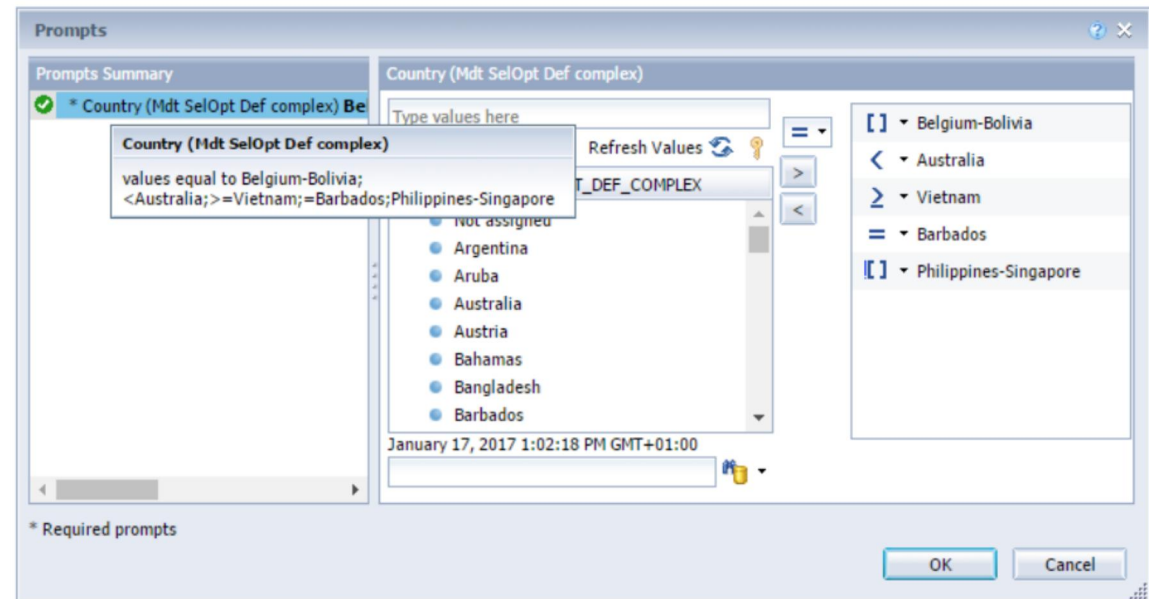


# SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

## ○ SAP Backend Integration

### Complex selection support on BEx variables for SAP BW

- Enablement of complex selection on BEx Variables on SAP BW
- Parity to SAP HANA support





# Semantic Layer

BI4.2 SP04 What's New



# SAP BusinessObjects BI 4.2 SP04 - Semantic Layer

## ○ Simplification

- CMS Access Enhancements
- Check Integrity Enhancements
- REST Web Services

## ○ Enable the Business

- Set Analysis Enhancements

## ○ SAP Backend Integration

- SAP HANA Enhancements

**This is the current state of planning and may be changed by SAP at any time.**

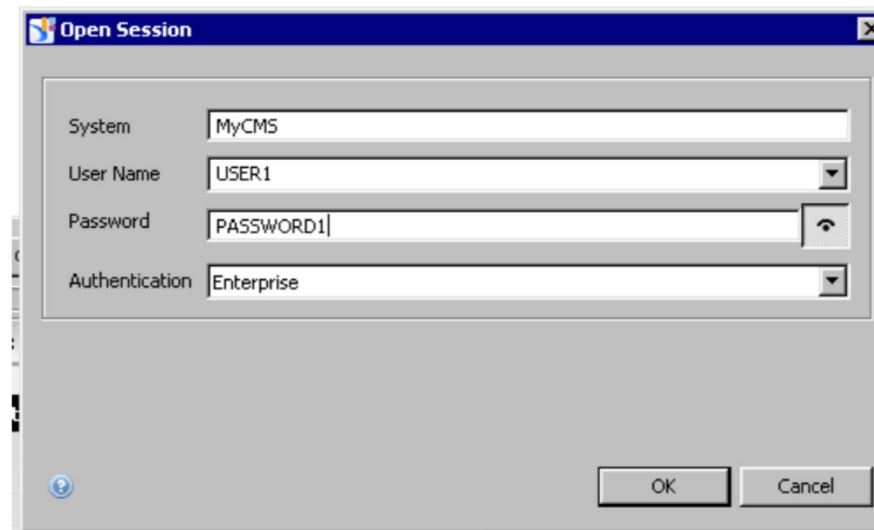
# SAP BusinessObjects BI 4.2 SP04 - Semantic Layer

## ○ TRUSTED FOUNDATION

### CMS Access

Enhanced with

- Republish Universe
- Show Password
- Copy – Paste “System” name



The screenshot shows a dialog box titled "Open Session" with the following fields:

Field	Value
System	MyCMS
User Name	USER1
Password	PASSWORD1
Authentication	Enterprise

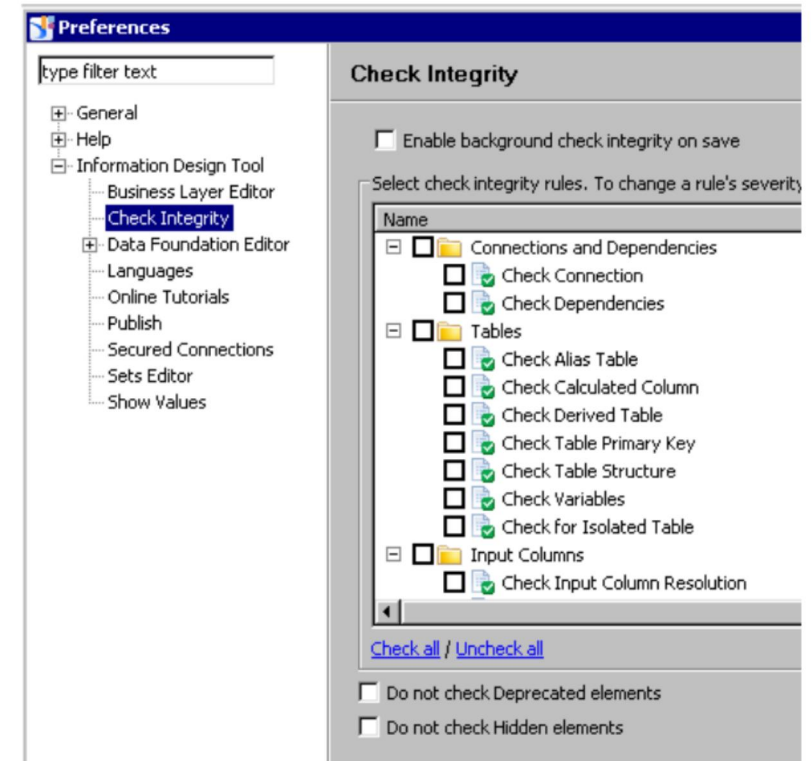
# SAP BusinessObjects BI 4.2 SP04 - Semantic Layer

## TRUSTED FOUNDATION

### Check Integrity

Enhanced with

- New preferences:
  - To skip Check integrity
  - To skip Deprecated or Hidden objects
- New rule to split parse and object execution against database



# SAP BusinessObjects BI 4.2 SP04 - Semantic Layer

---

## ○ TRUSTED FOUNDATION

### REST Web Services

Enhanced with

- New API to manage Data and Business Security Profiles: UniverseSecurityCache
- Reduced CMS repository interactions to increase performance

