

WEBINAR

# Automating Your Upgrade to UNIX Universes

# Today's Session

## *Key Topics*

- The UNX Adoption Challenge
- Upgrade Process Steps
- Automation of Process Steps
- Process Controls
- Volume & Scalability
- Field Mapping
- Q&A – see webinar console



## Today's Presenters:



**ALLAN PYM**

Chief Operating Officer  
APOS



**FRED WALTHER**

Senior Solution Consultant  
APOS



## Who is APOS?

- Formed in 1992
- Enabling BI platform management, administration, migration, governance and compliance
- Simplifying, automating, extending SAP Analytics Cloud, SAP BusinessObjects, and SAP data analytics
- Strategic SDK development and consulting
- Hundreds of customers globally





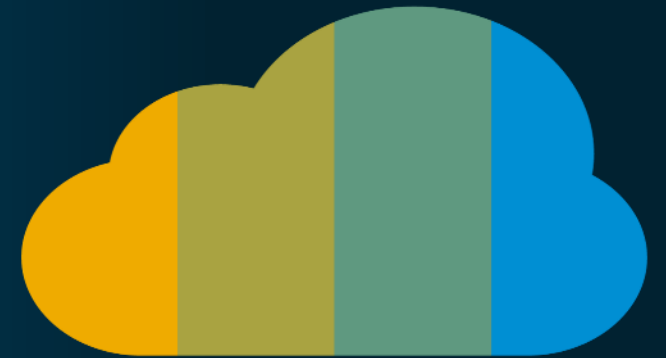
# APOS



**SAP BusinessObjects**



**Hybrid BI**



**SAP Analytics Cloud**

# HOUSEKEEPING



You will have access to the **slides** via email



You will get the **recording** within 24 hours



Download the **handouts** in the panel



Tell us how we did in the **survey**



**SAP BI 2025**

March 12, 2025

SAP BI 2027

SAP BI 2025

SAP  
BUSINESS  
OBJECTS

**The Road Ahead for SAP BusinessObjects**

# Regrouping for your SAP BusinessObjects Future



# Regrouping for your SAP BusinessObjects Future

## Recommendations:

- Take stock of what you have
- Assess & action unsupported content
- Right-size your system content
- Upgrade platform to Version 4.3
- Upgrade universes to UNX format
- Automate for efficient management





# Preparing for BI 2025:

## The UNX Adoption Challenge

## Upgrade Challenge: **UNV Deprecation**

Across BusinessObjects deployments, the UNV universe is the most common and prevalent universe format in use.

- Vast amounts of Web Intelligence reports rely on UNV universes
- BI 2025 will not support UNV, so all relevant content must be migrated to UNX format

## Solution Requirement: **Upgrade Content**

Relevant content for upgrade to UNX format includes:

- all UNV universes must be upgraded to UNX format
- all Web Intelligence reports that connect to those universes must have their connection changed from the old UNV universe to the new UNX universe

## Solution Barrier: **Heavy Manual Process**

Manual update of all universes and individual reports is very time consuming, so many organizations have avoided starting the project of UNX adoption.

## **UNX Adoption Steps**

Required process steps include:

- Manual conversion of universes from UNV to UNX format
- Publish new UNX universe
- Manual repointing of Web Intelligence report to new UNX format universe
- Verify and validate the repointed Web Intelligence report results
- Publish the repointed Web Intelligence report

# UNX Universe Adoption Considerations

## Manual Upgrade Time Estimates

- Manual conversion of universes from UNV to UNX format
  - 5 minutes per universe
- Publish new UNX universe
  - 2 minutes per universe
- Manual repointing of Web Intelligence report to new UNX format universe
  - 10-15 minutes per report
- Verify and validate the repointed Web Intelligence report results
  - 8-10 minutes per report
- Publish the repointed Web Intelligence report
  - 2 minutes per report

# UNX Universe Adoption Considerations

## Example Manual Upgrade Estimate

### Example Scenario:

- 50 universes
- 5000 Web Intelligence reports
  
- 50 universes @ 7 minutes/universe = 350 minutes
- 5000 reports @ 20 - 27 minutes/report = 100,000 – 135,000 minutes  
= ~1700 - 2250 hours  
(212 – 281 days)
  
- Total time of 1700 – 2250 hours @ \$/€ per hour = BIG number \$/€
  - @ \$/€ 40 per hour = 68K – 90K raw project personnel cost

What are the costs if you have a larger deployment??

# UNIX Universe Adoption Considerations

## Automate the upgrade process!

- Massive time savings
- Dramatically reduced costs
- Minimize the use of and distraction of precious team resources
- Control system change risks, remove manual error risks
- Simplify coordination of BI Team and User departments
- Execute a controlled, manageable, successful upgrade project

# APOS Web Intelligence Migrator

# Customer Profile

**Large multi-national financial institution** focused on life & health insurance, and investment services

- Global operating units, NA primary focus
- Thousands of geographically distributed locations and advisors serving millions of customers

## Landscape & Core Challenge

- SAP BusinessObjects BI 4.3, long-term commitment
- 100+ UNV universes
- 4,000+ Web Intelligence reports

Upgrade UNV universes to UNX, repoint and test Web Intelligence reports in a structured and orderly fashion



# Outcomes & Customer Success

With APOS Web Intelligence Migrator successfully deployed, the centralized BI team:

- Managed project time and resources efficiently
- Coordinated upgrades across multiple BI user departments effectively
- Vastly reduced cost and execution time
- Reduced technical debt and streamlined SAP BusinessObjects administration

*“We were able to turn a very large and challenging upgrade project into one that we executed within a very controlled time with few resources. We completed the project well ahead of schedule, and the cost savings were dramatic.*

*My BI operations team and our departmental user teams experienced no disruption, and now we are well positioned for our BusinessObjects future. Thanks APOS!”*

Technical Director, Data & Business Intelligence Technology



**Fred Walther**  
Senior Solution Consultant  
APOS

# APOS Web Intelligence Migrator

(WebI Migrator) - A migration solution focused on automating time and labor-intensive activities of upgrading to the UNX universe within SAP BusinessObjects.

