0302
SAP BusinessObjects Design Studio & Dashboards Roadmap

Eric Schemer, Product Management Analysis Clients
March 2013
Legal Disclaimer

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

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

**Discovery and Analysis**
- Discover areas to optimize your business
- Adapt data to business needs
- Tell your story with beautiful visualizations

**Dashboards and Apps**
- Deliver engaging information to users where they need it
- Track key performance indicators and summary data
- Build custom experiences so users get what they need quickly

**Reporting**
- Securely distribute information across your organization
- Give users the ability to ask and answer their own questions
- Build printable reports for operational efficiency


Build Engaging Experiences

Share Information
SAP BusinessObjects Dashboarding Strategy

Self Service Dashboarding
- Data is placed into the hand of the consumer
- Navigate and share datasets
- Create and share data visualizations
- Simple & intuitive

Professional Authored Dashboards
- Created by IT or Power User
- High expectation for mobility
- Can be broadly published
- Trusted data based on IT centric deployment

Solutions in BI4
- Visual Intelligence
- Exploration Views

Solutions in BI4
- SAP BusinessObjects Dashboards
- SAP BEx Web Application Designer
  → SAP BusinessObjects Design Studio
Analysis, Visualization & App Design: emerging persona relationships


Design (Apps, Dashboards, Reports)

Data
Metadata
Models

Data Quality
Security
Data Access

System Administration

Data
Metadata
Models

Data
Metadata
Models


Explore. Enrich. Explain.
(Information, Stories.)

Visual Intelligence
Analysis Office


Users

Analyst

Designer (IT, Power User)

Design. Govern.

Design Studio
Dashboards and Apps
Core investment in Design Studio

1 Phase One – Complete [Ship Design Studio and mobile Dashboards]

- Ship new desktop designer (Design Studio 1.0) for BW and SAP HANA scenarios
- Add ability to publish Dashboards in HTML5 for mobile consumption in Mobile BI application (Xcelsius)
- Ship update to Mobile BI (4.4)

2 Phase Two – 2013

- Reduce visualization and charting gap in Design Studio
- Design Studio becomes dashboard tool of choice for BW & HANA usage
- Advanced OLAP app design in DS reduces need for AOLAP
- Additional data source support for mobile dashboards (Xcelsius)

3 Phase Three – 2014

- Add support for non-SAP data sources to Design Studio
- DS also becomes the tool of choice for data sources other than BW & HANA
- Performance enhancements in Dashboards (Xcelsius)
- Migration support (XCE & WAD)
SAP BusinessObjects Dashboarding Strategy
What does this mean for existing customers in 2012/2013?

Current use of Bex Web Application Designer

Use SAP BusinessObjects Design Studio as primary tool for creating dashboards and applications, both on the web and on device

Current use of SAP BusinessObjects Dashboards (former Xcelsius)

SAP BW only

Consider building new dashboards in SAP BusinessObjects Design Studio

Multi-Source, Non-SAP BW

Continue with SAP BusinessObjects Dashboards and leverage the upcoming HTML5 functionality for on-device dashboards for now
SAP BusinessObjects Analysis & Design Studio
The Premium Alternative to BEx

**Analytical Applications**
- **Design Studio**
  - Premium Alternative to BEx Web App Designer
  - Design studio for power users to create purpose-built OLAP analysis & planning apps
  - Mobile support
  - Customer- and SAP-delivered content
  - Supporting SAP BW & SAP HANA sources

- **Analysis, Edition for OLAP**
  - Dedicated Ad-Hoc OLAP client for business users to analyze OLAP data and share it with others
  - Seamless interoperability between designer and ad-hoc client
  - Supporting SAP BW & SAP HANA sources + 3rd party OLAP

**AdHoc OLAP**

**Microsoft Office**
- **Analysis, Edition for Microsoft Office**
  - IT / Developers, Data Analysts, Business Users
  - Excel-based OLAP analysis
  - Excel-based BI applications
  - Live PowerPoint presentations
  - Supporting SAP BW & SAP HANA sources
Business Explorer (BEx) and Analysis/Design Studio
Existing Investments in SAP BW are safe

**BEx tools in maintenance mode**

BEx 7.0 is delivered with the latest BW release and will be maintained for at least the next 7+2 years

See additional information on SCN

BEx Query Designer remains core modeling tool for SAP BW

**Conversion**

Conversion support available for Analysis, edition for Microsoft Office

Conversion support planned for Design Studio
### SAP BusinessObjects Dashboarding strategy

#### Professional authored dashboards

<table>
<thead>
<tr>
<th>2012</th>
<th>Phase 2</th>
<th>Phase 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Most commonly used components for mobile Dashboards in HTML5 allowing customers to get their existing dashboards on mobile devices.</td>
<td>- Selected continuous enhancements of HTML5 components</td>
<td>- Conversion tool for existing dashboards to Design Studio</td>
</tr>
</tbody>
</table>

#### Design Studio

- Renovation of the user experience, both at runtime and design time, bringing a modern environment from which to build innovative functionality
- “Mobile First” / HTML5 rendering system, MOBI
- Support for HANA and BW and be optimized for big data.