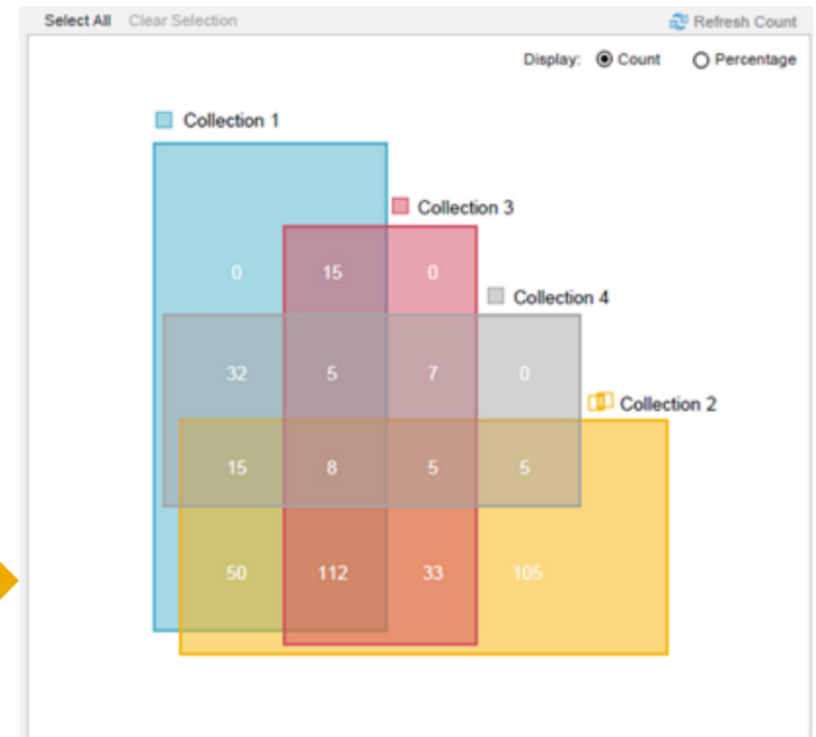
# SAP BusinessObjects BI 4.2 SP04 - Semantic Layer

## Enable the Business

### Set Analysis (1)

Enhanced with

- Sets Editor
  - Support segmentation per measure and per attribute
  - Support query panel to select subject
  - Support prompts or context in query panel
- Sets on Sets
  - Updated Venn Diagram UI



# SAP BusinessObjects BI 4.2 SP04 - Semantic Layer

---

## ○ Enable the Business

### Set Analysis (2)

Enhanced with

- Visual Data Steps
  - Support prompts and context when creating sets
  - Reorder steps
  - Insert custom values
  - Limit distinct values
  - Display count by step
  - Propose formula editor for scalar dimension by default



# SAP BusinessObjects BI 4.2 SP04 - Semantic Layer

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## ○ Enable the Business

### Set Analysis (3)

Enhanced with

- Materialization
  - Create processing group to schedule several set materializations at once

# SAP BusinessObjects BI 4.2 SP04 - Semantic Layer

---

## ○ SAP Backend Integration

### SAP HANA

Enhanced with

- Support for complex filter
- Manage and Customize SAP HANA Variables at creating a relation UNX
- Support for SAP HANA HTTP Connection and UNX Authoring



# Live Office

BI4.2 SP04 What's New



# SAP BusinessObjects BI 4.2 SP04 - Live Office

## ○ Simplification

## ○ Enable the Business

## ○ Performance

- Custom Element Consumption



**This is the current state of planning and may be changed by SAP at any time.**

# SAP BusinessObjects BI 4.2 SP04 - Live Office

---

## ○ Enable the Business

### Custom Elements Consumption

Enhanced with

- Retrieval of Custom Elements as Chart Image from Web Intelligence report



# Crystal Reports for Enterprise

BI4.2 SP04 What's New



# SAP BusinessObjects BI 4.2 SP04 - Crystal Reports for Enterprise

## ○ Simplification

- Server Group Enhancements
- Analytics Partner Extension Directory support
- SDK

## ○ Enable the Business

- Fiori Styled BI Launchpad Support
- Data Source Mapping Enhancements
- BW Enhancements
- SAP S/4HANA
- Direct to Data

## ○ Performance

**This is the current state of planning and may be changed by SAP at any time.**

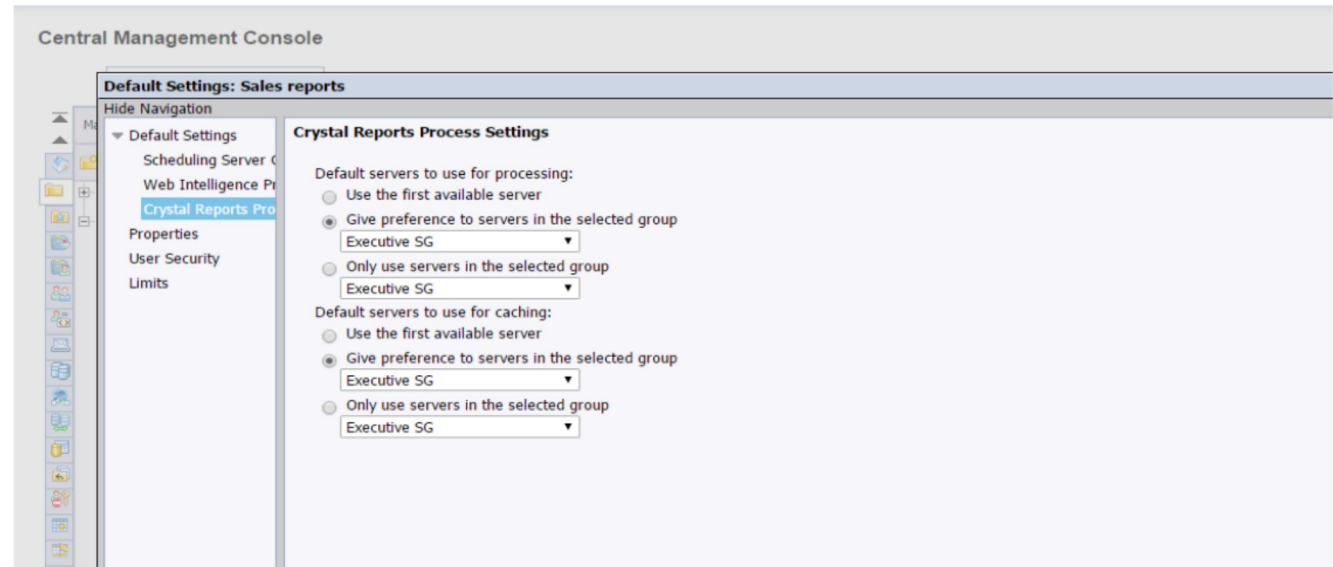
# SAP BusinessObjects BI 4.2 SP04 - Crystal Reports for Enterprise

## ○ Simplification

### Server Group Exclusivity Settings

Crystal Reports for Enterprise Service enhanced with

- Support for Server Group Exclusivity while refreshing reports on demand
  - On User / Usergroup level
  - On Folder level



