EV technologies

What's New in
SAP BusinessObjects Enterprise 4.2?

01 December 2016

Today's Speakers

EV technologies

Dallas Marks

Principal Pre-Sales Architect

SAP Mentor

dallas@evtechnologies.com

Today's Agenda

What's New in SAP BusinessObjects Enterprise 4.2?

- Innovations in Web Intelligence

- Innovations in SAP Lumira

- Adopting the Information Design Tool

- Accelerate your data warehouse with SAP IQ included in SAP BusinessObjects Enterprise Professional and Premium packages

Our Products and Services

Data Visualization

Harness the full capabilities of SAP analytics with our tools.

Managed Services

Support your users, address potential issues, and plan for growth.

Training

Learn from instructors with years of practical experience.

Architecture

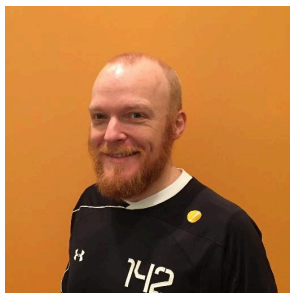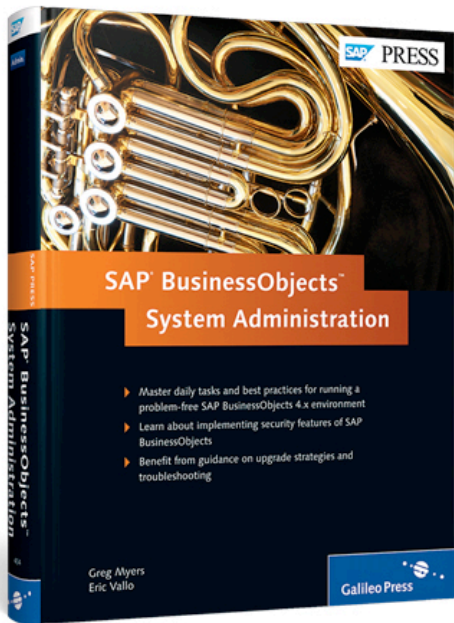Trust the industry leaders to design and implement your system.

Analytic Apps

See your data in a new light with our useful and beautiful interfaces.

SAP Analytics Outstanding Partner of the Year

Less Suck, More Success

SAP BusinessObjects System Administration

Eric Vallo
CEO and SAP Mentor

Greg Myers
Solution Director and
SAP Mentor

Trusted and experienced experts for deploying your
SAP BusinessObjects BI Platform

Join me in Orlando at SAP Insider BI 2017!

Dallas Marks
Sessions on SAP Lumira and SAP IQ

BI2017

FEBRUARY 27—MARCH 2 • ORLANDO

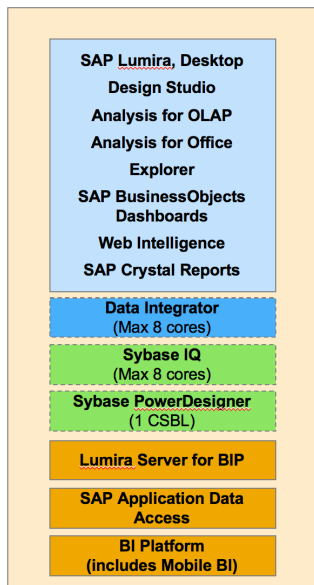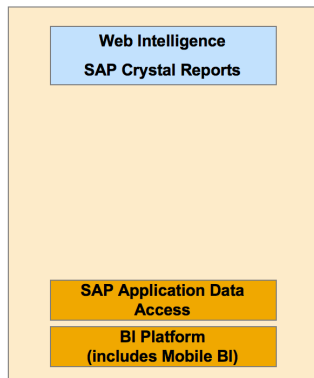Produced and conducted by WIS, publisher of SAPinsider, with permission from SAP SE

produced by **SAPinsider**

Choose a Package
Standard, Professional, or Premium

☐ Limited Use Runtime Component

SAP BusinessObjects Enterprise Premium

Predictive Analysis Suite
(Max 256 GB)
Includes PA Modeler (1)

HANA Vora
(Max 8 cores)

SAP BusinessObjects Enterprise Professional

SAP Lumira, Desktop
Design Studio
Analysis for OLAP
Analysis for Office
Explorer
SAP BusinessObjects Dashboards
Web Intelligence
SAP Crystal Reports

Data Integrator
(Max 8 cores)

Sybase IQ
(Max 8 cores)

Sybase PowerDesigner
(1 CSBL)

Lumira Server for BIP

SAP Application Data Access

BI Platform
(includes Mobile BI)

SAP BusinessObjects Enterprise Standard

Web Intelligence

SAP Crystal Reports

SAP Application Data Access

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SAP Lumira, Desktop
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Lumira Server for BIP

SAP Application Data Access

BI Platform
(includes Mobile BI)

Licensing Model

Supported Metrics

- Blocks of 10 CBSL (Concurrent Session Based Licenses)
- Blocks of 1 Named User
- Blocks of 1 Public Document (Pro and Premium only)

1. Runtime licenses of SAP IQ and Data Integrator can be deployed on multiple instances up to a maximum of **8 cores** each. The DI instances cannot be clustered.
2. SAP IQ runtime license is limited to access by and through SAP BusinessObjects BI Suite and SAP Predictive Analytics.
3. Runtime license of DI is limited to one target datastore, can be IQ or some other datastore.
4. The runtime license of the Predictive Analysis Suite can only be used in conjunction with the BI Suite. Predictive scoring results can only be used by SAP BI tools and not for use by other non SAP BI applications.
5. The runtime license of SAP HANA Vora is limited to a maximum of 4 nodes and a total of 8 cores and can only be access by the included BI and predictive tools.
6. Some clients in the SAP BusinessObjects BI portfolio that are deployed on a desktop are only supported with a NUL metric.

What's New in SAP BusinessObjects Enterprise 4.2?