UNV Reports



UNX Reports

# Key Upgrade Process Steps

- **Scan System and Inventory Content**
  - **Bulk Conversion of Universes**
    - **Bulk Repointing of Reports**
      - **Bulk Validation of Upgrade Success**
        - **Commit Changes**



# Scan System and Inventory Content

## Why scan system and inventory its content?

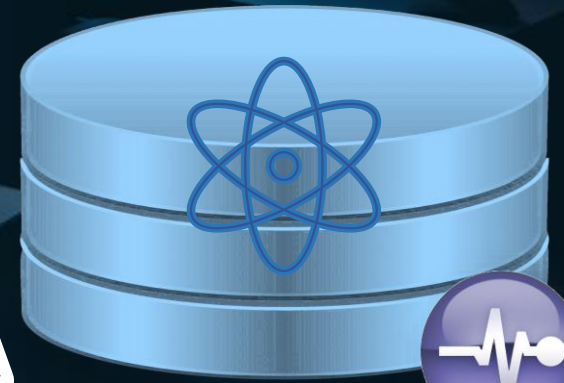
- Get a clear understanding of what content is in your system
- Identify what content can be excluded from the upgrade
- Capture detailed report structure metadata for reference later in process



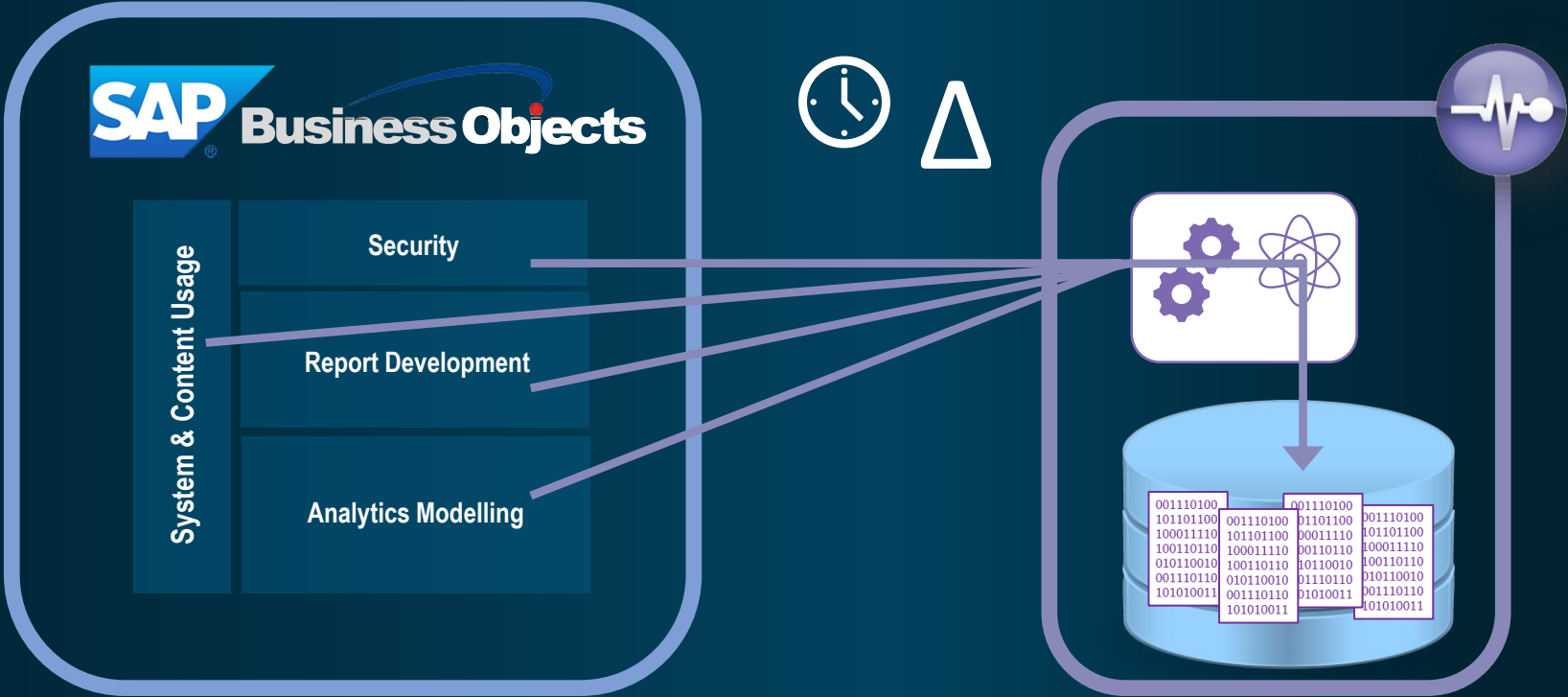
# System Metadata



System & Content Usage	Security
	Report Development
	Analytics Modelling



# System Metadata

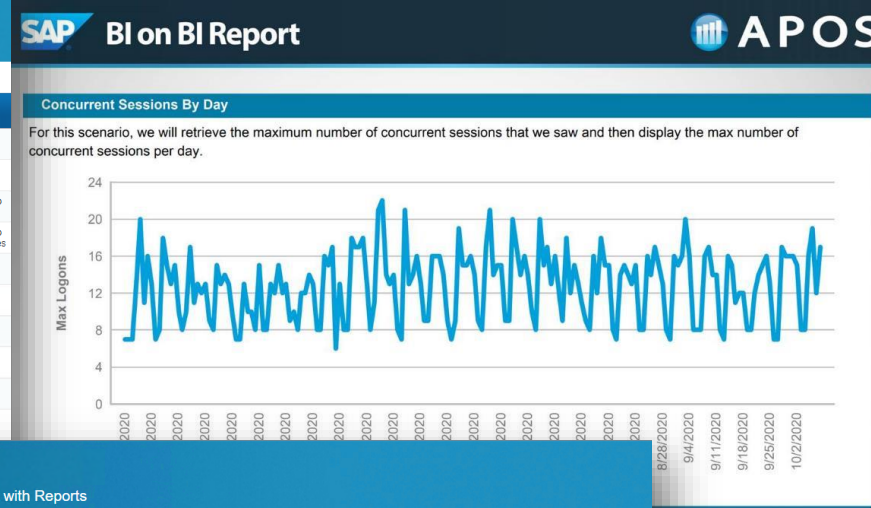


# System Analysis

**APOS Insight**

List Objects by Type for System: PRODUCTION

Object Type	Number of Objects	Object Type	Folder	1,146 Si Id	Si Name
ClientAction	469	AdminConsole	/AposWorkshop1-6400/Application Folder/Root Folder 99	4404	BI Administration Console
Webi	129	AdminTool	/AposWorkshop1-6400/Application Folder/Administrative Tools	608	Security Query Export
Report	126	AdminTool	/AposWorkshop1-6400/Application Folder/Administrative Tools	622	Update Authentication Group Membership
Folder	84	AdminTool	/AposWorkshop1-6400/Application Folder/Administrative Tools	631	Update Authentication Group Membership and User Aliases
ClientActionUsage	68	AdminTool	/AposWorkshop1-6400/Application Folder/Administrative Tools	4883	Principal File Import
ClientActionSet	66	AlertingApp	/AposWorkshop1-6400/Application Folder/Root Folder 99	534	Alerting
MON_ManagedEntityStatus	28	AO Plugin	/AposWorkshop1-6400/Application Folder/Root Folder 99	4390	Analysis Office
CCIS.DataConnection	15				
PlatformSearchContentExtractor	11				
TaskTemplate	10				
MON Probe	9				