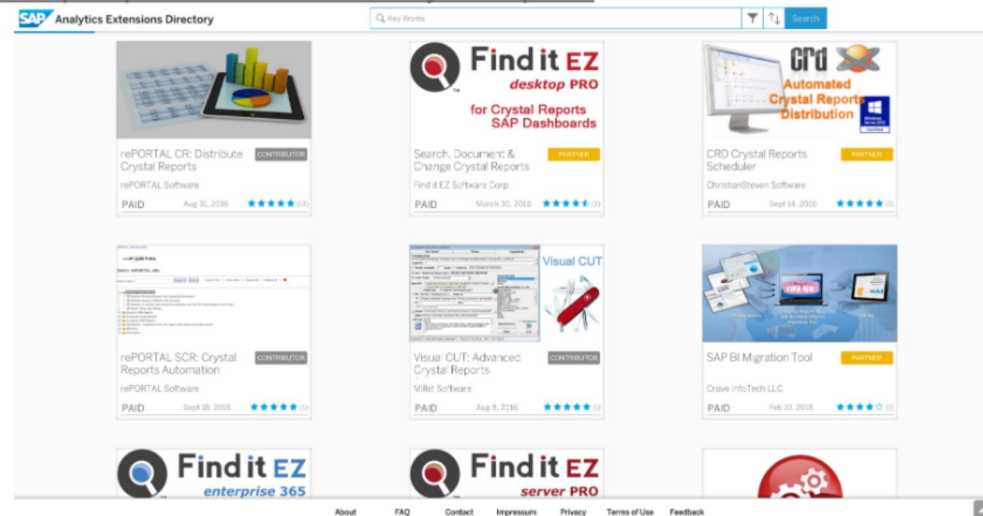


# SAP BusinessObjects BI 4.2 SP04 - Crystal Reports for Enterprise

## ○ Simplification

### Analytics Partner Extension Directory support

- Direct access to the SAP Analytics Partner Extension Directory from Crystal for Enterprise Client
- <https://analytics-extensions.enter.sap/sap/aed/ui/?Product=crystalreports>



# SAP BusinessObjects BI 4.2 SP04 - Crystal Reports for Enterprise

---

## ○ Simplification

### SDK

Crystal Reports for Enterprise SDK enhancements

- JavaScript
- “Send to” function enabled when viewing Crystal Reports through OpenDocument
- “PVL” Parameter to be used for setting preferred viewing locale through OpenDocument

# SAP BusinessObjects BI 4.2 SP04 - Crystal Reports for Enterprise

---

## ○ Enable the Business

### Fiori styled BI Launchpad Support\*

- View Crystal Reports for Enterprise documents
- Schedule Crystal Reports for Enterprise documents

\* This is a first release with limited functionality, further enhancements planned for sub sequential Support Packages

# SAP BusinessObjects BI 4.2 SP04 - Crystal Reports for Enterprise

---

## ○ Enable the Business

### Datasource mapping

Enhanced with

- Repointing a report to a new data source enhanced with Parameter mapping
  - No manual recreation of parameters at repointing to another data source required anymore
  - Mapping button added
  - Parity with Crystal Reports

# SAP BusinessObjects BI 4.2 SP04 - Crystal Reports for Enterprise

---

## ○ Enable the Business

### SAP BW Connectivity

Issues resolved for

- Updating Crystal Reports for Enterprise while using SAP BW as data source to BI4.2
  - Reports using BW OLAP Connector from BI Platform
  - Render report data issues resolved with errors “Invalid Data Source”, “Verify Data Source” and “Set Data Source Location”
  - Reports using BW Variables in text format that are optional

# SAP BusinessObjects BI 4.2 SP04 - Crystal Reports for Enterprise

---

## ○ Enable the Business

### SAP S/4HANA

Connection to

- S/4 HANA On-Premise using BICS

\* This is a first release with limited functionality, further enhancements planned for sub sequential Support Packages

# SAP BusinessObjects BI 4.2 SP04 - Crystal Reports for Enterprise

---

## ○ Enable the Business

### Direct to Data

Added support for

- Access 2013
- XML Files
- Sybase SQL Anywhere 27
- Microsoft SQL Server 2012 / 2014 / 2016

\* This is a first release with limited functionality, further enhancements planned for sub sequential Support Packages



# Crystal Reports

BI4.2 SP04 What's New





# SAP BusinessObjects BI 4.2 SP04 - Crystal Reports 2016

## ○ Simplification

- Server Group Enhancements
- Analytics Partner Extension Directory support
- SDK

## ○ Enable the Business

- Fiori Styled BI Launchpad Support
- Direct to Data Enhancements

## ○ Performance

**This is the current state of planning and may be changed by SAP at any time.**

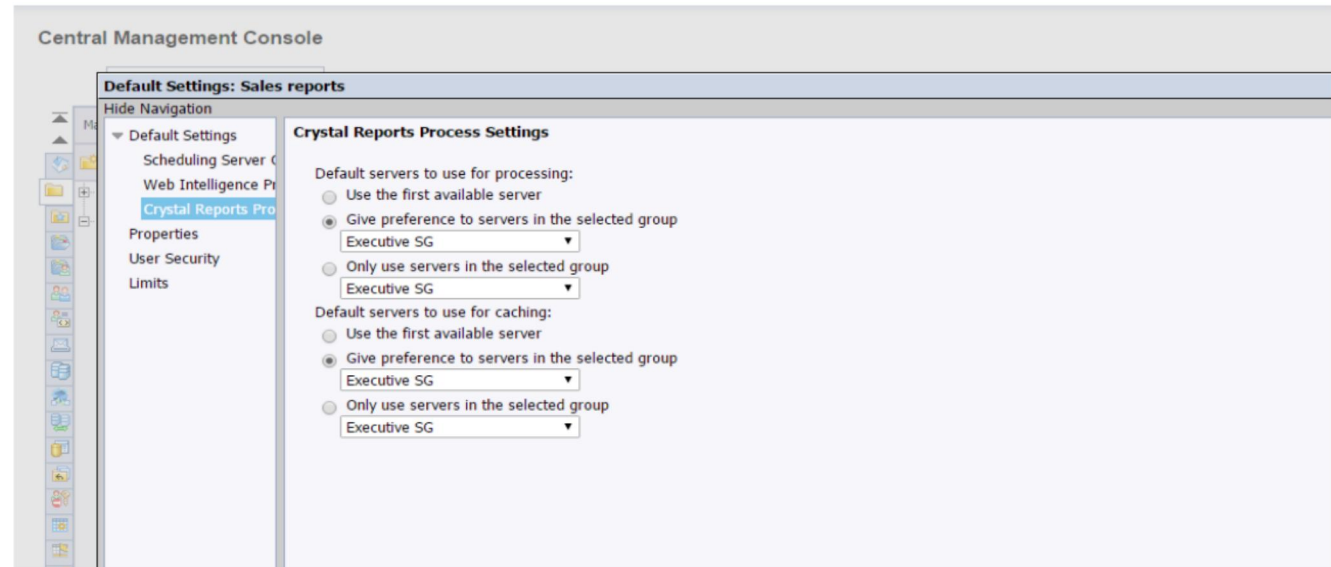
# SAP BusinessObjects BI 4.2 SP04 - Crystal Reports 2016

## ○ Simplification

### Server Group Exclusivity Settings

Crystal Reports for Enterprise Service enhanced with

- Support for Server Group Exclusivity while refreshing reports on demand
  - On User / Usergroup level
  - On Folder level