Part I: SAP Lumira

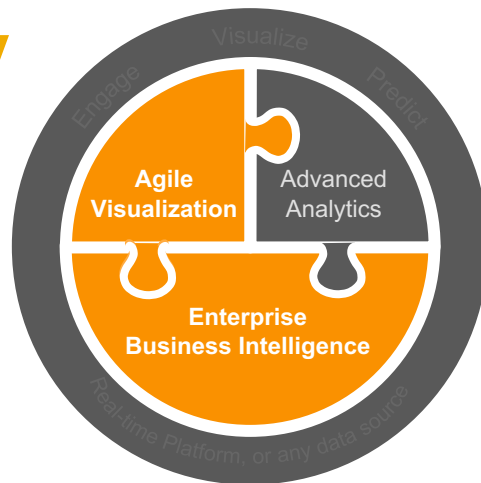# The Power of Collective Insight with …

Trusted Data Discovery

Agility for the Analysts

Instant insight for decision makers
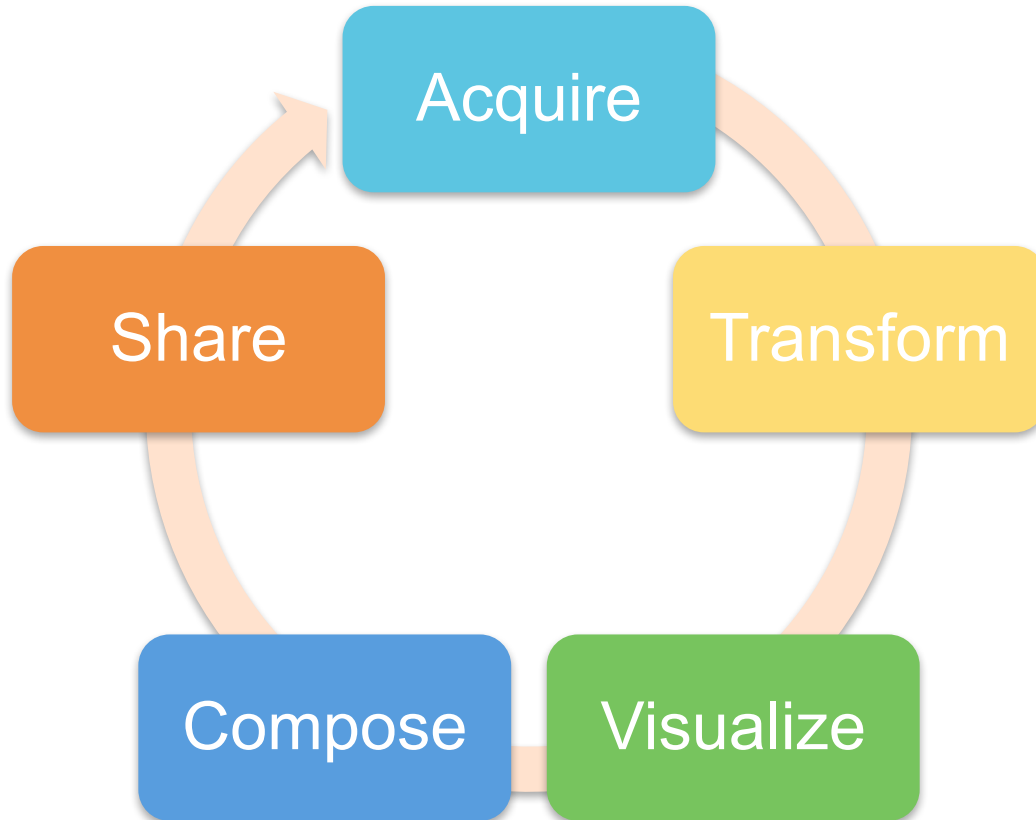
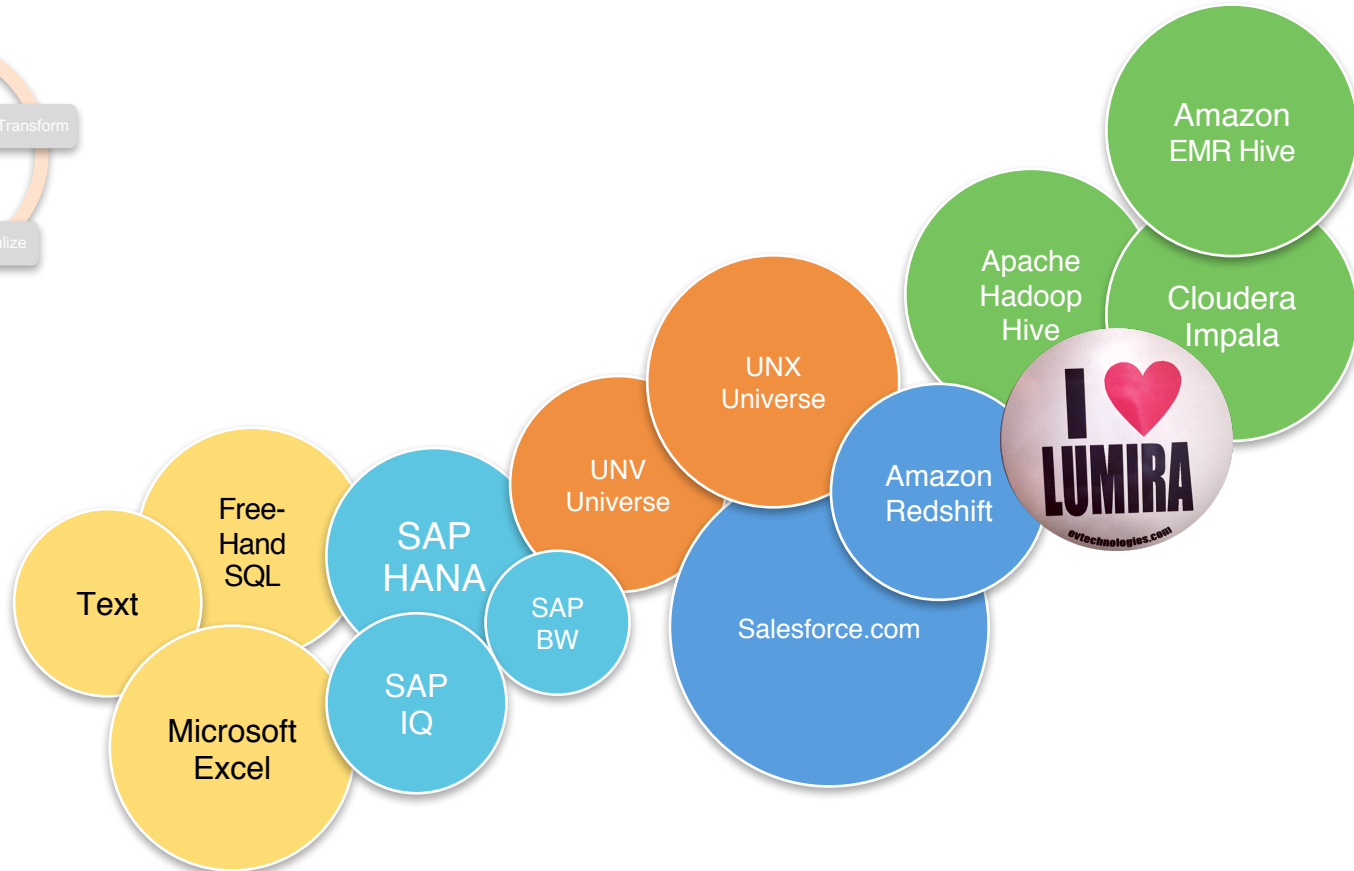**Scale and trust for IT and Management**

BI Simplification

Crystal Reports Web Intelligence Desktop Intelligence (IMS)	Crystal Reports Web Intelligence	**Reporting**
Predictive Analysis Lumira Desktop Set Analysis Lumira Cloud/Server Explorer Analysis OLAP	Lumira	**Discovery and Analysis**
Design Studio Dashboards	Design Studio	**Dashboards & Applications**
Analysis Office Live Office BI Widgets	Analysis Office	**Office Integration**

Interoperability

I ♥ LUMIRA
ergtechnologies.com

Slide courtesy SAP

SAP Lumira Lifecycle

Acquire

Acquire · Transform · Share · Compose · Visualize

Text · Free-Hand SQL · Microsoft Excel · SAP HANA · SAP IQ · SAP BW · UNV Universe · UNX Universe · Salesforce.com · Amazon Redshift · Apache Hadoop Hive · Cloudera Impala · Amazon EMR Hive · I ♥ LUMIRA
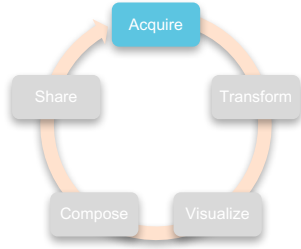
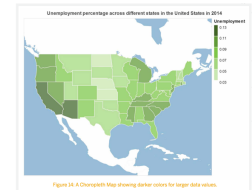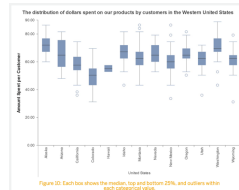NOTE: For a full list of supported data sources, consult the SAP Lumira Product Availability Matrix (PAM)
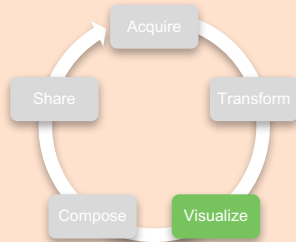
Transform
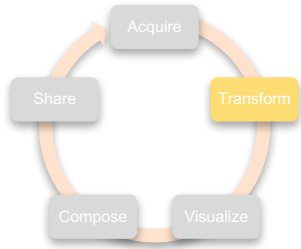
- Use Data Blending to combine and cleanse multiple data sources

- Data Wrangling allows manipulation of large data sets from Hadoop

Visualize
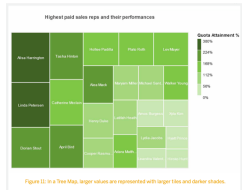
Comparison	Percentage	Correlation	Trend	Geographical
Bar Chart	Pie Chart	Scatter Plot	Line Chart	Geo choropleth chart
Column Chart	Donut Chart	Scatter Matrix Chart	Line Chart for Date/Time Series	Geographic bubble chart
Column Chart with 2 Y-Axes	Pie with Depth Chart	Bubble Chart	Line Chart with 2 Y-Axes	Geo pie chart
3D Column Chart	Stacked Column Chart	Network Chart	Combined Column Line Chart	ESRI charts
Marimekko Chart	Tree	Numeric Point	Combined Column Line Chart with 2 Y-Axes	
Radar Chart	Funnel Chart	Tree	Scatter Plot for Date/Time Series	
Area Chart			Bubble Chart for Date/Time Series	
Tag Cloud			Waterfall Chart	
Heat Map			Box Plot	
Crosstab			Parallel Coordinates Chart	
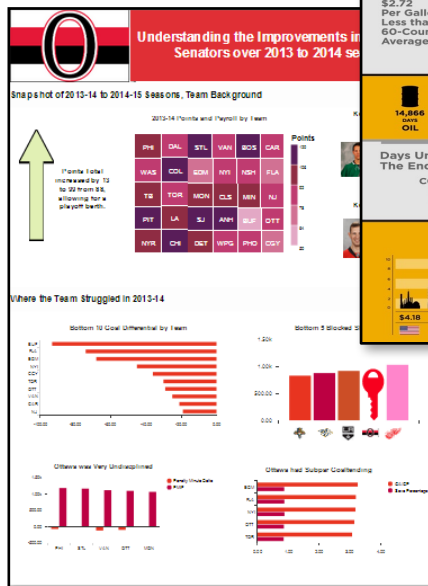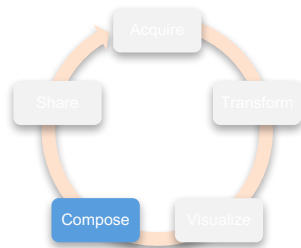
visualizations courtesy SAP