**APOS Insight Schedules - Inactive Report**

977 Reports not scheduled in the last 365 days As of latest scan date: 2015-02-11 07:57:54

Folder: /1-Management

Report Name	Type	Create Date	Owner	Data Source	Last Updated
Manufacturing Report 1	Report	2014-12-17 20:58:46	Administrator	Original: http://resources.businessobjects.com/support/downloads/samples/crf/customer_db/orders.xml h	2014-12-18 13:25:46

Folder: /2-Sales

Report Name	Type	Create Date	Owner	Data Source	Last Updated
Manufacturing Report 1	Report	2014-12-17 20:58:51	Administrator	Original: http://resources.businessobjects.com/support/downloads/samples/crf/customer_db/orders.xml h	2014-12-18 13:25:46

Folder: /3-Support

Report Name	Type	Create Date	Owner	Data Source	Last Updated
Manufacturing Report 1	Report	2014-12-17 20:58:54	Administrator	Original: http://resources.businessobjects.com/support/downloads/samples/crf/customer_db/orders.xml h	2014-12-18 13:25:45
Report1	Report	2015-01-15 11:43:43	Administrator		2015-01-15 11:43:43

Folder: /4-Reynold Industries Reports

Report Name	Type	Create Date	Owner	Data Source	Last Updated
CEO Report 1	Report	2014-12-02 17:15:32	Administrator	Custom: C:\Program Files (x86)\SAP BusinessObjects\SAP BusinessObjects Enterprise XI 4.0\Samples\Enl	2015-02-04 11:52:15

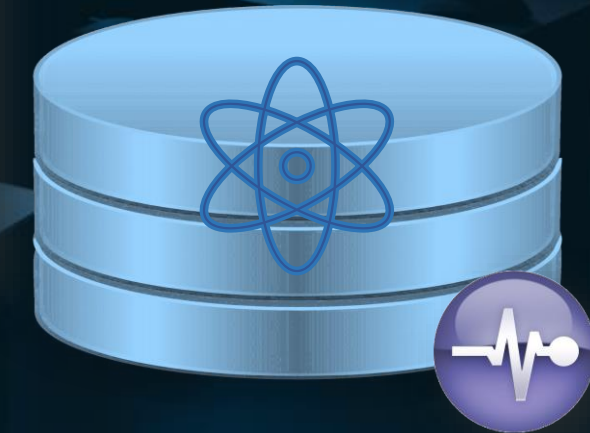
**APOS Well Managed BI** 1118-100 Conestoga College Blvd., Kitchener, ON Canada N2P 2N6 Tel: 519.894.APOS (2767) Email: info@apos.com - www.apos.com

**APOS Insight Universe List with Reports**

Folder and Name	Number of Reports
APOS Insight/Insight4 - SQL Server	37
APOS Insight/Insight4 - Oracle	35
samples\Fashion.unx	32
samples\Rio2016.unx	14
WebMigratorUNXWebMigrator.unx	7
funTest.unx	4
shop1-6400/Application Folder/Root connections/Insight4 - SQL Serve	2
Monitoring TrendData Universes/ TrendData Universe	1
Report Conversion Tool Universes/ version Tool Audit Universe	1
WebMigrator/WebMigrator	1

**Universes/APOS Insight/Insight4 - SQL Server**

Report Folder Location	Report Name	Report Owner	Report File Size
/APOS Insight Reports/SQL Server/	Audit - All Report Activity	Administrator	123211
/APOS Insight Reports/SQL Server/	Audit - Objects Scheduled by User	Administrator	102515
/APOS Insight Reports/SQL Server/	Audit - Reports Refreshed by User	Administrator	100472
/APOS Insight Reports/SQL Server/	Audit - Unused Objects in Date Range	Administrator	88626
/APOS Insight Reports/SQL Server/	Audit - User Logon Activity	Administrator	94653
/APOS Insight Reports/SQL Server/	Audit - User Logon Activity Details	Administrator	101628
/APOS Insight Reports/SQL Server/	Crystal - Search for Fields Used in Reports	Administrator	100647
/APOS Insight Reports/SQL Server/	Crystal - Search for Tables Used in Reports	Administrator	100312
/APOS Insight Reports/SQL Server/	Crystal - Structure	Administrator	100085
/APOS Insight Reports/SQL Server/	Crystal - Summary	Administrator	144565
/APOS Insight Reports/SQL Server/	Instances - Detail	Administrator	103991
/APOS Insight Reports/SQL Server/	Instances - Historical	Administrator	107194
/APOS Insight Reports/SQL Server/	Instances Status	Administrator	89286
/APOS Insight Reports/SQL Server/	Object Listing - Content Types and Folders	Administrator	91423





# Analyze System + Content Metadata

- Find unused reports
- Understand report content

**APOS Insight**  
**Unused Objects in Date Range**

Unused Reports from: 01/01/2023 00:00:00 to 08/03/2023 00:00:00

Insight User to Ignore: APOS\_Insight\_User

**/Report Samples/Demonstration**  
**Comparative Income Statement**

Create Date	Last Update Date	Last Activity Date	Latest Activity	Latest Activity User
7/2015	13/05/2020 08:32:28	01/02/2023 19:10:35	View	APOS_Insight_User

**Agency Dashboard**

Create Date	Last Update Date	Last Activity Date	Latest Activity	Latest Activity User
7/2015	11/08/2022 13:09:43	01/02/2023 19:10:47	View	APOS_Insight_User

**APOS Insight**  
**Webi Impact Analysis**

Searched for Table: AP\_UsersAndGroups;AP\_USERSANDGROUPS  
 Searched for Column: All Columns

System: BI41SP6FW  
 Folder: /APOS Insight Reports/Oracle

Report Name	Universe Name	UniType	TableName	ColumnName
Objects - Group Listing with Users	Insight4 - Oracle	UNV	AP_USERSANDGRO UPS	AP_TYPE
Objects - Group Listing with Users	Insight4 - Oracle	UNV	AP_USERSANDGRO UPS	SI_CHANGEPASS ORD
Objects - Group Listing with Users	Insight4 - Oracle	UNV	AP_USERSANDGRO UPS	SI_NAME