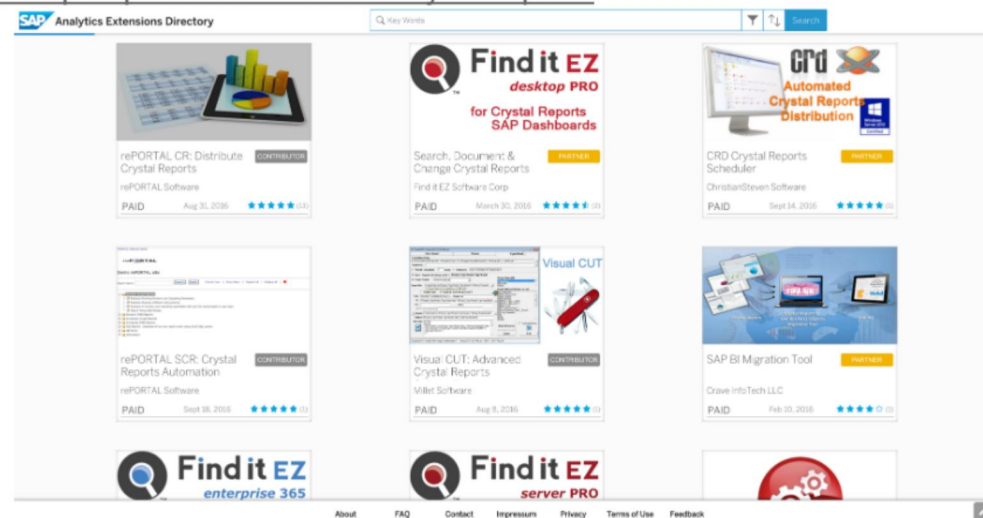


# SAP BusinessObjects BI 4.2 SP04 - Crystal Reports 2016

## ○ Simplification

### Analytics Partner Extension Directory support

- Direct access to the SAP Analytics Partner Extension Directory from Crystal for Enterprise Client
- <https://analytics-extensions.enter.sap/sap/aed/ui/?Product=crystalreports>



# SAP BusinessObjects BI 4.2 SP04 - Crystal Reports 2016

---

## ○ Simplification

### SDK

Crystal Reports for Enterprise SDK enhancements

- “Send to” function enabled when viewing Crystal Reports through OpenDocument
- “PVL” Parameter to be used for setting preferred viewing locale through OpenDocument

# SAP BusinessObjects BI 4.2 SP04 - Crystal Reports 2016

---

## ○ Enable the Business

### Fiori styled BI Launchpad Support\*

- View Crystal Reports for Enterprise documents
- Schedule Crystal Reports for Enterprise documents

\* This is a first release with limited functionality, further enhancements planned for sub sequential Support Packages

# SAP BusinessObjects BI 4.2 SP04 - Crystal Reports 2016

---

## ○ Enable the Business

### Direct to Data

Added support for

- SAP HANA SPS12 and SPS13
- Sybase SQL Anywhere 17
- Microsoft SQL Server 2016
- Oracle MySQL 5.7
- IBM DB2 for iSeries 7.3

\* This is a first release with limited functionality, further enhancements planned for sub sequential Support Packages



# Analysis for OLAP

BI4.2 SP04 What's New



# SAP BusinessObjects BI 4.2 SP04 - Analysis for OLAP

## ○ Simplification

- DrillThrough Enhancements
- Default Display for Member Selector
- Security Enhancements
- SSO Authentication
- Error Handling

## ○ Enable the Business

- User Profile Adoption
- Display Data Source Details
- Search for Connection
- Hierarchy Information
- Modification Indicator

## ○ Performance



**This is the current state of planning and may be changed by SAP at any time.**



# SAP BusinessObjects BI 4.2 SP04 - Analysis for OLAP

## Simplification

### DrillThrough

Enhanced Readability

- Enhanced display of column names while using DrillThrough

The screenshot shows a 'Drill Through' window in SAP BusinessObjects BI. The main table displays data with enhanced column names. A yellow box highlights the header row of the main table, which includes columns like 'Internet Sales Amount', 'Internet Order Quantity', 'Internet Extended Amount', 'Internet Tax Amount', 'Internet Freight Cost', 'Internet Unit Price', 'Internet Total Product Cost', 'Internet Standard Product Cost', 'Sales Order Number', 'Sales Order Line', 'Promotion', 'Date', 'Sales Territory Region', 'Product', 'Date', and 'Source Currency Code'. The data rows show values for these columns, such as 539.99, 1, 539.99, 43.1992, 13, etc.

Internet Sales Amount	Internet Order Quantity	Internet Extended Amount	Internet Tax Amount	Internet Freight Cost	Internet Unit Price	Internet Total Product Cost	Internet Standard Product Cost	Sales Order Number	Sales Order Line	Promotion	Date	Sales Territory Region	Product	Date	Source Currency Code
539.99	1	539.99	43.1992	13.4998	539.99	343.6496	343.6496	S073496	1	Volume Discount 11 to 14	July 3, 2004	Germany	Road-750 Black, 52	July 3, 2004	USD
539.99	1	539.99	43.1992	13.4998	539.99	343.6496	343.6496	S073496	1	Volume Discount 11 to 14	July 3, 2004	Germany	Road-750 Black, 52	July 3, 2004	USD
539.99	1	539.99	43.1992	13.4998	539.99	343.6496	343.6496	S073496	1	Volume Discount 11 to 14	July 3, 2004	Germany	Road-750 Black, 52	July 3, 2004	USD
769.49	1	769.49	61.5592	19.2373	769.49	419.7784	419.7784	S073804	1	Volume Discount 11 to 14	July 8, 2004	Germany	Mountain-400-W Silver, 46	July 8, 2004	USD
769.49	1	769.49	61.5592	19.2373	769.49	419.7784	419.7784	S073804	1	Volume Discount 11 to 14	July 8, 2004	Germany	Mountain-400-W Silver, 46	July 8, 2004	USD
2.29	1	2.29	0.1832	0.0573	2.29	0.8565	0.8565	S073455	3	Volume Discount 11 to 14	July 3, 2004	Germany	Patch Kit/8 Patches	July 3, 2004	USD

# SAP BusinessObjects BI 4.2 SP04 - Analysis for OLAP

## ○ Simplification

### Default Display for Member Selector

Member Selection enhanced with

- Inherit the BEx Default Display setting for users when entering the Member Selector

The image displays two screenshots from SAP BusinessObjects BI 4.2 SP04. The left screenshot shows the 'Member Selector' dialog box, which is used for selecting members from a data source. The 'Display' dropdown menu is open, showing options like 'Key', 'Text', 'Short description', 'Long description', 'Key : Text', 'Key : Short description', 'Key : Long description', and 'Text : Key'. The 'Key : Long description' option is selected. The right screenshot shows the 'General settings' tab in the 'Business Explorer' configuration window. The 'Display' dropdown is set to 'Key and Text', 'Text Type' is 'Long Text', and 'BEx description' is 'Short description'. A yellow arrow points from the 'Key and Text' setting in the right screenshot to the 'Key : Long description' option in the left screenshot, indicating that the BEx settings are inherited by the Member Selector.