- Expand HTML5 visualizations
- Customer & 3rd party API
- Close gaps to BEx Web/ BEx WAD
- HANA

- Design Studio as design environment for unified runtime
- Conversion tool for BEx WAD content
- Offline scenarios
- 3rd party data access
Common Technology – Targeted Experiences

Analytical apps & dashboards – professional, personalizable mobile & web apps designed with Design Studio
Self-Service & highly interactive data visualizations with Visual Intelligence
Seamless Microsoft Office Integration with SAP Analysis Office
HANA optimized versions of traditional reporting clients (Crystal and WebIntelligence)
Common BI Services & graphic engine etc. between components of the BI Suite
Design Studio – The powerful choice for Designers & IT

Easily design centrally governable analytic content ranging from simplified templates via guided analytics to sophisticated applications

- Intuitive WYSIWYG design environment for designers
- Large set of design components (buttons, tabs, dropdown menus etc.)
- Extend via scripting language (subset of JavaScript)
- Enterprise Ready Life Cycle Management
- Central Supportability
- Theming & Customizing

iPad Support built-in

Apps are ready for immediate usage on standard web browsers and mobile devices (HTML5)

Direct & native support for HANA & BW

- Operates directly on BEx Queries, InfoCubes and Hana views
- Support for BW & HANA specific engine- & platform services

Design Studio 1.0:
General Availability since November 2012
Out-of-the-Box BW & HANA OLAP Capabilities

Native support for SAP BW & HANA OLAP capabilities

- BW & HANA: Hierarchy support (e.g. time dependent hierarchies, filter member selection on hierarchy nodes)
- BW: Currency conversion
- BW: Show results of conditions, get exception levels
- BW: Display time-dependent attributes

iPad App created with Design Studio featuring multiple BW hierarchies
Initial View Editor
For SAP HANA and SAP BW DataSource

Convenient and intuitive editing of HANA views and BW InfoProviders within Design Studio

- Via drag and drop
- Add additional filters
- Change display to key or text
- Sorting, defining scaling factors and calculating totals for measures
- Pause refresh while editing Initial view
- Reset changed view to the initial status
- Create crosstab and chart directly from initial views
- Configure options for chart
- Activate hierarchy display
Free Form Layouting Options

**Intuitive layouting options**

- WYSIWYG (embedded runtime to enable what you see is what you get) design principle
- Pixel-exact layouting
- Dynamic layouting via docking position
- Propotional grid layouting
Filter Panel and Dimension Panel

Components for comfortable and intuitive data filtering

- Convenient for designers to define without any coding
- Easy-to-use for end users to select data
- Can be combined with Pop Up component for typical iPad scenarios
- True data binding between data source and filter panel

Designtime

Runtime
Comfortable Scripting Engine & Script Editor

Flexible defining interactions between design components

- JavaScript based command editor
- Easy-to-use scripting wizard
- Intuitive content assistance via CRTL+SPACE
- Display live data for selection
- Built-in documentation for script API
- Automatic syntax check
Integrating with SAP BusinessObjects BI Platform

Enable application management on BI Platform

- Enable multi user-access to applications
- Storage of applications and images
- Embedded runtime on BI Platform
- Central management of system connections

Open/save applications on BI Platform

System connections on BI Platform
Integration into SAP BI Mobile Solutions

Convenient and unified user access for large mobile community:

- Download and access Design Studio applications via SAP BI Mobile Solutions (native iOS application)
- Leverage the collaboration functionality (e.g. annotation, SAP StreamWork etc)
- Unified usability through SAP BI Mobile Solutions
- Enable large mobile community
**iPhone Support**

**Pre-delivered iPhone templates for rapid implementation**

- iPhone template using Tabstrip as component
- iPhone template using Pagebook as component

![Template using Tabstrip](image1)

![Template using Pagebook](image2)
News in Release 1.1

**GA Planned for Q2 2013**

**Design- & Runtime Enhancements**
- Enhanced Charting
- Align/distribute components in layout
- Enhanced Filter Components
- Enhanced Scripting
- Variable Screen
- Custom Stylesheets

**Interoperability**
- Interoperability with Analysis, edition for OLAP

**Mobile**
- Performance improvements
- iPhone support

**Platform**
- Optional NW deployment (functional restrictions compared to BOE deployment)
- HANA deployment for HANA-only use cases

**Partner & Customer SDK (Beta Program 1.2)**
- Custom visualizations of query data
Enhanced Charting Capabilities

Animated HTML5 Charts

- Animated HTML5 chart types
- New chart types: Column Combination, Bar Combination and Waterfall Charts
- Advanced properties view to edit chart areas, data series and data labels
- Color palette available

Column Combination Chart

Waterfall Chart
Align Design Studio Components in Layout

**Comfortable align and distribute components in layout**

- Convenient for designers to organize components without writing exact margin
- All type of components can be aligned and distributed
- Components within the same container or under the same root can be aligned and distributed
- Components can be automatically maximized
- Alignment and distribution can be done via context menu in Layout or per buttons in Design Studio menu