Compose
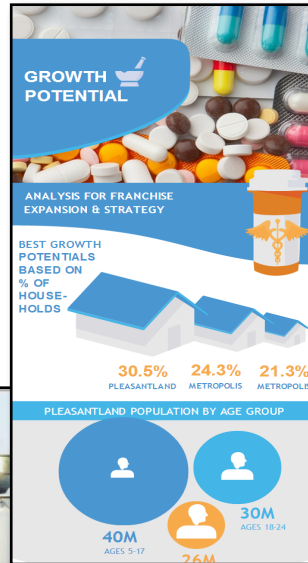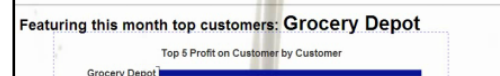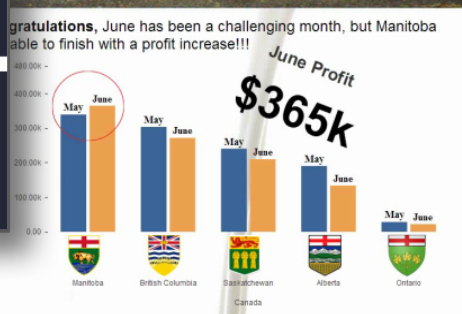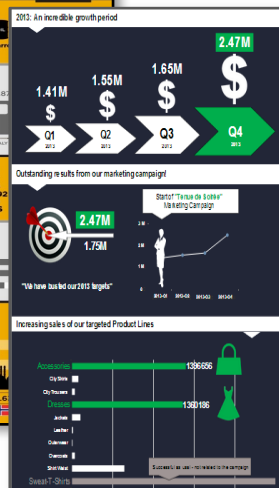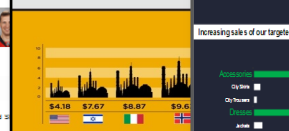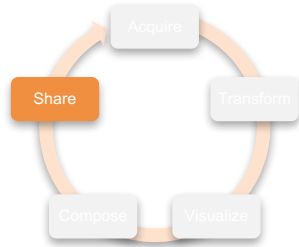
Share

Share to desktop, laptop, and tablet devices by publishing to the SAP BusinessObjects BI Platform

Images courtesy Microsoft, SAP

NOTE: sharing requires Lumira Integration for BI Platform add-on

Web Intelligence vs. Lumira?

Web Intelligence vs. Lumira?

Web Intelligence AND Lumira!

SAP Lumira *AND* Web Intelligence

SAP BusinessObjects
Web Intelligence

SAP Lumira®
Ignite Creative Ideas

"Lumira has data preparation, composition and layout capabilities that go beyond what are available in Web Intelligence, allowing you to accomplish some of the tasks you would normally perform in Web Intelligence more quickly, more easily, and with more flexibility."

Web Intelligence, Lumira and the SAP BI Convergence Strategy on SAP Community

SAP Lumira *AND* Web Intelligence

SAP BusinessObjects
Web Intelligence

SAP Lumira®
Ignite Creative Ideas

"In the future we see the two products coexisting, rather than one replacing the other. We see greater interoperability between Web Intelligence and Lumira to come."

The Future of Web Intelligence and Lumira Interoperability on SAP Community

SAP Lumira Prerequisites

SAP BI Suite License

Requires simplified BI Suite Licensing

Issued with Named User License (NUL) and Concurrent Access License

CPU licensing not available

No hardware restrictions

Windows 64-bit Desktop

64-bit Windows OS
- Windows 7 SP1
- Windows 8/Windows 8.1
- Windows 10

Minimum 3 GB RAM but 4 GB or higher recommended

By default Lumira Desktop allocates 85% of the available memory of your machine at start up to the in- memory data engine.

Additional Server Hardware

SAP Lumira uses its own In-Memory database engine (aka Velocity)

The engine requires dedicated hardware and adequate RAM

By default Lumira Server allocates 85% of the available memory of your machine at start up to the in- memory data engine.

Sizing is critical!

What's New in SAP BusinessObjects Enterprise 4.2?

Part II: Web Intelligence

Web Intelligence Data Sources
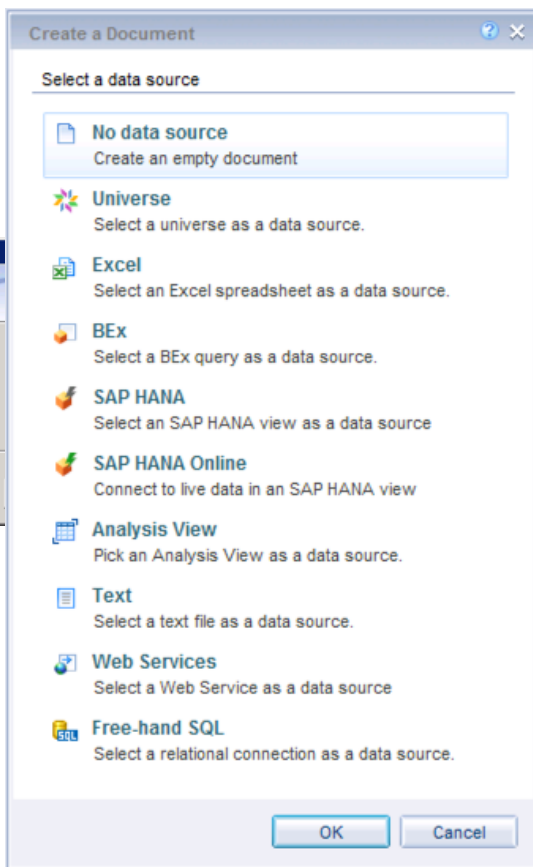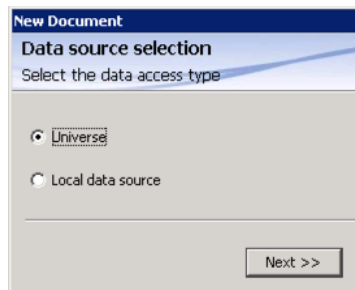
4.0
Native SAP BEx support
Native Analysis View support
Web Services support
Multisource universe support
UNX universe support

4.1
Improved MS Excel support
Free-Hand SQL support

4.2
Native SAP HANA support
Linked universe support

What's New In Web Intelligence 4.2?

Trusted Foundation

Remove Upgrade Barriers

- Linked Universes (4.2 SP3)

Client Improvements

- Parallel Queries
- Free-Hand SQL (4.1 SP6)

Enable the Business

Collaboration

- Commentary
- Shared Elements

Client Improvements

- Geo Maps
- Big Numbers

Unleash the Ecosystem

- Visualization Extensions

Best on SAP Backend

SAP BW Improvements

- BEx authored universe (BI 4.2 SP3)