# SAP BusinessObjects BI 4.2 SP04 - Analysis for OLAP

## ○ Simplification

### Security

Security Settings enhanced with

- Create Analysis Workspace security setting added for Analysis Edition for OLAP
- Split options to Export to Analysis Application, Analysis View, CSV, Excel and PDF

**Add/Remove Rights**

**Object:** Analysis edition for OLAP  
**Principal:** AOLAP - read-only

▼ **General**  
 General

▼ **Application**  
 Analysis edition for OLAP

▼ Specific Rights for Analysis edition for OLAP	Implicit Value	✓	✗	⚠	📄	🔗
Create Analysis Workspace	Granted	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Export to Analysis Application	Granted	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Export to Analysis View	Granted	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Export to CSV	Granted	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Export to Excel	Granted	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Export to PDF	Granted	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

▼ General Rights for Analysis edition for OLAP	Override General Global	Implicit Value	✓	✗	⚠	📄	🔗
Modify the rights users have to this object	<input type="checkbox"/>	Not Specified	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

# SAP BusinessObjects BI 4.2 SP04 - Analysis for OLAP

---

## ○ Simplification

### SSO Authentication

SSO Enabled for

- SAML SSO Authentication support for HANA HTTP Connection

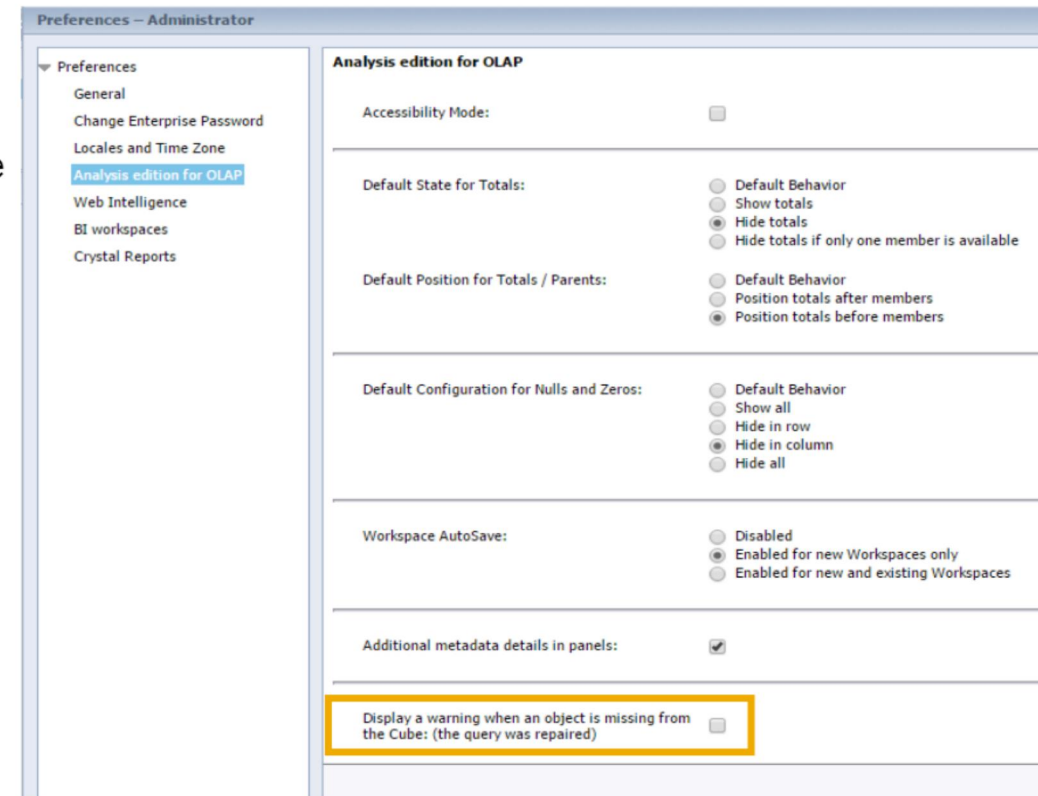
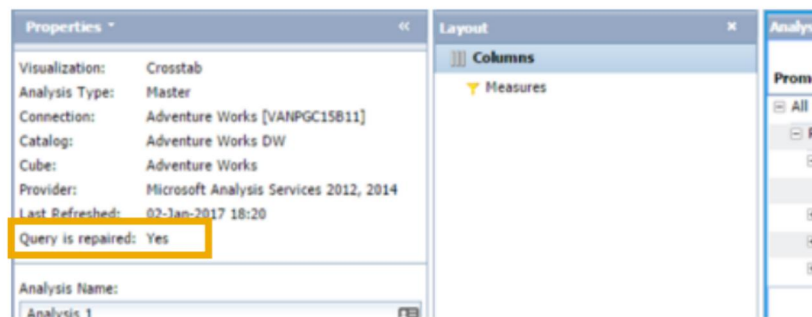
# SAP BusinessObjects BI 4.2 SP04 - Analysis for OLAP

## ○ Simplification

### Error Handling

Avoid Warnings when member in workspace is missing from Cube

- Properties Screen to tell if OLAP query has been repaired  
A Query is repaired when a explicitly referenced member in a workspace cannot be found in the Cube
- User Preference for display of warning when an OLAP Query has been repaired



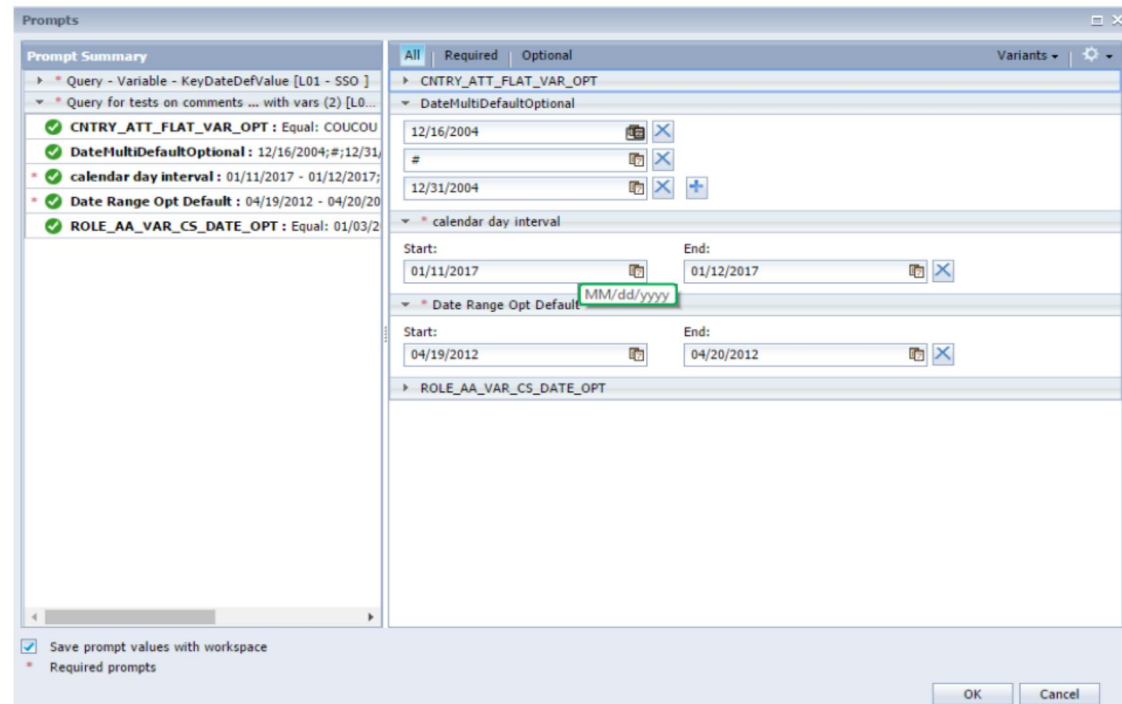
# SAP BusinessObjects BI 4.2 SP04 - Analysis for OLAP