**Aligned Left**

Objects are aligned left based on the object which has the most small left margin

**Distribute Horizontally**

Object in the middle will be moved to the center
**Enhancements for Component Filter Panel**

**More convenient to use filter panel for selecting data**

- Member display could be defined with key, text or both
- On Submit event enables triggering interactions
- Dimension name could be hide or shown
- Ranges are able to be defined in addition to the multiple selection of members
- Defined ranges and selected members could be deleted, included or excluded
Variable Prompting

- Queries with mandatory input are able to be defined as data source in Design Studio
- Variable Prompting can be shown while application start or triggering by other event
- Automatic check for input variable value
- All BW variable types are supported
- HANA parameters are supported
Custom Stylesheets

**Custom Stylesheet (CSS)**

- Using custom CSS to adopt customer corporate identity
- Changing the look and feel possible for every standard components
- Defining CSS document with CSS 3 standard
- Assigning CSS documents to design studio application
- Assign CSS class to the Design Studio components
Global Parameters

Global parameters for Design Studio application

- Defining global parameters on application level
- Global parameters can be passed through URL (RRI scenarios)
- Use cases (e.g):
  - Passing though parameters for data selection
  - Passing through an exception limit for exception calculation
Additional APIs for Data Calculation

Additional APIs for data calculation

- Able to define Local variables
- Support mathematical calculation in script editor
- Get meta data information via getInfo command
- Command „getData“ can retrieve the data from backend systems and represent it in 4 different ways (value, text, scaling factors and unit of measure)
- Conversion between different data formats possible
Interoperability scenario with Analysis, edition for OLAP

**Generate Design Studio applications out of AOLAP workspace**

- Export AOLAP workspace as design studio application for mobile devices or desktops
- Design Studio applications are stored on BI Platform
- Filter member values are taken over from AOLAP workspace to Design Studio applications
- Further editing generated design studio applications within eclip-based design environment

AOLAP Analysis Workspace

Generated iPad application with 2 pages and pre-set filter values
Software Development Kit (SDK) for customers and partners

- Using SDK from SAP to develop own components for Design Studio
- Custom component library is a eclipse plug-in, but no Java skills required
- Convienent deployment though „install new software“ in Desing Studio
- Containg Description XML file, JavaScript files, Images and CSS files

Example: Hichert charts

Example: Gauge
Deployment Option: BI Platform

**Consumer**
- BI Platform

**Designer**
- BI Platform

**Browser client**
- Available as of Design Studio release 1.0
- BI 4.0SP5 or BI 4.1SP0 as the prerequisite
- Design Studio applications stored on BI Platform
- Backend connections through CMC, able to connect to multiple SAP BW and SAP HANA systems
- Transportation via Promotion management
- Pre-requisite for SAP BI Mobile Solutions

**Deployment Platforms**
- Data sources
- BI Platform
- BW
- HANA
Deployment Option: SAP NetWeaver

**Consumer**

**Designer**

**SAP NetWeaver**
- Available as of Design Studio release 1.1
- BW 7.3SP9, BW 7.31 SP7 or BW7.4SP2 as the pre-requisite
- Design Studio applications stored on SAP BW
- Transported though different systems via TLOGO objects (ABAP transport mechanism)
- Can only connect to one BW system
- SAP Portal mobile solution is planned

**Deployment Platforms**

**Browser client**

**Data sources**
Deployment Option: SAP HANA

**SAP HANA:**
- Available as of Design Studio release 1.1
- HANA 1.0 SP6 as the prerequisite
- Design Studio applications stored in HANA repository
- Can only connect to one HANA system
- Java script rendering within browser

**Data sources**
- Consumer
- Designer
- Browser client

**Available as of Design Studio release 1.1**
- HANA 1.0 SP6 as the prerequisite
- Design Studio applications stored in HANA repository
- Can only connect to one HANA system
- Java script rendering within browser
Deployment Option: Local Mode

Designer

Browser client

Data sources

Local mode:
- Available as of Design Studio release 1.0, only for demo or quick prototyping purpose
- Direct connection to backend systems using local SAP logon file
- Design Studio runtime is local on laptop or PC
SAP BusinessObjects Design Studio
Product road map overview - key themes and capabilities

Design- & Runtime Enhancements
- Enhanced Charting
- Align/distribute components in layout
- Enhanced Filter Components
- Enhanced Scripting
- Variable Screen
- Custom Stylesheets

Interoperability
- Interoperability with Analysis, edition for OLAP

Mobile
- Performance improvements
- iPhone support

Platform
- Optional NW deployment (for BW-only use cases)
- HANA deployment for HANA-only use cases

Partner & Customer SDK (Beta Program)
- Custom visualizations of query data

Additional Data Sources
- DSL, Read&Write data to ABAP tables

Commentary

Midterm

Future

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

(Design Studio 1.1 Q2 2013)
THANK YOU FOR PARTICIPATING

Please provide feedback on this session by completing a short survey via the event mobile application.

SESSION CODE: ####

For ongoing education on this area of focus, visit www.ASUG.com