The Semantic Layer and BI 4 Migration
Agenda

- Introduction
- BI 4.1 Semantic Layer Update
- Semantic Layer Migration Discussion
- Semantic Layer Conversion Automation
- Q & A
- Wrap Up
The UNX Universe
Old Workflow for .UNV
New Workflow for .UNX

- Project
  - Connection(s)
  - Data Foundation
  - Business Layer
    - Tables
    - Folders
    - Objects
      - Attributes
New Workflow for .UNX

- Project
- Connection
- Data Foundation
  - Tables
  - Attributes
- Business Layer
  - Folders
  - Objects
New Workflow for UNX – continued

SAP BusinessObjects XI 3.1

Universe Connection 1:n Universe

SAP BusinessObjects BI 4.1 – Single-Source Universe

Data Connection 1:n Data Foundation 1:n Business Layer

SAP BusinessObjects BI 4.1 – Multi-Source Universe

Data Connection n:n Data Foundation 1:n Business Layer
## Security Setting Changes

<table>
<thead>
<tr>
<th>Specific Rights for Information Design Tool</th>
<th>Implicit Value</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Administer security profiles</td>
<td>Granted</td>
<td>✅</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>Compute statistics</td>
<td>Granted</td>
<td>✅</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>Create, modify, or delete connections</td>
<td>Granted</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>Publish universes</td>
<td>Granted</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>Retrieve universes</td>
<td>Granted</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>Save for all users</td>
<td>Granted</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>Share projects</td>
<td>Granted</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>
The UNX Universe

Opportunities:

- Multi-source universes
- New design SDK
- New consumption SDK
The UNX Universe

Opportunities:

- BI Dashboards, Design Studio, Lumira, Crystal Reports Enterprise support
- Teams can work on same universe
- Semantic layer for the future
  - Vendor development focused on UNX
The UNX Universe

Challenges:

- Currently no linked universe support
- Must use ANSI 92 SQL with Multiple Data Sources
The UNX Universe

Challenges:

- Not all UNV can migrate to UNX
  - No OLAP Universes conversion
  - No Stored Procedure Universes conversion
  - No conversion of UNV based on Data Federator

- QaaWS, Live Office, CR 2011/13 – UNV ONLY
## Universe Support

<table>
<thead>
<tr>
<th>SAP BI Content Type</th>
<th>UNV Support</th>
<th>UNX Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web Intelligence</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Crystal Reports 2011/2013</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Crystal Reports Enterprise</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>SAP Dashboards 4 (Xcelsius)</td>
<td>✓</td>
<td>(QaaWS)</td>
</tr>
<tr>
<td>Design Studio</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Lumira</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Explorer</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Live Office</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Predictive Analysis</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
# Maintenance Tips for UNX

<table>
<thead>
<tr>
<th>Category</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readability</td>
<td>All metadata (class names, object names &amp; descriptions) should use business terminology</td>
</tr>
<tr>
<td>Usability</td>
<td>Re-use Business Logic</td>
</tr>
<tr>
<td>Usability</td>
<td>The universe should be created from the end-user perspective</td>
</tr>
<tr>
<td>Usability</td>
<td>Avoid creating the same objects as a Measure and a Dimension, unless the distinction is known to the end user</td>
</tr>
</tbody>
</table>
# Maintenance Tips for UNX

<table>
<thead>
<tr>
<th>Category</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usability</td>
<td>Create Object Formatting for Dates</td>
</tr>
<tr>
<td>Usability</td>
<td>Create Object Formatting for Currency</td>
</tr>
<tr>
<td>Usability</td>
<td>Custom Hierarchies should be created based on end-user requirements</td>
</tr>
<tr>
<td>Usability</td>
<td>Object Names should be unique in the universe, and not repeated</td>
</tr>
<tr>
<td>Functional</td>
<td>Avoid unconnected tables, unless you’ve clearly documented their purpose in the universe</td>
</tr>
<tr>
<td>Functional</td>
<td>Avoid using LEFT OUTER joins where possible</td>
</tr>
</tbody>
</table>
The UNX Universe - Resources

- Video Tutorial Series

- Universe Design with SAP BusinessObjects BI: The Comprehensive Guide

- Semantic Layer Update Webinar – with Pierpaolo Vezzosi of SAP
  - [http://www.apos.com](http://www.apos.com)
The UNX Universe

Moving ahead:

- 3 possible choices to the UNX question
The UNX Universe

Moving ahead:

- Stay fully on UNV
  - No immediate action
  - Falling behind, not current technology
  - Missing opportunity with new capabilities
The UNX Universe

Moving ahead:

- Move fully to UNX
  - New capabilities and staying current
  - Updating skill sets
  - Universe conversion effort
  - Report re-pointing effort
The UNX Universe

Moving ahead:

- Run both UNV and UNX, new development on UNX
  - Transition phase
  - Get exposure to UNX, retain current UNV to start
  - Double Maintenance
  - Field change maintenance
  - New reports on old UNVs
- Two tool sets
- Two skill sets
- Two documentation sets
- Two testing processes
The UNX Universe

Moving ahead:

- Stay fully on UNV
- Move fully to UNX
- Run both UNV and UNX
APOS Web Intelligence Migrator
APOS Web Intelligence Migrator

High volume conversion from UNV to UNX
High volume repointing of Web Intelligence reports to new UNX universes

- Bulk conversion of universes from UNV to UNX
- Re-point Web Intelligence reports from UNV universes to UNX universes
- Update existing reports or create a new copy in the desired location and naming convention
- Convert UNV to UNX and re-point Web Intelligence reports in a single, two-phase process
- Log conversions and issues
APOS Web Intelligence Migrator
APOS Web Intelligence Migrator

Demonstration
APOS Solutions

Migration
Speed and simplify migration processes

- APOS Migrator for Web Intelligence
- APOS Dashboard Migrator
- APOS Migrator for Crystal Reports
APOS Solutions

**Migration**
Speed and simplify migration processes

**Insight**
System metrics, performance analytics, and system planning

**Publisher**
Document Bursting, consolidation and delivery

**BI Mobile App**
SAP BI 4 mobile access for iPad / iPhone

**Administrator**
Automated administration and management

**Storage Center**
Archive, backup, versioning, selective restore

**IDAC**
BI Query Governance