## Enable the Business

### User Profile Adoption

Prompt Panel enhanced with

- Enter DATE based prompts in format as defined on User Profile settings instead of default yyyyMMdd



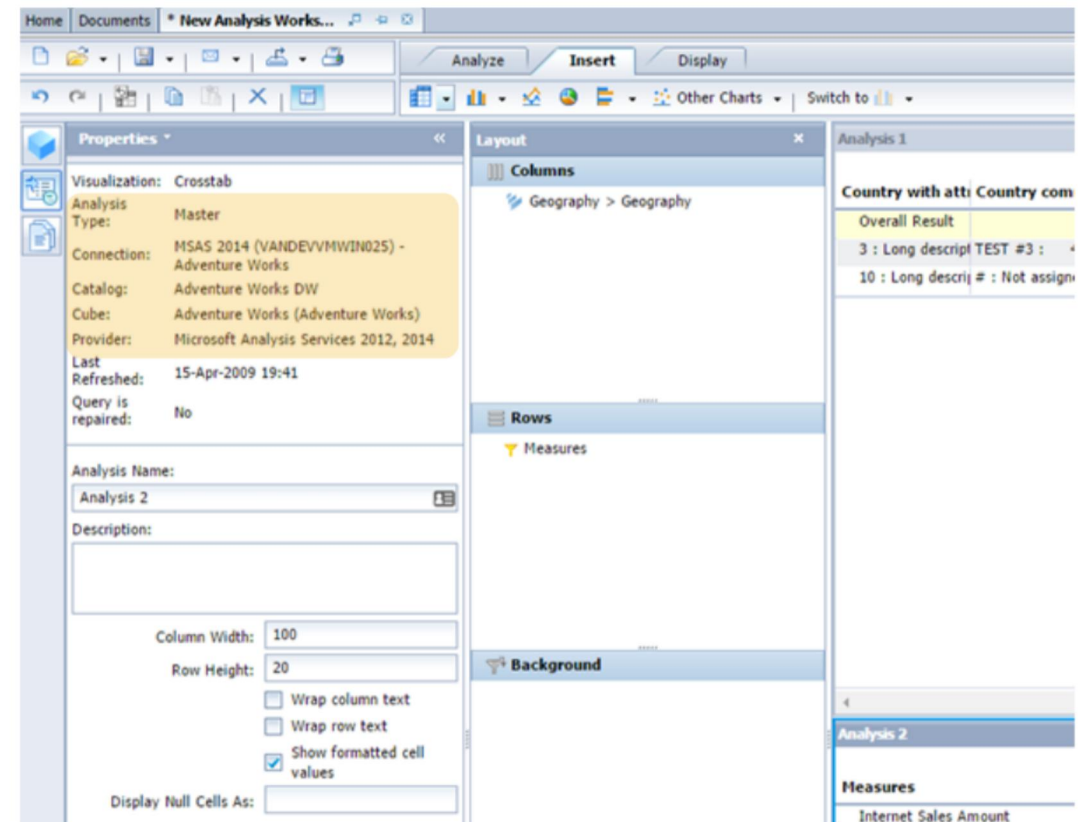
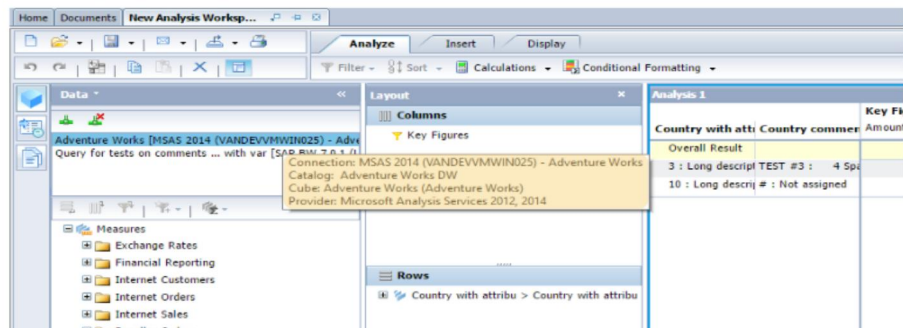
# SAP BusinessObjects BI 4.2 SP04 - Analysis for OLAP

## Enable the Business

### Display Data Source Details

Enable quick and easy insight to OLAP source

- Data Source description for all OLAP Connections
  - Cube / Query
  - Catalog
  - Server



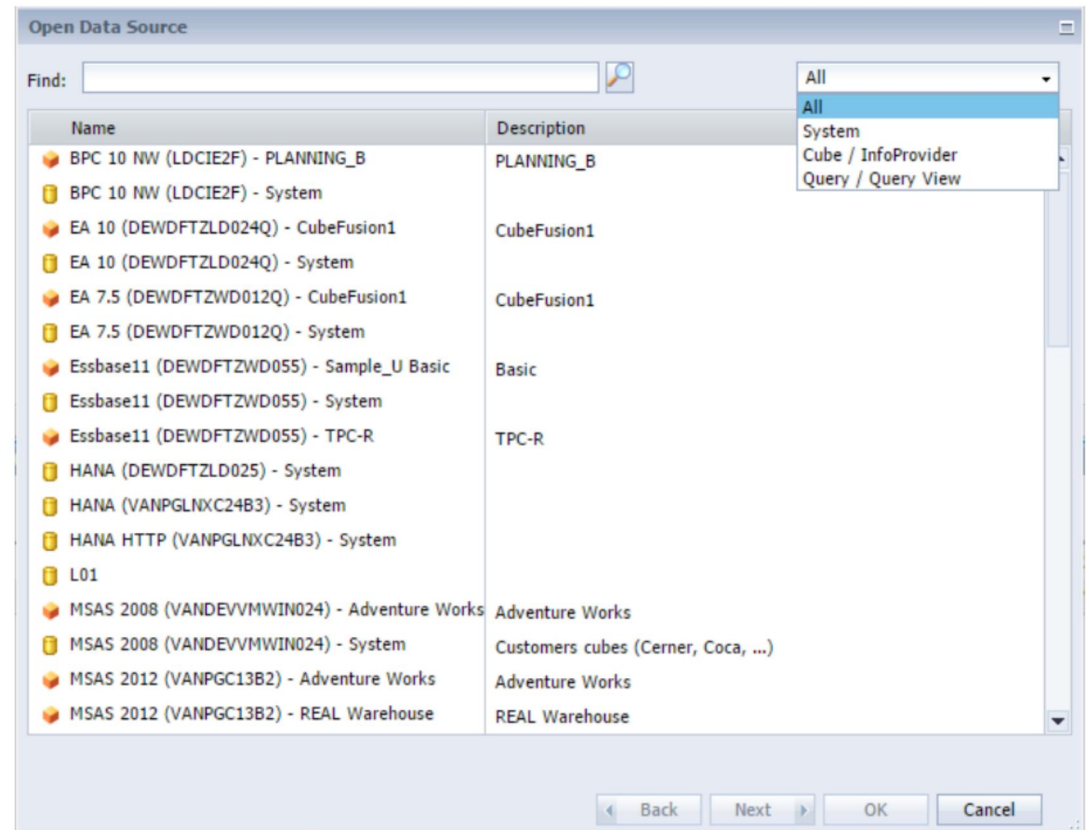
# SAP BusinessObjects BI 4.2 SP04 - Analysis for OLAP