SAP HANA Improvements

- SAP HANA Direct Access
- SAP HANA Online Mode

What was released in Web Intelligence BI 4.2 SP3

Slide courtesy SAP
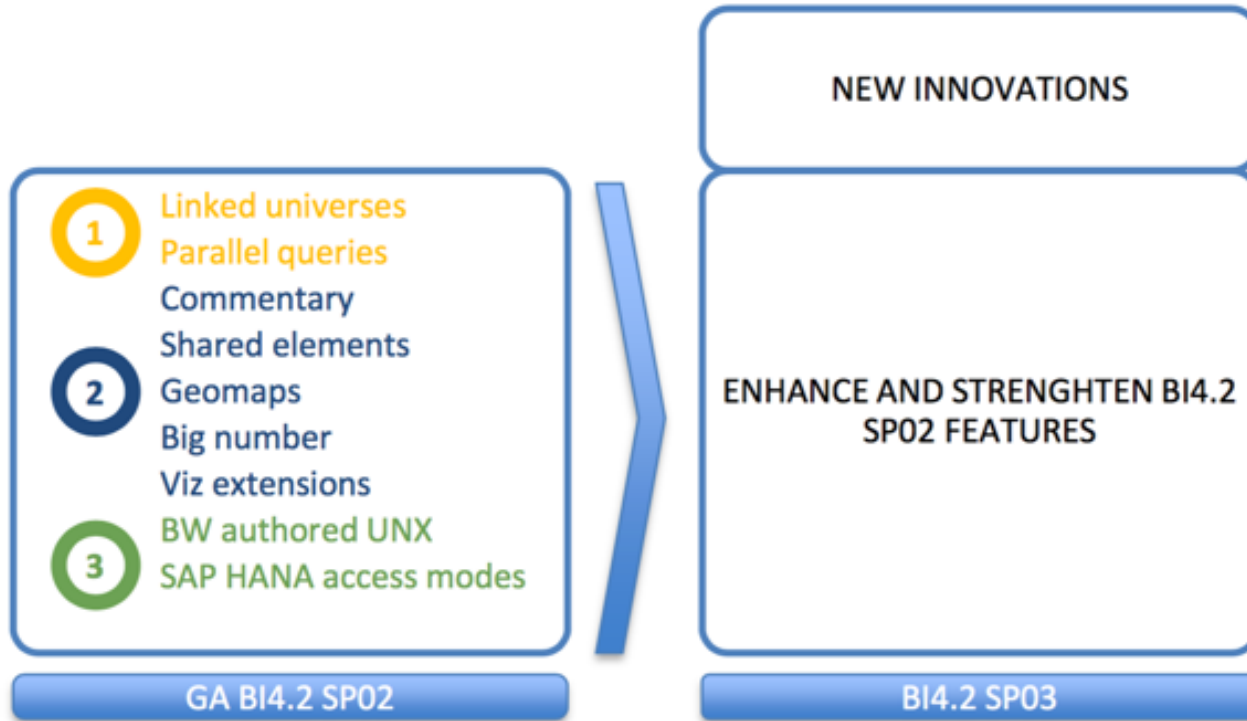
What was released in Web Intelligence BI 4.2 SP3

NEW

dHTML catch up > Java parity – Step 1 : will probably span multiple service pack release

Dynamic Input Controls

Sets – IDT authoring and WebI (incl. CR, LUMIRA desktop) consumption

Referenced cell – step 1 on 2 to enable Alerting and notification in WebI

Extend commentary – comment in table cell, block (chart or table), add query context, search & locate

Parallel Queries – Support for BEx queries, Connection server support to define number of parallel jobs

Linked Universes – convert linked UNV to linked UNX

Extend geomaps – Use lat/long as datapoints, Show geomaps in tool bar

Extend Shared Elements – for Geomap support + Support custom elements + Support Embedded picture + Optimize DP merge

HANA access improvements

Java and REST SDK enhancements – Expose BI 4.2 WebI features

Slide courtesy SAP

Information Design Tool

Information Design Tool 4.2
Build: 14.2.3.2132
Version: 4.2 Support Pack 3
©2010 - 2016 SAP SE. All rights reserved.

What's New in SAP BusinessObjects Enterprise 4.2?

Part III: Information Design Tool

What is a legacy UNV Universe?

*.unv

Connection

What is a traditional UNV Universe?

Created with the Universe Design Tool, formerly known as "Universe Designer" or simply "Designer".

What is a UNX Universe?

Business Layer blx

Data Foundation dfx

Connection cns

*.unx
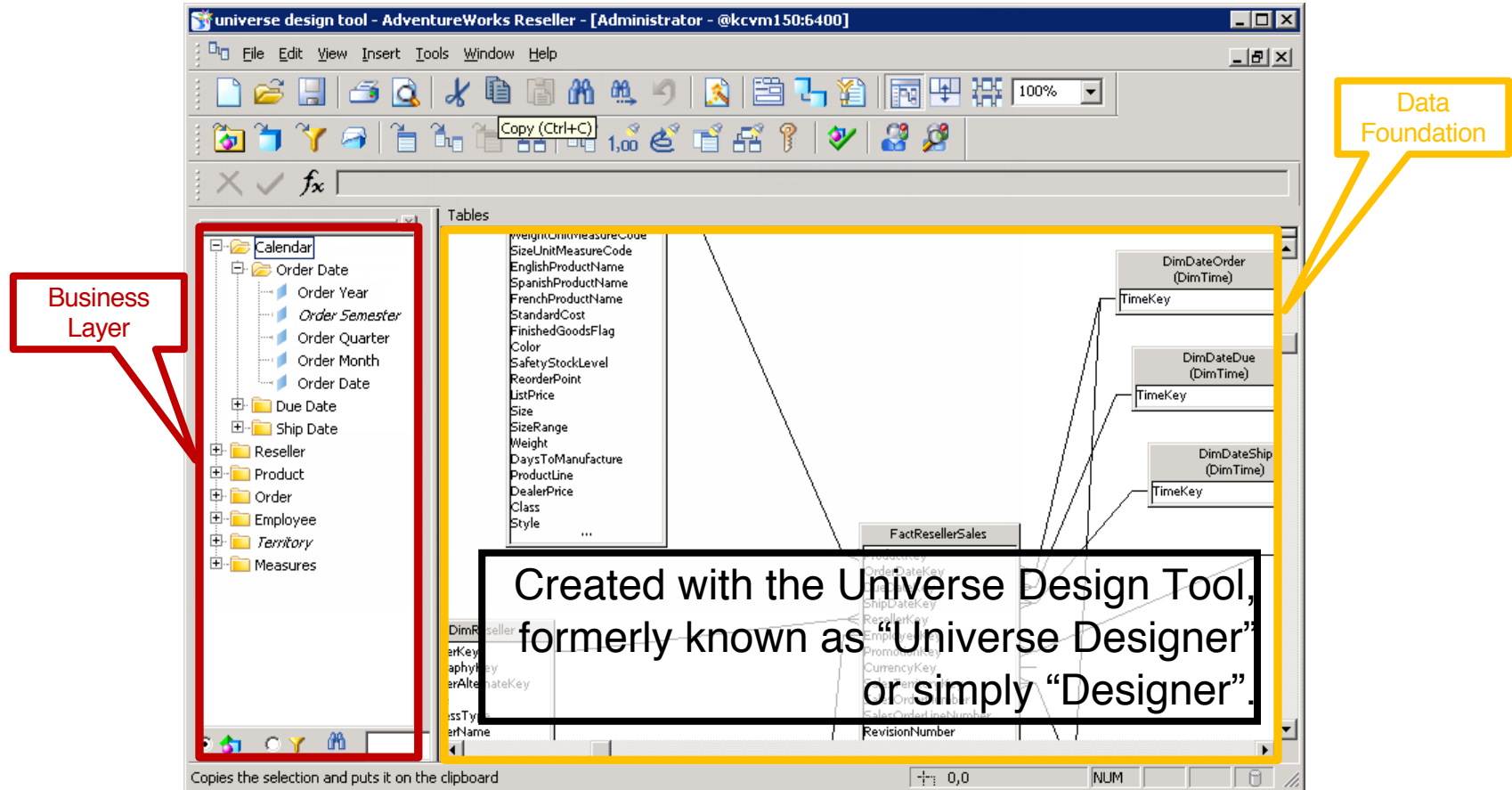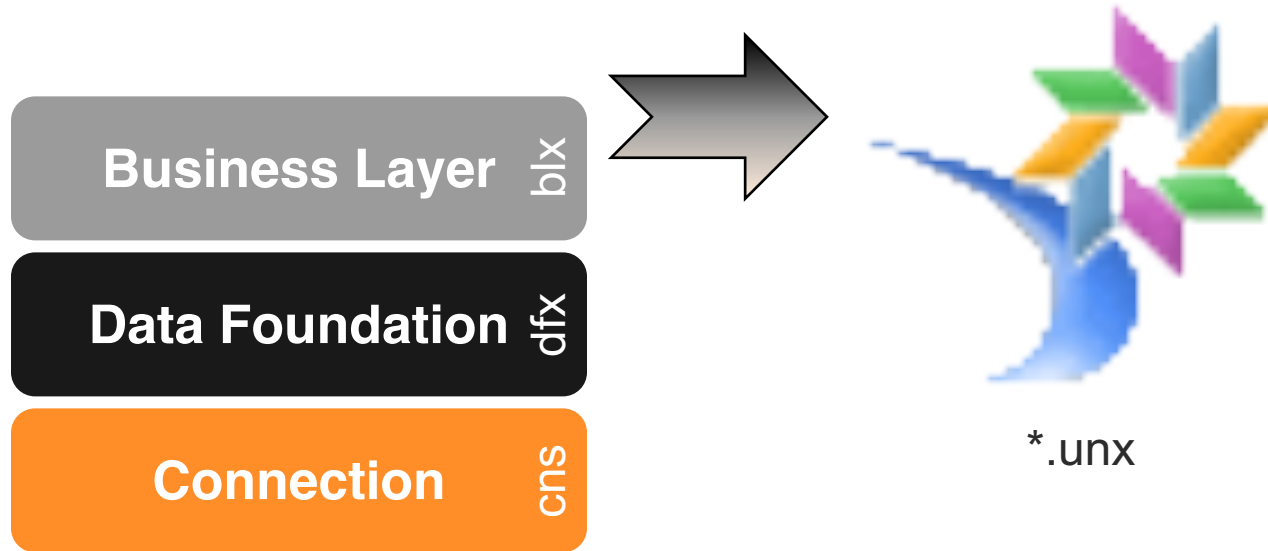
What is a UNX Universe?