# Bulk Conversion of Universes

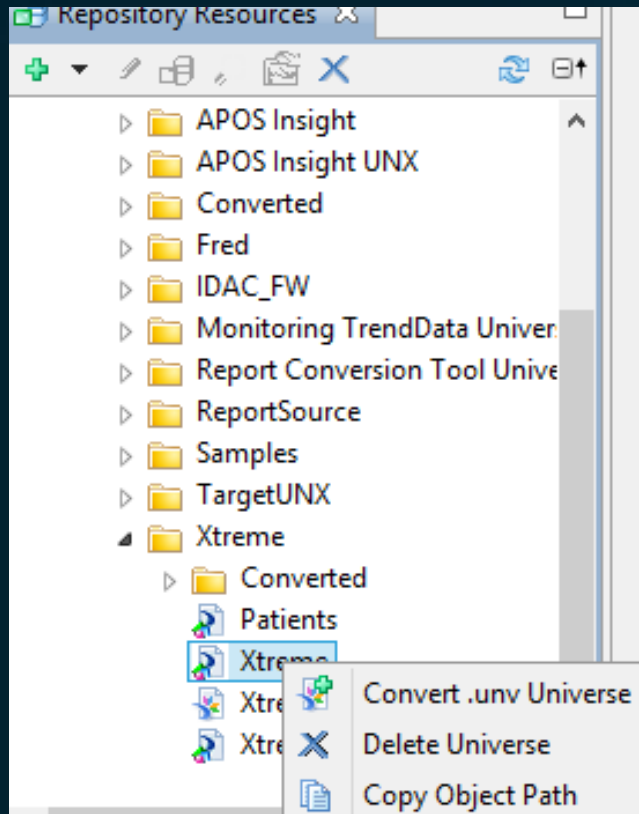
## Key Considerations

- Understand which universes need to be converted
- Understand which universes can be ignored due to non-usage
- Convert UNV to UNX quickly and easily



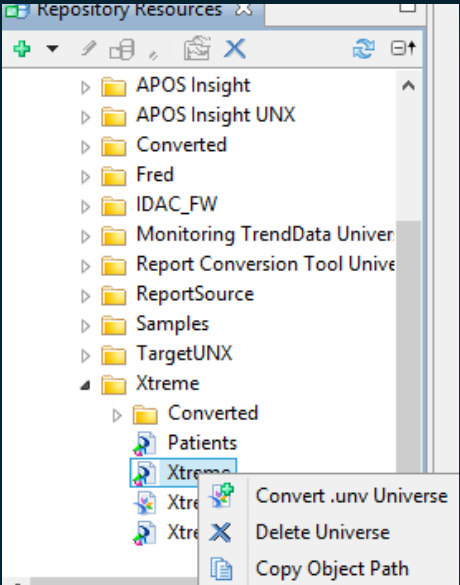
# Conversion of Universes

- Convert 1 by 1 in the IDT



# Conversion of Universes

- Convert 1 by 1 in the IDT



- Convert in bulk: WebI Migrator

A screenshot of the 'Convert Universe to UNX Format' dialog box. The dialog has a title bar with a blue icon and standard window controls. Below the title bar, there is a section for search criteria: 'Search By: Name', 'Object Type: Universe', and 'Date Criteria: Create Date'. Below this is a table with columns 'Object Type' and 'Name'. The table lists several universes, with 'Xtreme' and 'Patients' highlighted in blue. A 'Target Folder for Converted UNX' section contains a text box with 'Universes/ Converted 24-Apr' and a 'Browse...' button. There is a checked checkbox for 'Overwrite Existing Universes'. At the bottom right are 'Convert' and 'Cancel' buttons.

Object Type	Name
Universe	XtremeSourceUNV
Universe	Xtreme_Orders
Universe	Xtreme
Universe	Patients
Universe	Monitoring TrendData Ur
Universe	Insight4 - Oracle
Universe	Report Conversion Tool Audit ...
Universe	eFashion



# Bulk Repointing of Reports

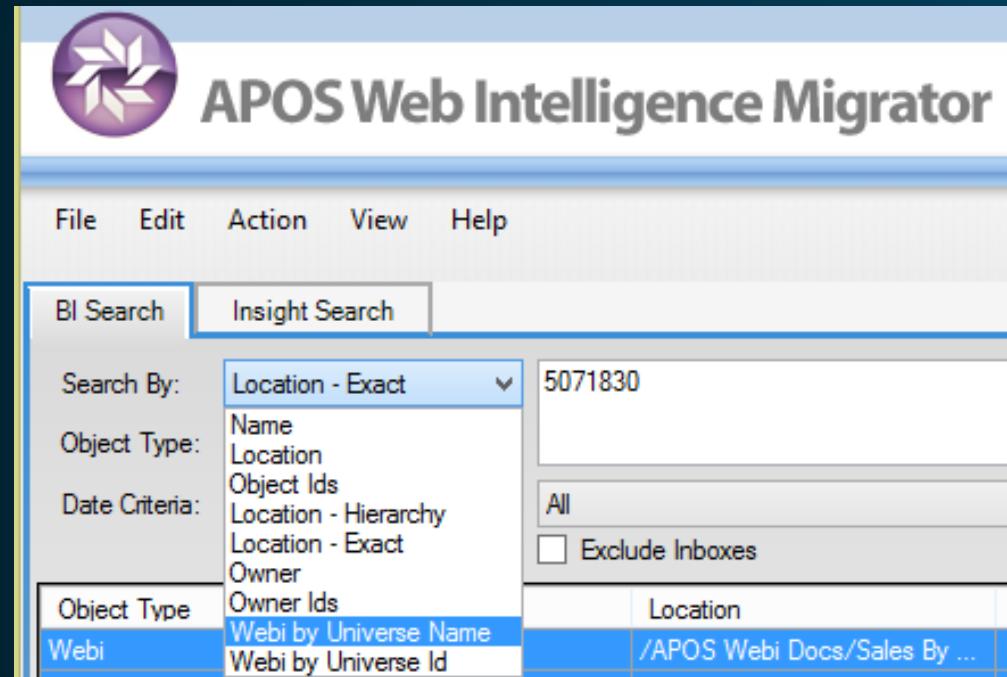
## Key Considerations

- Work with manageable chunks of reports
- Retain any Custom SQL that reports are using
- Spread the processing load across multiple machines