## Enable the Business

### Search for Connection

Enable quick and easy access to OLAP source

- Search Connections
  - Name
  - Description
- Case insensitive
- Cumulative with filter by connection type





# SAP BusinessObjects BI 4.2 SP04 - Analysis for OLAP

## Enable the Business

### Hierarchy Information

Enable quick and easy insight to Hierarchy Levels

- Tooltip while hovering over Hierarchy to display Levels

The screenshot shows the SAP BusinessObjects BI 4.2 SP04 Analysis for OLAP interface. The main window displays a table with columns for 'YeaQuaMonDay', 'Amount of Open It', 'Delivery Date', and 'Product Price'. The table data is as follows:

YeaQuaMonDay	Amount of Open It	Delivery Date	Product Price
Overall Result	196 ST	01/30/2004	4.433,690
2004	82 ST	01/29/2004	1.352,730
20041	3 ST	01/15/2004	13,280
02/14/2004	1 ST	01/02/2004	4,280
02/15/2004	1 ST	01/01/2004	4,500
02/29/2004	1 ST	01/15/2004	4,500
20042	36 ST	01/28/2004	522,150
20043	19 ST	01/25/2004	305,600
20044	24 ST	01/29/2004	511,700
2005	114 ST	01/30/2004	3.080,960

A tooltip is visible over the 'YeaQuaMonDay' column, showing the following 'Levels Visibility' options:

- Calendar year
- Calendar year/quarter
- Calendar year/month
- Date
- Leaf Members

The interface also shows a 'Layout' pane on the left with 'Columns' and 'Rows' sections. The 'Rows' section shows 'Calendar day > YeaQuaMonDay'. The 'Background' section is also visible at the bottom of the layout pane.

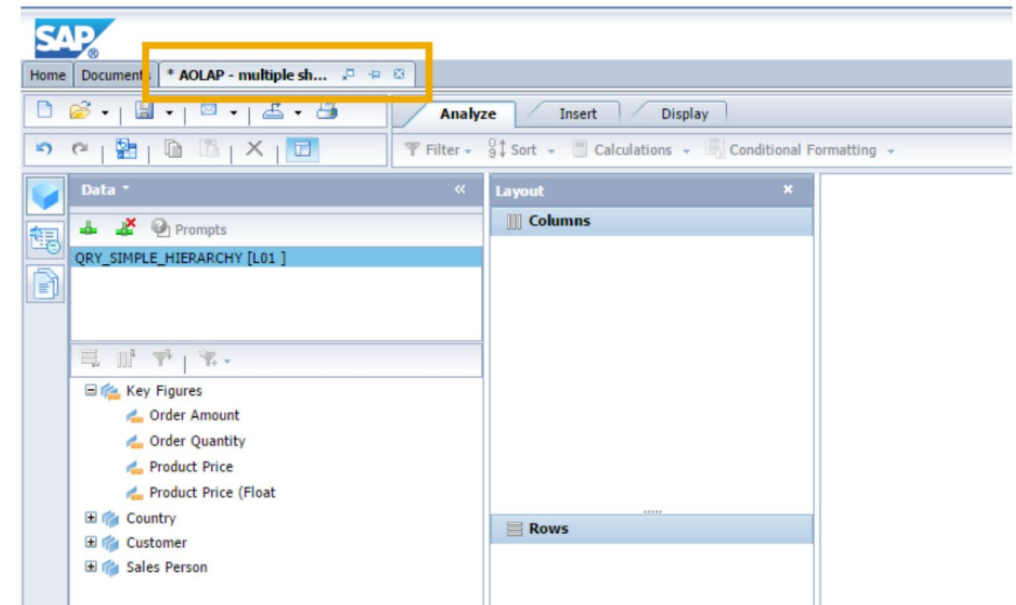
# SAP BusinessObjects BI 4.2 SP04 - Analysis for OLAP

## ○ Enable the Business

### Modification Indicator

Enable quick update if workspace is changed

- Indicator on Workbook tab if content has been modified  
tab will receive an asterisk (\*) as pre-fix





# BI Platform SDK

BI4.2 SP04 What's New



# SAP BusinessObjects BI 4.2 SP04 – BI Platform SDK

---

## ○ Simplification for IT

## ○ Enable the Business

## ○ Performance

- BI Inbox
- Document Management
- Recycle Bin
- User Management
- Scheduling
- Publication
- Alerts and Notifications
- Calendar
- Generic
- OpenDocument

# SAP BusinessObjects BI 4.2 SP04 - BI Platform SDK

---

## ○ SIMPLIFICATION for IT

### BI Inbox

- List Inbox messages for the User
- Update messages read/ unread states, Properties, filters etc.
- Permanently delete items from inbox

# SAP BusinessObjects BI 4.2 SP04 - BI Platform SDK

---

## ○ SIMPLIFICATION for IT

### Document Management

- Send documents to destination
  - Inbox
  - File Location
  - Email via SMTP
  - (S)FTP

# SAP BusinessObjects BI 4.2 SP04 - BI Platform SDK

---

## ○ SIMPLIFICATION for IT

### Recycle Bin

- List Items and their properties move to Recycle Bin
- Restore items from Recycle Bin
- Permanently delete item(s) from Recycle Bin

# SAP BusinessObjects BI 4.2 SP04 - BI Platform SDK

---

## ○ SIMPLIFICATION for IT

### User Management

- List available locales and time zones
- Get and Set locales, time zones and PVL for user logged-in
- Change password for Logged-in user
- Last logged in information for user



# SAP BusinessObjects BI 4.2 SP04 - BI Platform SDK

---

## ○ SIMPLIFICATION for IT

### Scheduling

- Recurrence details on schedules
- Calendar support for schedules – list , get selected dates

# SAP BusinessObjects BI 4.2 SP04 - BI Platform SDK

---

## ○ SIMPLIFICATION for IT

### Publication

- Set Merged PDF settings and delivery rules
- Distribution information on successful and failed received publication info for users
- Events listings for publications
- Notifications on scheduled status - Through MyAlerts or through eMail
- Advanced settings for publications
- Server group at report level and publications

# SAP BusinessObjects BI 4.2 SP04 - BI Platform SDK

---

## ○ SIMPLIFICATION for IT

### Alerts and Notifications

- List alerts subscribed for current user
- Details of particular alert
- Mark read/unread alerts
- Delete single /multiple alerts
- List details and the count of banner message notifications for the user

# SAP BusinessObjects BI 4.2 SP04 - BI Platform SDK

---

## ○ SIMPLIFICATION for IT

### Calendar

- Get the list of calendars available
- Get the selected dates for the selected calendars