Information Design Tool Support

Product	UNV	UNX
Crystal Reports 20xx	Yes	No
Crystal Reports for Enterprise	No	Yes
Dashboards (Xcelsius)	No	Yes
Design Studio	No	Yes
Explorer	Yes	Yes
Live Office	Yes	Yes
Lumira	Limited	Yes
Web Intelligence	Yes	Yes
SAP BusinessObjects Cloud	No	Yes

The Information Design Tool and its UNX universe format was introduced with BI 4.0 to eventually replace the classic UNV universe format.

Information Design Tool Support

Product	UNV	UNX
Crystal Reports 20xx	Yes	No
Crystal Reports for Enterprise	No	**Yes**
Dashboards (Xcelsius)	No	**Yes**
Design Studio	No	**Yes**
Explorer	Yes	Yes
Live Office	Yes	Yes
Lumira	Limited	**Yes**
Web Intelligence	Yes	Yes
SAP BusinessObjects Cloud	No	**Yes**

Information Design Tool adoption and conversion is recommended for organizations using or planning to use SAP Crystal Reports, SAP Design Studio, SAP Lumira, or SAP BusinessObjects Cloud.

Converting classic UNV to modern UNX

Stop using Universe Design Tool for new projects

Sign Up for Information Design Tool training

Profile BI platform for obsolete reports

Profile BI platform for obsolete or poorly designed universes

Budget conversion during routine maintenance and enhancement

Read *The Fate of the Universe Depends on You* for more details.

Top 5 Information Design Tool Innovations - #1

Multi-source universes
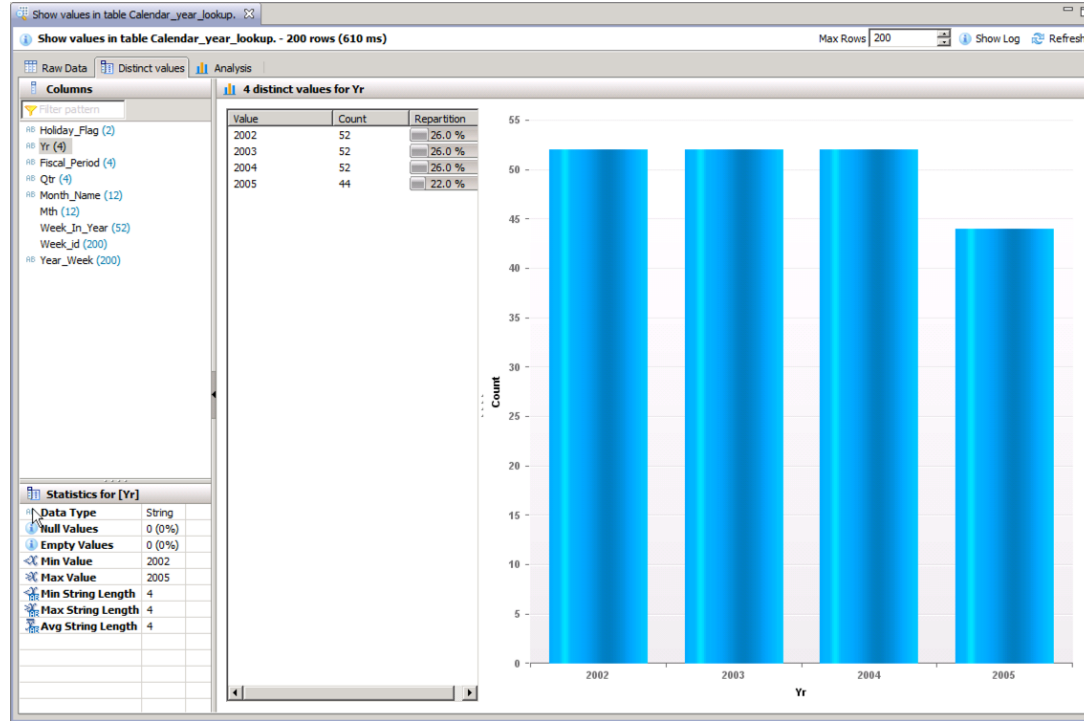
Data Profiling

Top 5 Information Design Tool Innovations - #3
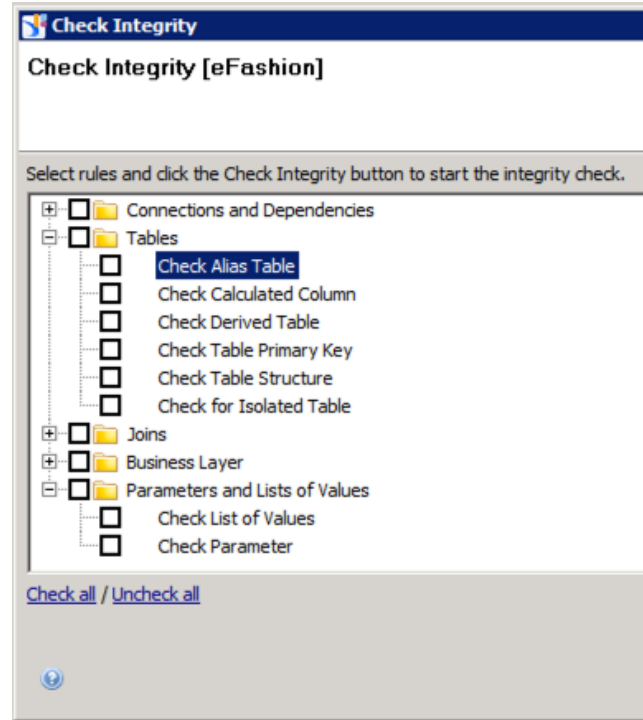
Vastly improved integrity checking

Top 5 Information Design Tool Innovations - #4
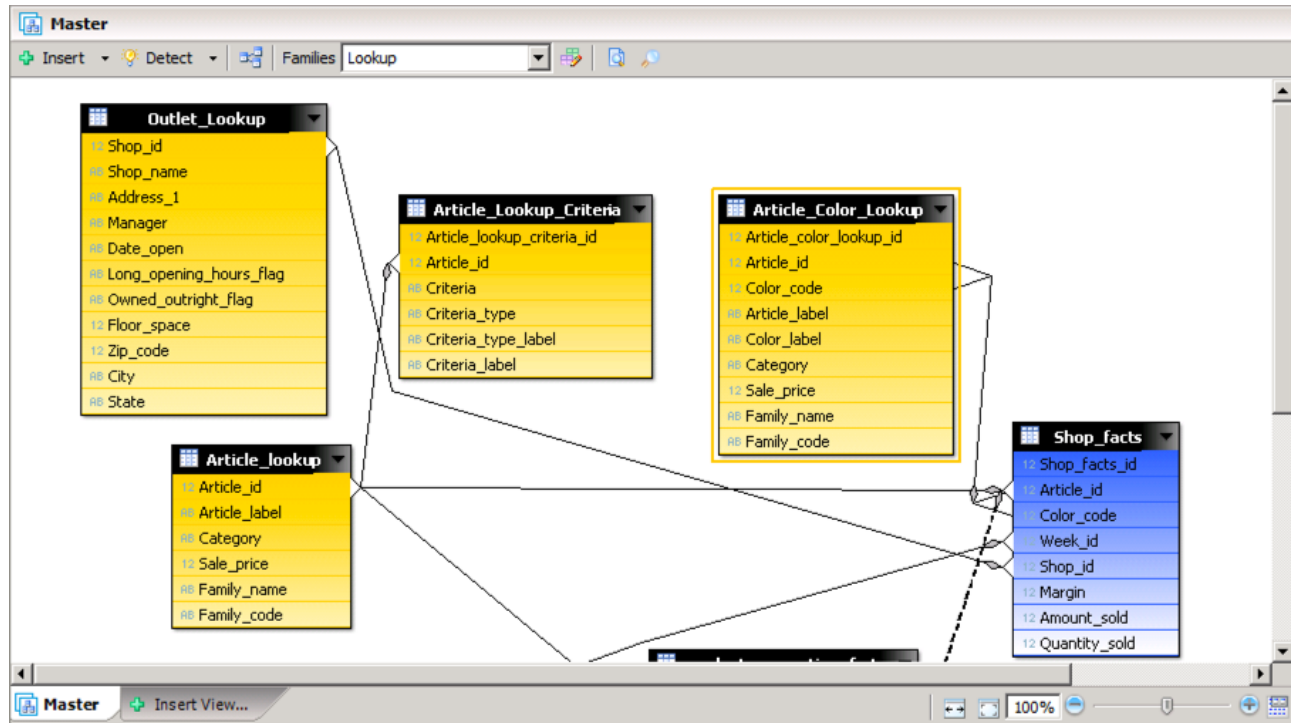
Color-coded data models for improved readability