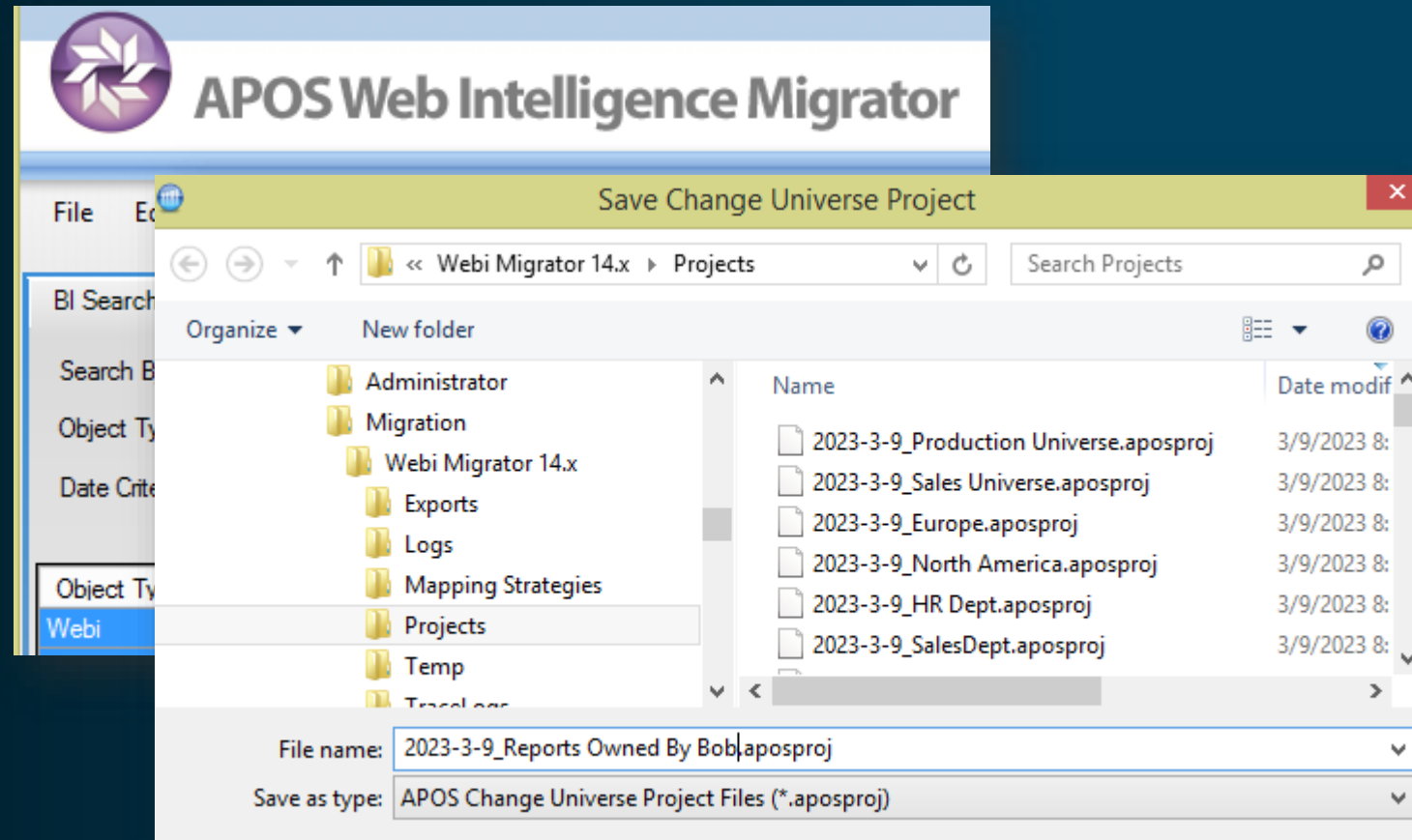
# Bulk Repointing of Reports

- Select reports by your choice of criteria
- Use a project-based approach to streamline and control the repointing
- Ensure that only those reports that are being used in the organization are repointed



# Bulk Repointing of Reports

- Select reports by your choice of criteria
- Use a project-based approach to streamline and control the repointing
- Ensure that only those reports that are being used in the organization are repointed



# Bulk Web Intelligence Repointing – Process

The screenshot displays the APOS Web Intelligence Migrator interface. The main window shows a project named "Project - Sales&Marketing.aposproj" with a "Result Filters" section containing checkboxes for "Unmodified", "Successful", "Needs Manual Refresh", "Unsuccessful", "Skipped", "Committed", and "Submitted". Below this is a table with columns: "Webi Name", "ID", "Processed", "Committed", "Last Status", "\*Data Type", "\*Value", "\*Advanced", and "\*Errors". A context menu is open over the table, listing actions such as "Commit...", "Export to CSV...", "Export Conversion Errors to CSV...", "High Availability Options...", "Process...", "Reload Webi Information", "Refresh Universe Info on Webi", "Retrieve Universe Information from Insight", "Remove from Project...", and "Reprocess...". The "Process..." option is selected, and a sub-menu is visible with options "With Specific Universe" and "With Universe Conversion Matrix".

**APOS Web Intelligence Migrator**

File Edit Action View Help

BI Search Insight Search

Search By: Location - Exact 6275

Object Type: Name Location Object Ids Location - Hierarchy Location - Exact Owner

Date Criteria: All

Object Type: Owner Ids Webi by Universe Name Webi by Universe Id

Webi Xtreme Pending Orders By Su

Webi Xtreme Pending Orders By Pr

Webi Xtreme Pending Orders By Er

Webi Xtreme Orders by Product Cla

Webi Xtreme Orders by Product

Webi Xtreme Orders by Country

Webi Xtreme Order Information

Webi Xtreme Last Year's Sales by C

Webi Xtreme Employee Listing

Webi Xtreme Customer List by Cour

Webi Xtreme and Adv Works Orde

Result Filters

Unmodified  Successful  Needs Manual Refresh  Unsuccessful  Skipped  Committed  Submitted

Webi Name	ID	Processed	Committed	Last Status	*Data Type	*Value	*Advanced	*Errors
** Xtreme and Adv Wo					?	?	?	0
** Xtreme Customer Li					?	?	?	0
** Xtreme Employee Li					?	?	?	0
** Xtreme Last Year's					?	?	?	0
** Xtreme Order Inform					?	?	?	0
** Xtreme Orders by C					?	?	?	0
** Xtreme Orders by P					?	?	?	0
** Xtreme Orders by P					?	?	?	0
** Xtreme Pending Or					?	?	?	0
** Xtreme Pending Or					?	?	?	0
** Xtreme Pending Or					?	?	?	0
** Xtreme Product Cla					?	?	?	0

Commit...

Export to CSV...

Export Conversion Errors to CSV...

High Availability Options...

Process...

Reload Webi Information

Refresh Universe Info on Webi

Retrieve Universe Information from Insight

Remove from Project...

Reprocess...