# SAP BusinessObjects BI 4.2 SP04 - BI Platform SDK

---

## ○ SIMPLIFICATION for IT

### Generic

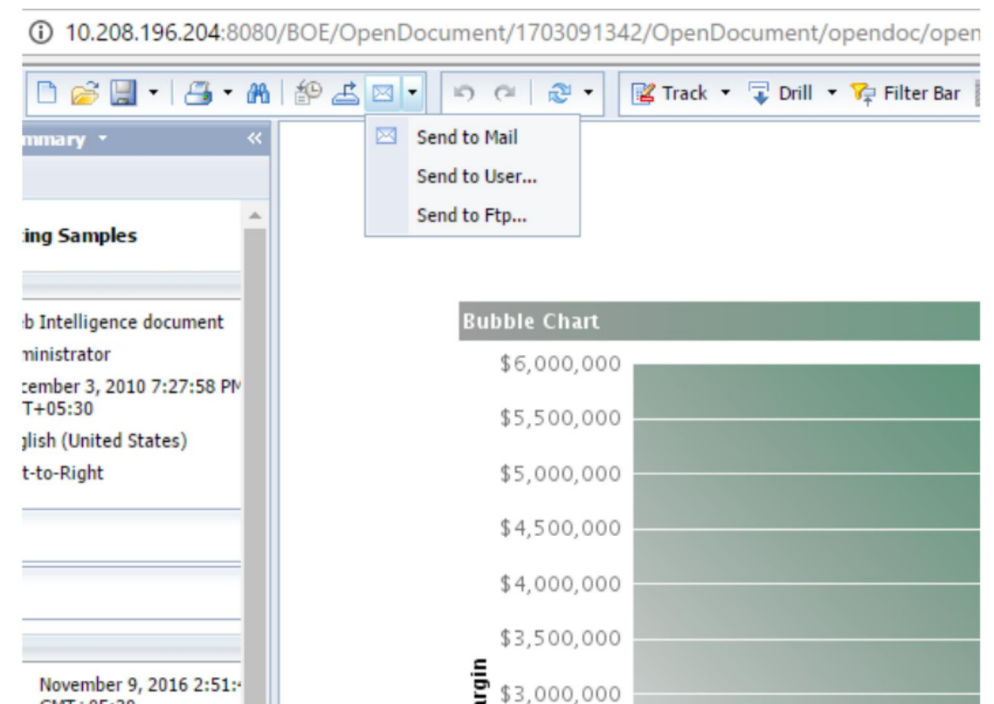
- RESTful Web services session consumption lists in CMC

# SAP BusinessObjects BI 4.2 SP04 – OpenDocument

## ○ SIMPLIFICATION for IT

### OpenDocument

- SendTo in Opendoc – Webi + CR
- Support Lang PARAM for CR  
Parity to Webi - Set Preferred viewing locale and language independently in a OpenDocument





# Crystal Reports Java Scripts API

BI4.2 SP04 What's New



# SAP BusinessObjects BI 4.2 SP04 – CR JAVA Script API

---

## ○ SIMPLIFICATION for IT

### New APIs for

- setEnableDrillDown
- setToolPanelViewMode
- setHasToggleGroupTreeButton
- setHasToggleParameterPanelButton
- setHasSearchButton





# Platform Support

BI4.2 SP04 What's New



# SAP BusinessObjects BI 4.2 SP04 - Platform Support

---

## ○ Simplification for IT

- Default Bundle Changes
- Operating Systems
- Web Application Servers
- Portals
- Others

## ○ Enable the Business

## ○ Performance

**This is the current state of planning and may be changed by SAP at any time.**

# SAP BusinessObjects BI 4.2 SP04 - Platform Support

---

## ○ SIMPLIFICATION for IT

### Default Bundled with Installer

Changes made

- Upgraded to SQLAnywhere 17
- Upgrade to Tomcat 8.5.4

\* Please Check [Product Availability Matrix](#) for support by Client

# SAP BusinessObjects BI 4.2 SP04 - Platform Support

---

## ○ SIMPLIFICATION for IT

### Operating Systems\*

Added support for

- Red Hat Enterprise Linux (RHEL) 7.2
- IBM AIX 7.2
- Oracle Linux 7.2 including Unbreakable Enterprise Kernel (UEK)

\* Please Check [Product Availability Matrix](#) for support by Client

# SAP BusinessObjects BI 4.2 SP04 - Platform Support

---

## ○ SIMPLIFICATION for IT

### Web Application Servers \*

Added support for

- Jboss EAP 7.0

\* Please Check [Product Availability Matrix](#) for support by Client

# SAP BusinessObjects BI 4.2 SP04 - Platform Support

---

## ○ SIMPLIFICATION for IT

### Portals \*

Added support for

- SAP NW 7.5 SP05 Application Server Java

\* Please Check [Product Availability Matrix](#) for support by Client

# SAP BusinessObjects BI 4.2 SP04 - Platform Support

---

## ○ SIMPLIFICATION for IT

### Others \*

Added support for

- Visual Studio 2015 including compiler

\* Please Check [Product Availability Matrix](#) for support by Client



# Data Access

BI4.2 SP04 What's New





# SAP BusinessObjects BI 4.2 SP04 - Data Access

---

## ○ Simplification for IT

## ○ Enable the Business

## ○ Performance

- SAP HANA 2.0
- Big Data
- RDBMS

**This is the current state of planning and may be changed by SAP at any time.**

# SAP BusinessObjects BI 4.2 SP04– Data Access

---

## ○ Enable the Business

### Data Access (1) \*

Added support for

- SAP HANA 2.0
- Apache Spark 2.0
- Hive 2.0
- Cloudera Impala 2.3

\* Please Check [Product Availability Matrix](#) for support by Client

# SAP BusinessObjects BI 4.2 SP04– Data Access

## ○ Enable the Business

### Data Access (2) \*

Added support for

- SQLAnywhere 17
- Oracle Exadata 12
- Microsoft Parallel Datawarehouse (JDBC Only)
- Microsoft SQLServer 2016
- DB2 for zOS 12
- DB2 for iSeries 7.3
- MySQL 5.7

\* Please Check [Product Availability Matrix](#) for support by Client



# Additional Information



# Key Links (1)

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## SAP Generic Links

- **SAP Community Network** : <http://scn.sap.com>
- **SAP Road Maps in SMP** : <http://service.sap.com/saproadmaps>
- **Product Documentation** : <http://help.sap.com>
- **Product Availability Matrix** : <https://apps.support.sap.com/sap/support/pam>
- **Maintenance schedule** : <https://support.sap.com/release-upgrade-maintenance/package-stack-schedules/analytics-maintenance-schedule.html>
- **Design-thinking methodology**: <http://scn.sap.com/community/design-thinking>
- **Remote Supportability**: <https://support.sap.com/remote-support.html>

## Key Links (2)

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### SAP BI Recommended Links

- **BI4.2 Virtual Upgrade Workshop** : <http://scn.sap.com/community/bi-platform/blog/2016/07/18/announcing-the-launch-of-sap-businessobjects-bi-42-upgrade-virtual-technical-workshop-online-videos>
- **Watch SAP Analytics Customer Stories** : <http://www.SAPAnalyticsStory.com>
- **SAP BI Statement of Direction** : [http://bit.ly/SAPBI\\_SOD](http://bit.ly/SAPBI_SOD)
- **SAP BI Recourse Center** : [www.sapbi.com](http://www.sapbi.com)
- **Official tutorials for SAP BI** : <http://sap.com/learnbi>
- **Choosing the right BI Client** : <http://scn.sap.com/docs/DOC-38981>
- **SAP BI Sizing** : [www.sap.com/bisizing](http://www.sap.com/bisizing)
- **SAP BI Pattern Books** : <https://wiki.scn.sap.com/wiki/display/BOBJ/Business+Intelligence+Platform+-+Pattern+Books+Index>
- **SAP BI Platform Support Tool** : <http://wiki.scn.sap.com/wiki/display/BOBJ/SAP+BI+Platform+Support+Tool>

# Where to go to provide product feedback and ideas

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## 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/>

Public

# Thank You

## SAP GTMBI





# Change Log

Version	Comment	Date
1.0	Initial release	20-04-2017

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