Top 5 Information Design Tool Innovations - #5
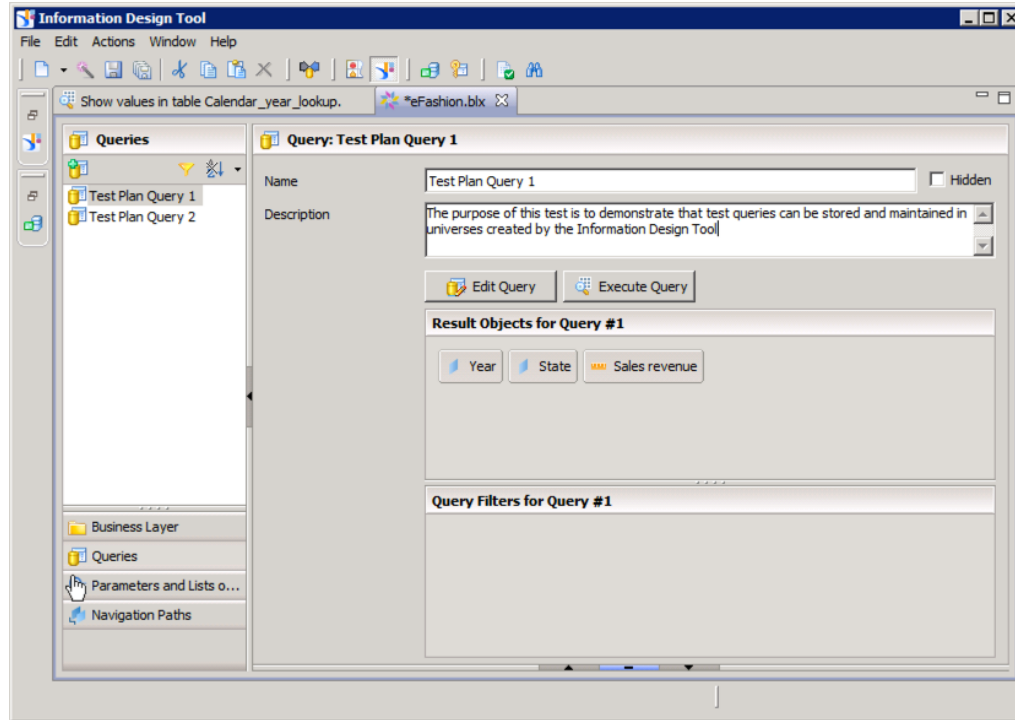
Test suite integration into universe

Special thanks to Clint Vosloo, EV Technologies Australia managing partner and SAP Mentor.

What's New in SAP BusinessObjects Enterprise 4.2?

Part IV: SAP IQ

Big Data Architecture

SAP HANA

Big Data Appliance

???

Big Data to Go!

SAP BusinessObjects Enterprise Premium

Predictive Analysis Suite
(Max 256 GB)
Includes PA Modeler (1)

HANA Vora
(Max 8 cores)

SAP BusinessObjects Enterprise Professional

SAP Lumira, Desktop
Design Studio
Analysis for OLAP
Analysis for Office
Explorer
SAP BusinessObjects Dashboards
Web Intelligence
SAP Crystal Reports

Data Integrator
(Max 8 cores)

Sybase IQ
(Max 8 cores)

Sybase PowerDesigner
(1 CSBL)

Lumira Server for BIP

SAP Application Data Access

BI Platform
(includes Mobile BI)

SAP Lumira, Desktop
Design Studio
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Sybase PowerDesigner
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Lumira Server for BIP

SAP Application Data Access

BI Platform
(includes Mobile BI)

SAP BusinessObjects Enterprise Standard

Web Intelligence
SAP Crystal Reports

SAP Application Data Access

BI Platform
(includes Mobile BI)
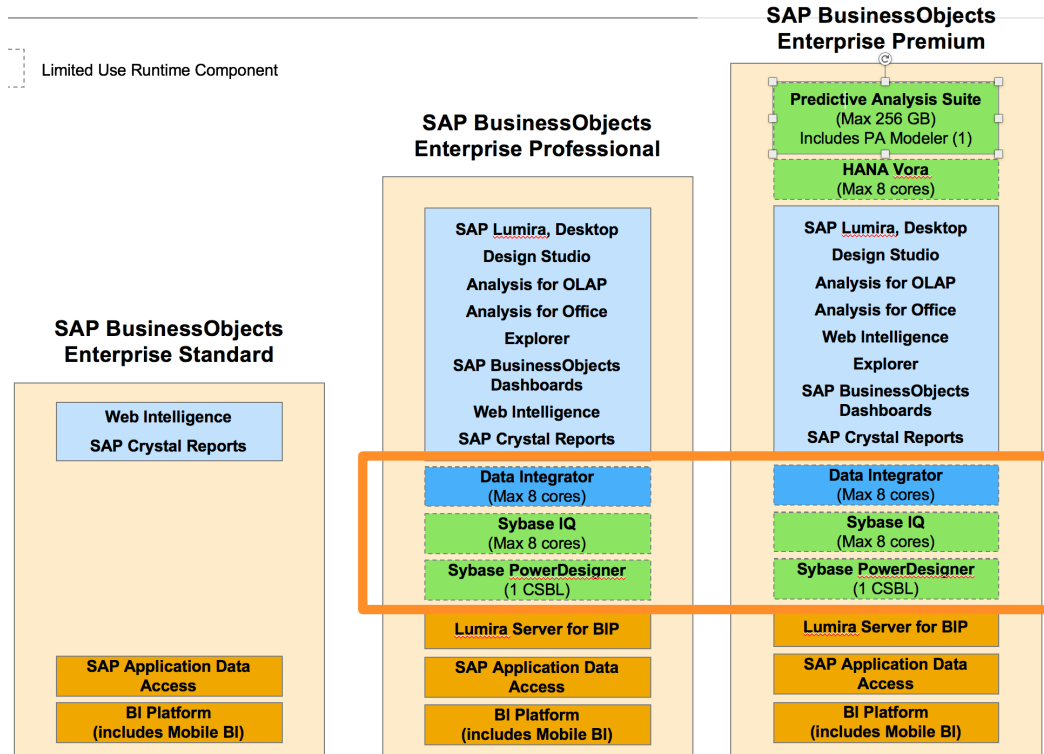
Professional and Premium packages include

- 8 cores Sybase IQ database

- 8 cores Data Integrator ETL

- 1 seat of PowerDesigner

Everything you need to upsize your existing enterprise data warehouse.

A column-based, petabyte scale, relational database software system

SAP IQ

SAP IQ's primary function is to analyze large amounts of data in a low-cost, highly available environment. SAP IQ is often credited with pioneering the commercialization of column-store technology; and holds two Guinness World Records.
It is designed specifically to excel in the following environments:

Advanced
Analytics

Data
Warehousing

Business
Intelligence

Customer value delivered by SAP IQ

- **SAP IQ** delivers speed and power for extreme-scale enterprise data warehousing and Big Data analytics with dramatic affordability and efficiency. It gives companies the ability exploit the value of massive amounts of data at the speed of business.