With Specific Universe

With Universe Conversion Matrix



# Bulk Validation of Upgrade Success

## Key Considerations

- Reports need to be trusted
- Validation needs to happen quickly
- Validation should be automated



# Bulk Validation of Upgrade Success

ID	Process
5071891	<input checked="" type="checkbox"/>
5071896	<input checked="" type="checkbox"/>
5071857	<input checked="" type="checkbox"/>
5071855	<input checked="" type="checkbox"/>
5071859	<input checked="" type="checkbox"/>
5071847	<input checked="" type="checkbox"/>
5071845	<input checked="" type="checkbox"/>
5071915	<input checked="" type="checkbox"/>
5071875	<input checked="" type="checkbox"/>
5071877	<input checked="" type="checkbox"/>
5071869	<input checked="" type="checkbox"/>
5071903	<input checked="" type="checkbox"/>

### Webi Validation Options

**Specify Webi Validation Options**

Source Document  
 Webi Document  Latest Instance  Latest Recuring Instance

Validate As  
 Current User (administrator)  Report Owner  Specific User:

This feature requires that BI impersonation and trusted authentication be enabled

Basic Validation Options  
 Validate Data Types  Validate Values  
 Count Errors  Sort Result Set Before Validating

Advanced Validation Options (Requires both basic validations be performed)

Maximum number of simultaneous validations

Restrict validation to  
 First  KB  Last  KB  Ignore invisible characters  
 Specified columns:   
Example: A, C-E, G will validate columns A, C, D, E, G.

Warning: When using both the First KB and the Skip first rows options, if the value of the First KB option isn't large enough to contain more rows than the value of the Skip first rows option, the validation will always be considered as successful, as there will be no rows eligible to validate

Discard results of previous validations

- Ensure correct user is set
- Select how validation occurs
- Exclude certain rows/ columns



# Commit Phase

## Key Considerations

- Which Web Intelligence report will be used going forward – original or copy?
- Ensure that recurring schedules are maintained



# Commit Phase

The screenshot displays the APOS Web Intelligence Migration application interface. In the background, there is a search results table with columns for Object Type and Name. Overlaid on this is a 'Webi Commit Options' dialog box with the following settings:

**Webi Commit Options**

**Specify Webi Commit Options**

- Backup original Webi document before committing
- Include Security
- Commit Webi document to previously designated Webi Target Path  
Selecting this option will result in a new Webi document located in your designated Webi Target Path
- Delete original Webi document
- Commit Webi document to original Webi document's location  
Selecting this option will cause the original Webi document to be updated with the new universe information.
- Maintain original submitter for recurring instances

Buttons: Commit, Cancel

At the bottom of the application window, there is a checkbox for 'Discard results of previous validations' which is checked.

In the background, another dialog box titled 'Validation Options' is partially visible, showing fields for 'Recurring Instance', 'User: Felix', 'KB', 'Ignore invisible characters', 'Skip first 1 rows', and 'Validate/Cancel' buttons.

Object Type	Name
Webi	Xtreme Pending Orders By Su
Webi	Xtreme Pending Orders By Pr
Webi	Xtreme Pending Orders By Er
Webi	Xtreme Orders by Product Cla
Webi	Xtreme Orders by Product
Webi	Xtreme Orders by Country
Webi	Xtreme Order Information
Webi	Xtreme Last Year's Sales by C
Webi	Xtreme Employee Listing
Webi	Xtreme Customer List by Cour
Webi	Xtreme and Adv Works Order

# Web Intelligence Migrator Overview

## Solution Demonstration

To view this demonstration, watch the webinar [on demand](#)



