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About this presentation

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

- 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

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

<PLACEHOLDER>

SAP BusinessObjects What’s 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

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**SAP S/4HANA**
Embedded Analytics

**SAP BW/4HANA**
Integrated Data Warehousing

**SAP HANA PLATFORM**
Real-time Platform | Advanced Analytics | Smart Data Integration
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.
SAP BI Key Investment Areas

**Enterprise**
- Ubiquitous analytics for all users and landscapes
- Collaborate across the organization
- Scalable, secure, and mission critical

**Agile**
- Unleash user’s creativity
- Agility for the business
- Able to leverage IT’s expertise

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

**Big Data**
- Explore new opportunities
- Build on SAP HANA strengths
- Embrace new emerging data sources

**Cloud**
- Public cloud with BusinessObjects Cloud
- Private cloud with support for HANA Enterprise Cloud, AWS, Azure, etc
- Drive lower TCO
Enterprise - Vision & Strategy
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

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!

**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 then 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
The power of Big Data Analytics - Vision & Strategy

Real-Time Insight with Big 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.)
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

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### Building Bridges

#### Interoperability and Support for Hybrid Scenarios

**LEAD THE CLOUD**
Software as a service in the public cloud

**INNOVATE THE CORE**
On-premise and/or private cloud

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#### 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

- Universe data
- HANA data
- SQL
- BW data
- BPC model import
- Live HANA data

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**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

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On-premise and/or private cloud deployment options

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Hybrid: SAP BusinessObjects Cloud + BI

Leverage on-premise data sources for hybrid scenarios

Integrate data from cloud applications

Corporate

On-premise

SAP Analytics
BI4 - Predictive
BPC - GRC

Private Cloud or IaaS

Business Units

SAP BusinessObjects Cloud

Suppliers

SAP BusinessObjects Cloud
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

<table>
<thead>
<tr>
<th>Data Discovery &amp; Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lumira 2.x</td>
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<table>
<thead>
<tr>
<th>Office Integration</th>
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<td>Analysis Office</td>
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<thead>
<tr>
<th>Reporting</th>
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<tbody>
<tr>
<td>Crystal Reports</td>
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<tr>
<td>Web Intelligence</td>
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</tbody>
</table>

- 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 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
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
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
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
**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
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

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
**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

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

* This is a first release with limited functionality, further enhancements planned for sub sequential Support Packages
**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
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
- Servers network name resolution should be verified, either using a DNS or hosts file configuration
Enhancements for BI Administration

HANA SAML Test connection
Enhanced with

- Test Connection function on HANA Authentication Connection
Enhancements for BI Administration

User Account Status

- New column in User List to gain quick insight of account status of user
Enhancements for BI Administration

Instances Count

- New column in Folders to gain quick insight of number of instances attached to a document
Enhancements for BI Administration

Limit number of documents in Inbox

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

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

Search (3)
Enhanced with

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

![Image of System Login with System Name: SystemNameWCursor]

![Image of Job Properties with New Job 123]
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

```sql
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
```
Performance

Promotion Management (3)
Enhanced with

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

```
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'", "$CUID$")
```
Performance

Upgrade Management Tool
Enhanced with

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

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

**O Enable the Business**
- Rejuvenated Interface (Viewer)
- DHTLM Catch-Up
- Enhanced Chart Library
- References Enhancements
- Variables Enhancements
- Grouping Enhancements
- New and Enhanced Functions
- BI Variants Enhancements

**O 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.
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
TRUSTED FOUNDATION

Security Enhancements

- Added security settings for consuming relational connections with FHSQ
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
Calculation Extensions
Extend the Web Intelligence Calculation Engine

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

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

Rejuvenated Interface for viewing Web Intelligence documents* (5)

Viewer support for

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

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

* 1st phase started with BI4.2 SP03, Final completion planned for subsequent Support Packs
Enable the Business

DHTML Catch-Up (2)*
Web Intelligence DHTML Client enhanced with

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

*SAP BusinessObjects BI 4.2 SP04 - Web Intelligence

* 1st phase for BI4.2 SP03, Final completion planned for subsequent Support Pack
Enable the Business

Enhanced Chart Library (1)
Added to the Chart Library
- Gauges: Lineao, Speedometer and Angular
- Tiles for KPI display
Enable the Business

Enhanced Chart Library (2)

Enhanced charts

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

References Enhancements
References values enhanced with

- Description Field
Enable the Business

Variables Enhancements
Variables enhanced with

- Description Field
Enable the Business

Grouping Enhancements
Grouping Values enhanced with

- Description Field
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
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 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.
TRUSTED FOUNDATION

CMS Access
Enhanced with
- Republish Universe
- Show Password
- Copy – Paste “System” name
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
TRUSTED FOUNDATION

REST Web Services
Enhanced with

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

Custom Elements Consumption
Enhanced with

- Retrieval of Custom Elements as Chart Image from Web Intelligence report
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.
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
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](https://analytics-extensions.enter.sap/sap/aed/ui/?Product=crystalreports)
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
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
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
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](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
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
Simplification

Default Display for Member Selector

Member Selection enhanced with

- Inherit the BEx Default Display setting for users when entering the Member Selector
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
SAP BusinessObjects BI 4.2 SP04 - Analysis for OLAP

- **Simplification**

**SSO Authentication**

SSO Enabled for

- SAML SSO Authentication support for HANA HTTP Connection
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
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
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
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
Enable the Business

Hierarchy Information
Enable quick and easy insight to Hierarchy Levels

- Tooltip while hovering over Hierarchy to display Levels
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
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
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
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
SIMPLIFICATION for IT

Calendar

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

Generic

- RESTful Web services session consumption lists in CMC
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.
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
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
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
  - SAP HANA 2.0
  - Big Data
  - RDBMS

- Enable the Business

- Performance

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

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
SAP BI Recommended Links

- Watch SAP Analytics Customer Stories: [http://www.SAPAnalyticsStory.com](http://www.SAPAnalyticsStory.com)
- SAP BI Recourse Center: [www.sapbi.com](http://www.sapbi.com)
- Choosing the right BI Client: [http://scn.sap.com/docs/DOC-38981](http://scn.sap.com/docs/DOC-38981)
- SAP BI Sizing: [www.sap.com/bisizing](http://www.sap.com/bisizing)
Where to go to provide product feedback and ideas

- SAP Idea Place: [https://ideas.sap.com](https://ideas.sap.com)
Thank You

SAP GTMBI
## Change Log

<table>
<thead>
<tr>
<th>Version</th>
<th>Comment</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>Initial release</td>
<td>20-04-2017</td>
</tr>
</tbody>
</table>


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