Simplified Architecture

Streamlined IT administration tasks and reduced IT workloads
- All your data runs on a single system
- Fewer copies of data

Enterprise Wide Analytics

Manage, analyze and benefit from all your data
- 360° view of information across business and social data
- Enable immediate ad hoc reports on real-time data

Big Data Insights

Comprehensive and flexible approach to Big Data
- Massive historical data storage
- Advanced analytics capabilities

SAP IQ vs Microsoft SQL Server

SAP IQ		SQL Server
Free - 16	Edition	Free - 2014
151 534 969	Rows Loaded	20 558 180
5.9 GB	Database Size	10 GB
6 ½ seconds	Average Query Speed	108 seconds

** No CPU's were harmed during this shoot out …

SAP IQ vs Microsoft SQL Server - Shootout
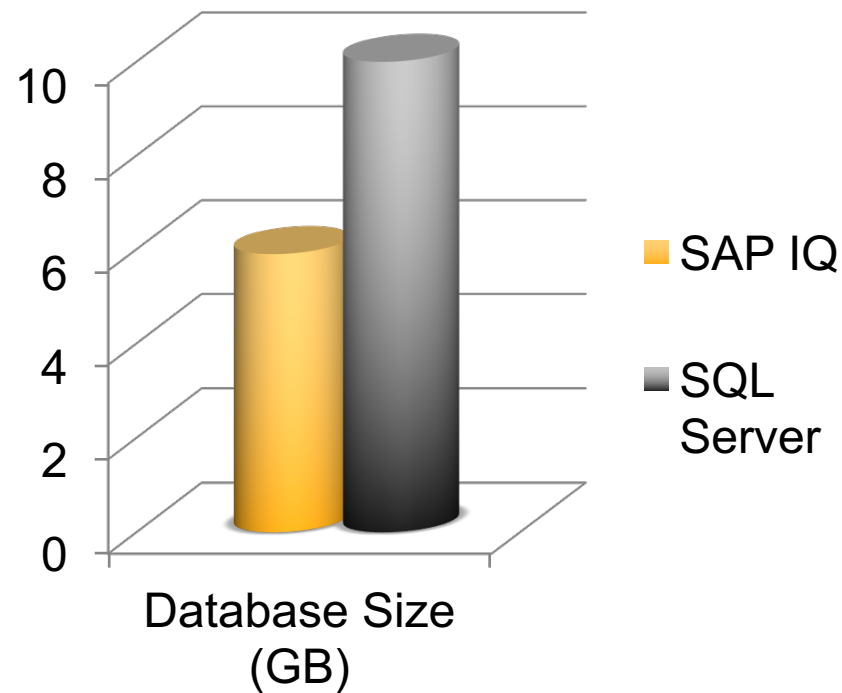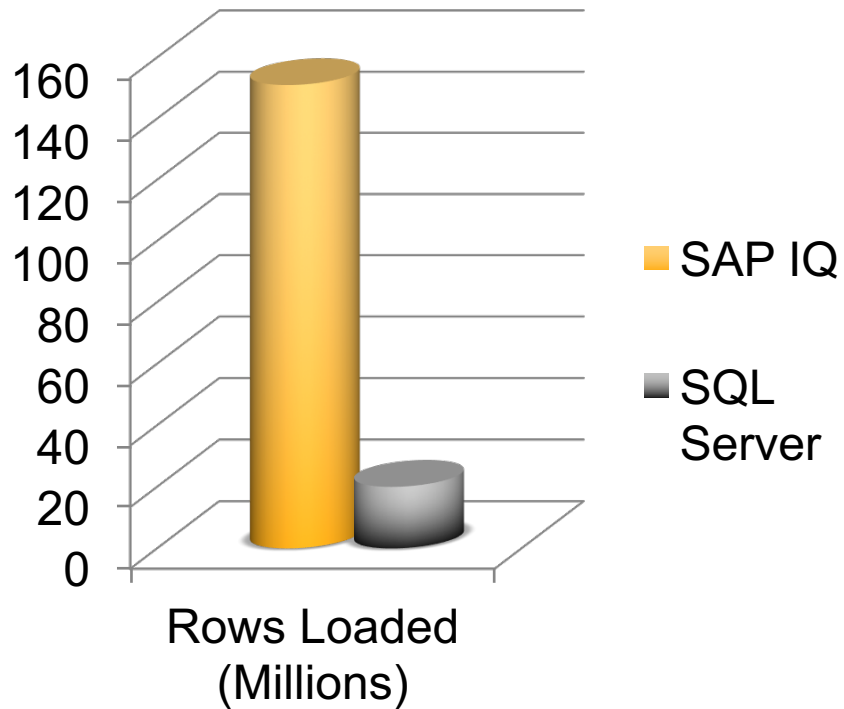
SAP IQ vs Microsoft SQL Server – Projected DB Size
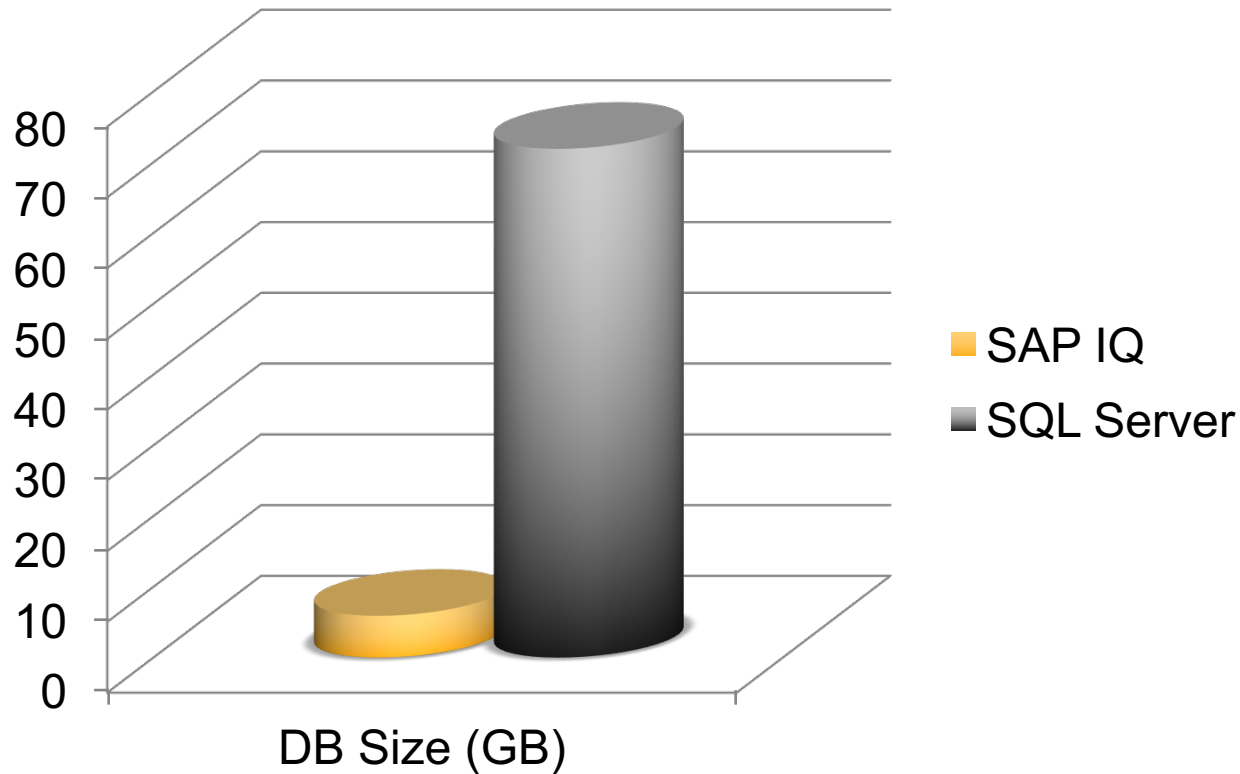
** Based on 10 GB of storage for 21 million rows. SQL Server would use 72 GB for 151 million rows

SAP IQ vs Microsoft SQL Server – Query Speed (seconds)