# Process Control Features

- **Projects Structure**
  - **High Availability**



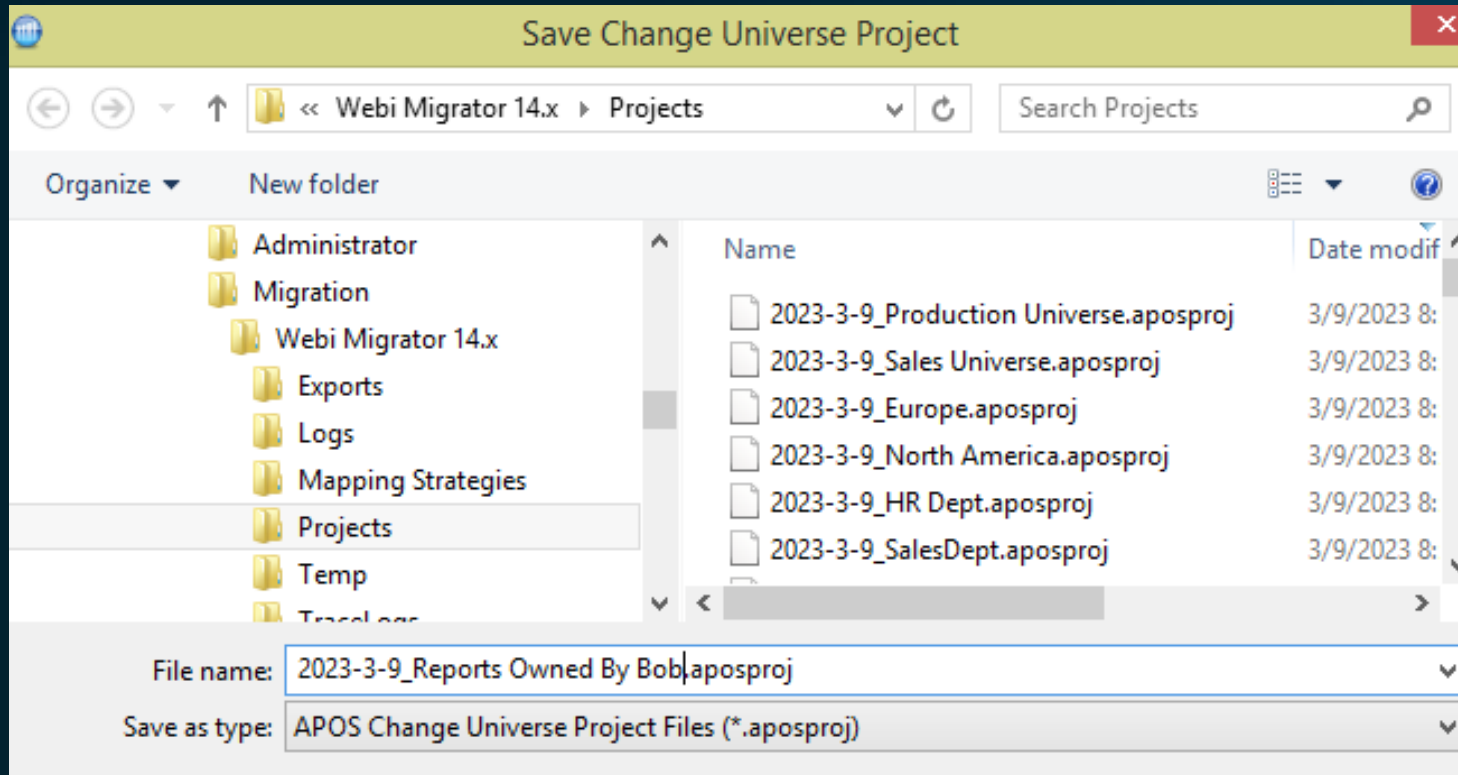
# Projects Structure

## Key Considerations

- Organized approach to repointing
- Work in manageable chunks



# Projects Structure



- Name the projects meaningfully





# Projects Structure

The screenshot displays the 'Save Change Universe Project' window in the APOS Web Intelligence Migrator. The window title is 'Save Change Universe Project'. The breadcrumb path is '<< Webi Migrator 14.x >> Projects'. The main content area shows the application logo and a menu bar with 'File', 'Edit', 'Action', 'View', and 'Help'. Below the menu bar, there are tabs for 'BI Search', 'Insight Search', and 'Project - 2023-3-7-13-36-14-133.aposproj'. Underneath, there are 'Result Filters' with checkboxes for 'Unmodified', 'Successful', 'Unsuccessful', 'Skipped', 'Committed', and 'Sub'. At the bottom, a table lists project details.

Webi Name	ID	Processed	Committed	Last Status	*Data Type	*Value
Customer List By Country	5071891	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Successful	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Customer List By Country and Region	5071896	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Successful	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Product Class Sold by Country	5071857	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Successful	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Product Name Sold by Country	5071855	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Successful	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Product Type Sold by Country	5071859	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Successful	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Quantity Sold by Country	5071847	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Successful	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sales By Country	5071845	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Successful	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sales By Customer	5071915	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Successful	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sales by Product Class	5071875	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Successful	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sales by Product Name	5071877	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Successful	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sales by Product Type	5071869	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Successful	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

- Name the projects meaningfully
- Work on them when you have the time
- Process all reports together or select specific reports



**High Availability**  
**High Scalability**

**UNV Reports**

**UNIX Reports**

# High Availability

## Key Considerations

- Need to work with many thousands of reports
- Need to spread the load across multiple machines
- Automate for high volume processing, less user intervention



# High Availability

- Batches are executed on multiple machines
- Console allows monitoring of batch status
- Pause/Resume pending batches

The screenshot shows the 'Webi Migrator High Availability System Status' window. It has two tabs: 'Current Status' and 'Completed Jobs'. The 'Completed Jobs' tab is active, showing a summary table and a details table.

**Summary Table:**

Job Type	Pending	Processing	Paused	Successful	Failed
Change Universe	0	1	0	71	13
Commit	0	0	0	35	1

**Details Table:**

Submission Date	Source Machine	Project	Job Type	Time Received	Processing Start Time	Processing End Time	Pending	Processing	Paused	Successful	Failed
10/12/2022 1:55:34 PM	BI42SP9	2022-10-12-13-53-53-6...	Change Universe	10/12/2022 1:56:03 PM	10/12/2022 1:56:36 PM	10/12/2022 1:56:54 PM	0	0	0	0	1
9/21/2022 10:46:19 AM	BI42SP9	2022-9-21-10-44-15-91...	Change Universe	9/21/2022 10:46:46 AM			0	0	0	0	1
9/22/2022 9:43:52 AM	BI42SP9	2022-9-21-10-44-15-91...	Change Universe	9/22/2022 9:44:07 AM			0	0	0	0	1
9/22/2022 10:36:21 AM	BI42SP9	2022-9-21-10-44-15-91...	Change Universe	9/22/2022 10:36:37 AM			0	0	0	0	1
9/22/2022 10:47:14 AM	BI42SP9	2022-9-21-10-44-15-91...	Change Universe	9/22/2022 11:37:23 AM			0	0	0	0	1
9/22/2022 1:29:44 PM	BI42SP9	2022-9-21-10-44-15-91...	Change Universe	9/22/2022 1:30:12 PM			0	0	0	0	1

At the bottom of the console, there are filters for 'Show <All Job Types>' and 'submitted from <All Source Machines>'. There are buttons for 'Export Details to CSV', 'Pause Pending', and 'Resume Paused'. A checkbox is checked for 'Automatically update system status every 10 seconds'. A 'Close' button is in the bottom right corner.



# Customer Profile

**Major Telco** - a multinational telecommunications company and wireless carrier, one of the largest in the world, with revenues above \$100 billion.

## Landscape & Core Challenge

- SAP BusinessObjects BI 4.2
- Multiple SAP BusinessObjects deployments
- Over 160 universes and 400,000 reports
- APOS Insight customer

Upgrading SAP BusinessObjects to BI 4.3, and eventually to BI 2025, in which UNV universes are no longer supported.

Moving from Teradata to Snowflake, which does not support UNV universes.

## Requirements

- Conversion of 160+ universes to UNX
- Rationalization and repointing of 400,000+ Web Intelligence reports
- Organization of business units into conversion and repointing projects

## Problems

- The move to Snowflake would be negatively impacted by failure to achieve objectives
- Future **SAP BusinessObjects** upgrades would be in jeopardy
- Limited resources would be heavily taxed by manual processes

## Barriers

- Manual Web Intelligence report upgrades are time- and resource-intensive
- Manual repointing and testing are prone to human error
- SAP conversion resources do not enable bulk upgrades

Customer Problem

# Outcomes & Customer Success

- Rationalized and reduced number of Web Intelligence reports to be migrated
- Automated conversion of UNV universes to UNX universes
- Repointed Web Intelligence reports to new UNX universes in bulk
- Changed universe settings on reports in bulk
- Established and maintained granular control over conversion and repointing processes

*“Recognizing the scale of the conversion and repointing effort required to achieve their reporting and data management objectives, this customer deployed APOS Migrator for Web Intelligence to achieve a highly controlled, project-based upgrade to UNX universes and Web Intelligence reports across multiple deployments.”*

- Cathy Ramsli, APOS Account Manager

# Expanded Solution Feature

- Custom Field Mapping





# Custom Field Mapping

## Key Considerations

- Universes may need to be made more user friendly
- Objects may need to be renamed or moved to different folders



# Custom Field Mapping

- Map source UNV objects and classes to target UNX

Universe Mappings

Source Universe Name	Source Universe Path	Target Universe Name	Target Universe Path
XtremeSourceUNV	Universes/Xtreme	Xtreme TargetUNX.unx	Universes/TargetUNX