** SAP IQ was on average 1662 % faster with **7 times more data** than SQL Server

SAP PowerDesigner

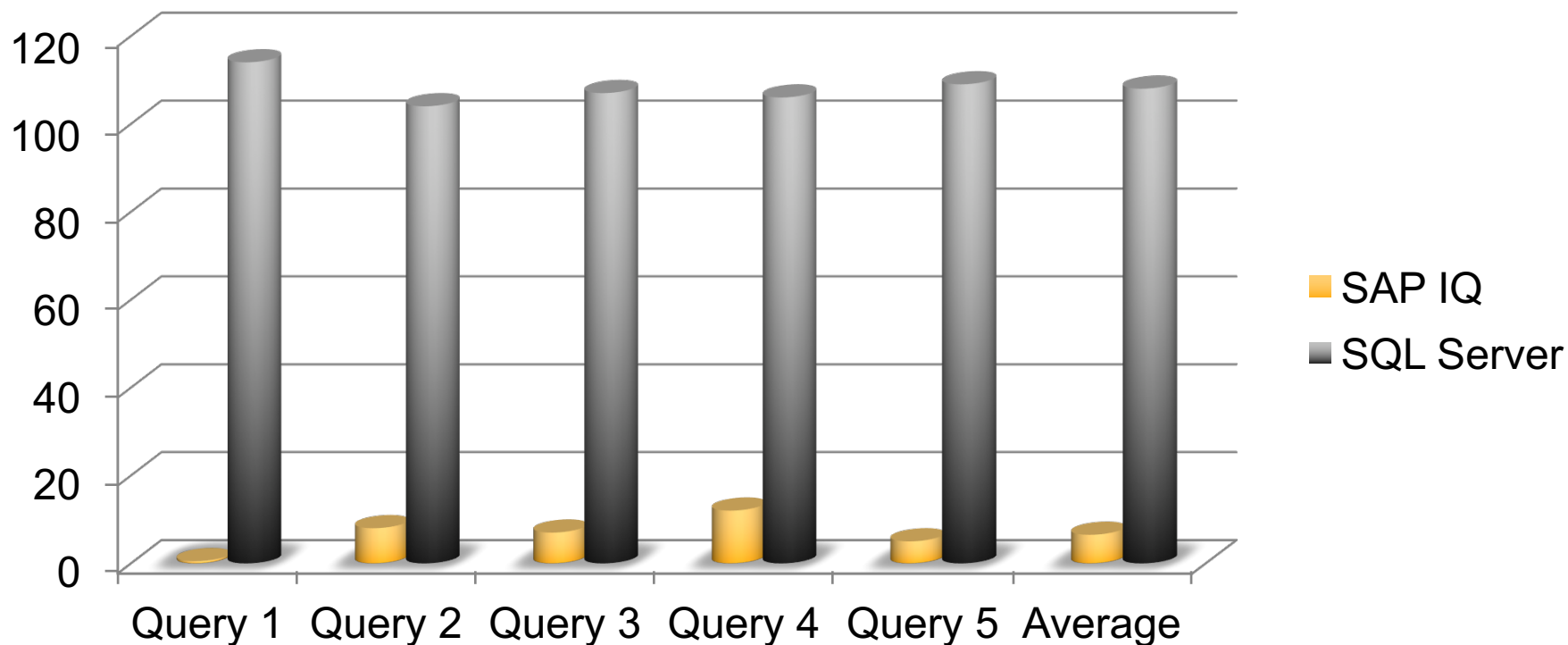**SAP PowerDesigner is** an architecture & modeling tool for planning that aligns business with technology, provides any complex organization the capability to capture, design & communicate throughout business transformation

Capture

- Capture, or discover, information about current business & information technology & *capture the interaction between business & IT*

Design

- Design the enterprise future state, integrating technical & business transformation to *lead enterprise information & technology change*
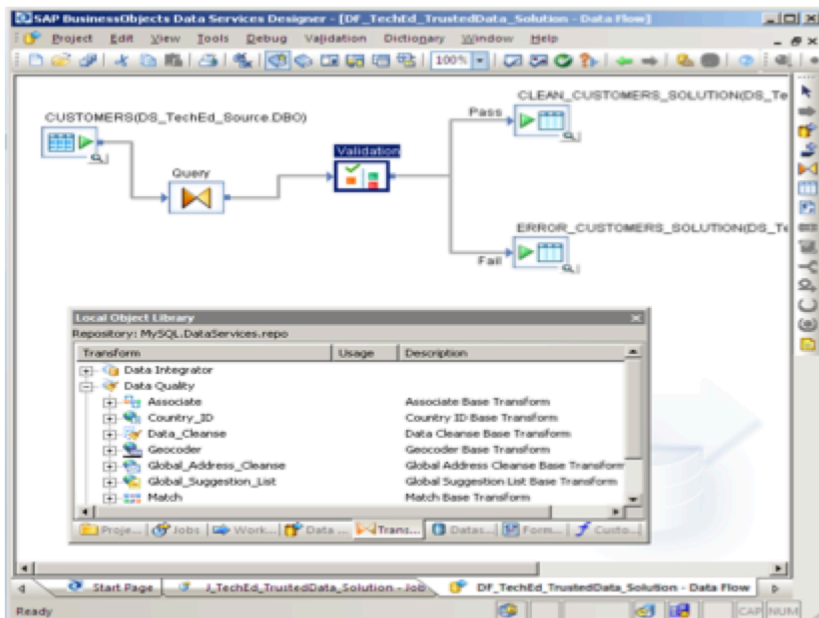
Communicate

- Communicate change impact to all stakeholders, collaborate in lock step to *follow the plan & implement the transformed enterprise*

With our unique **Link & Sync Technology**, SAP PowerDesigner is one of the most effective enterprise architecture modeling tools in the market today.

SAP Data Integrator
Integrate a variety of data from any source

Data Integrator is an enterprise-class ETL platform which enables users to rapidly develop and deploy data marts or data warehouses

Benefits of Data Integrator

☐ Agility and ease-of-use

☐ Extreme scalability to handle the largest movement of data

☐ Wide connectivity to different sources of data

☐ Powerful, pre-defined data transformation capability

> ✓ **SAP Data Services is a "LEADER" in Data Integration and Data Quality Gartner Magic Quadrants**
> ✓ **SAP has 6500+ customers on our Data Integration and Data Quality solutions**
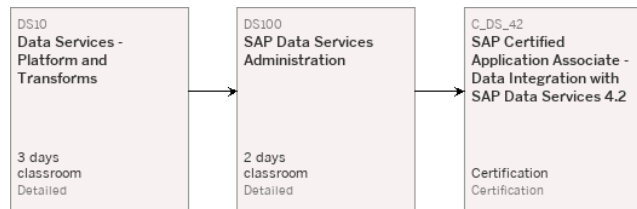
SAP PowerDesigner Education and Certification

| DEV355 Data Modeling with PowerDesigner 16.5 | 4 days Classroom Foundation | → | DEV523 Customizing and Extending PowerDesigner | 2 days Classroom Detailed | → | C_SPDDA_165 SAP Certified Technology Associate - Data Consultant for PowerDesigner 16.5 | Certification Certification |

DEV621 Enterprise Architecture Modeling with SAP PowerDesigner 16.5

2 days
Classroom
Detailed

DEV524 SAP PowerDesigner Administration

2 days
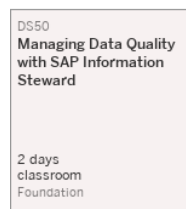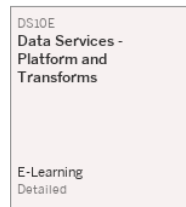Classroom
Detailed

‣ DEV355 Data Modeling with PowerDesigner 16.5 (4 days)

‣ DEV523 Customizing and Extending PowerDesigner (2 days)

‣ DEV621 Enterprise Architecture Modeling with SAP PowerDesigner 16.5 (2 days)

‣ DEV524 SAP PowerDesigner Administration (2 days)

‣ **SAP Certified Technology Associate - Data Consultant for PowerDesigner 16.5**

Visit http://training.sap.com for more details.

SAP Data Integrator Education and Certification

DS10	DS100	C_DS_42
Data Services - Platform and Transforms	**SAP Data Services Administration**	**SAP Certified Application Associate - Data Integration with SAP Data Services 4.2**
3 days classroom Detailed	2 days classroom Detailed	Certification Certification

or

DS10E
Data Services - Platform and Transforms
E-Learning Detailed

DS50
Managing Data Quality with SAP Information Steward
2 days classroom Foundation

- DS10 Data Services - Platform and Transforms (3 days)

- DS100 SAP Data Services Administration (2 days)

- **SAP Certified Application Associate – Data Integration with SAP Data Services 4.2**

Visit http://training.sap.com for more details.

SAP IQ Education and Certification

- EDB785 SAP IQ Administration (5 days)

- EDB795 SAP IQ Advanced Administration (4 days)

- **SAP Certified Application Associate - SAP IQ 16.0 Administration (C_SYIQA_16)**

Visit http://training.sap.com for more details.

What's New in SAP BusinessObjects Enterprise 4.2?

Wrap Up

Where to find more information

- [BusinessObjects BI Licensing Updates](#) – February 2, 2016 blog on SAP Community Network by Blair Wheadon

- [The Fate of the Universe Depends on You](#) – October 4, 2916 blog on EV Technologies

- [SAP Lumira Benchmark Whitepaper](#)

Thank you for joining us!

EV technologies

Dallas Marks

Principal Pre-Sales Architect

SAP Mentor

dallas@evtechnologies.com