Universe Mapping Configuration

Source Universe (XtremeSourceUNV - Universes/Xtreme)

Name	Type	Path
Customer	Folder	\Customer
City	Dimension	\Customer\City
Country	Dimension	\Customer\Country
Customemame	Dimension	\Customer\Customemame
Region	Dimension	\Customer\Region
Orders	Folder	\Orders
Orderdate	Dimension	\Orders\Orderdate
Orderid	Dimension	\Orders\Orderid
Quantity	Measure	\Orders\Quantity
Unitprice	Measure	\Orders\Unitprice

Target Universe (XtremeTargetUNX.unx - Universes/TargetUNX)

Name	Type	Path
CustInfo	Folder	\CustInfo
City	Dimension	\CustInfo\City
Country	Dimension	\CustInfo\Country
CustName	Dimension	\CustInfo\CustName
Region	Dimension	\CustInfo\Region
OrderInfo	Folder	\OrderInfo
Order Id	Dimension	\OrderInfo\Order Id
OrderDate	Dimension	\OrderInfo\OrderDate
Product Class	Dimension	\OrderInfo\Product Class
Product Name	Dimension	\OrderInfo\Product Name

Universe Links

Source Name	Source Type	Source Path	Target Name	Target Type	Target Path
Customemame	Dimension	\Customer\Customemame	CustName	Dimension	\CustInfo\CustName
Country	Dimension	\Customer\Country	Country	Dimension	\CustInfo\Country
Region	Dimension	\Customer\Region	Region	Dimension	\CustInfo\Region
City	Dimension	\Customer\City	City	Dimension	\CustInfo\City



# Custom Field Mapping

- Select the target UNX when executing the project

Change Universe on Web Intelligence

Conversion List

Source Universe	Source ID	Source Path	Target Universe	Target ID	Target Path	Status
<input checked="" type="checkbox"/> XtremeSourceUNV	4933117	/Xtreme/XtremeSourceUNV	XtremeTargetUNX.unx	4933776	/TargetUNX/XtremeTargetUNX.unx	

[Clear Target](#)

[Target Universe](#) | [Copy Settings](#) | [Consolidation & Tolerance](#) | [Misc.](#)

Select Target Universe

[Set](#)

[Filter List...](#) [Clear Filter](#)

UNIX Target Location:  [Add](#)





## STREAMLINE YOUR MOVE TO UNX UNIVERSE



### INVENTORY SYSTEM CONTENT

- Scan your system for Web Intelligence reports using the criteria you specify
- Accurately plan and prioritize upgrade steps with a deep understanding of your BI system:
  - ◆ *Report Objects* ◆ *Universe Objects* ◆ *System Objects*
  - ◆ *Report/Universe Usage* ◆ *Report/Universe Structure*
  - ◆ *Schedules & Instances* ◆ *System Structure & Security*



### HIGH VOLUME REPOINTING OF REPORTS

- Repoint Web Intelligence reports in bulk from old UNV to new UNX
- Update existing reports or create a new copy in a custom location & naming convention
- Project-based approach to select and manage Web Intelligence reports conversion process
- Define a mapping strategy, or create custom mapping
- Scale conversion infrastructure to handle high volume scenarios with multiple conversion processors



### BULK CONVERSION OF UNIVERSES

- High volume conversion of universes from UNV to UNX format
- Use system inventory to set project priorities for the most important universes



### VALIDATE UPGRADE SUCCESS

- Automated bulk testing and validation
- Ensure a successful and accurate upgrade process
- Take the risk out of migration



### STRONG PROCESS CONTROLS

- Synchronize and scale your migration processes
- Enterprise-grade process controls
- Handle massive volumes of reports with distributed project management

# More Information – Next Steps

## UNIX Adoption Project Cost Estimator

- Details and [link to instant estimate](#)

## UNV to UNIX Upgrade Freemium Offer

- Information Sheet: [download link](#)

## Solution Discovery Call

- Deployment Discussion
- Dedicated Solution Demonstration

# Upcoming Event

## BI 2025 Debrief + Automating Migration Steps

Join us for this session to review the BI 2025 release, and to discuss automation to help you speed and strengthen your move to BI 2025!

**March 13 - 11am EDT / 8am PDT / 3pm GMT / 4pm CET**

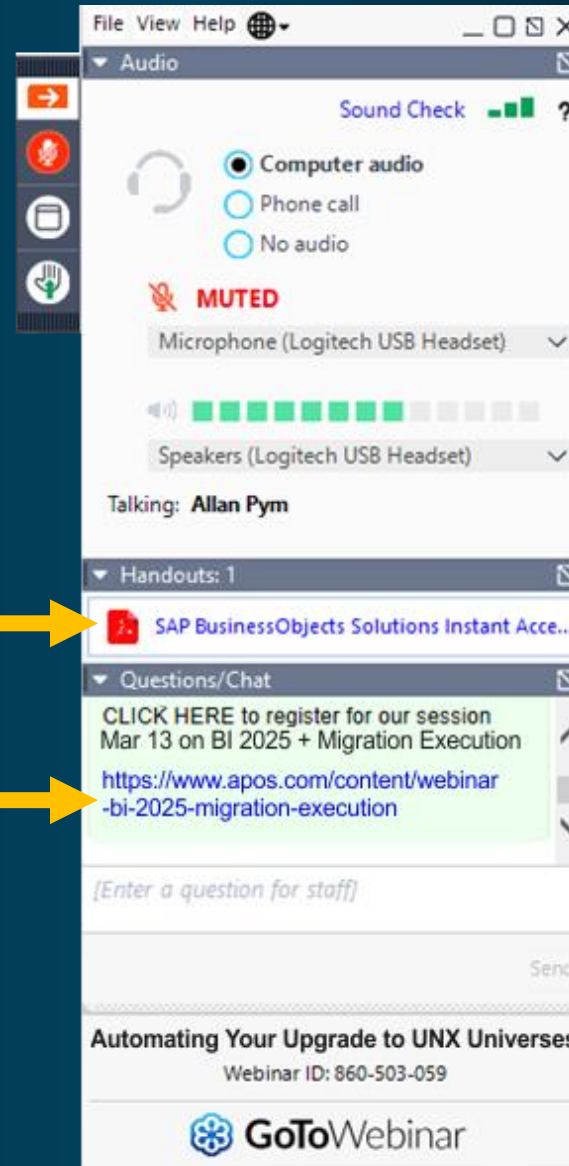
**Register now** in PDF in handout panel or using link in Chat panel



# Register for March 13



- ✓ Open the PDF in the Handout panel and click on the webinar link
- ✓ Open the Question panel and click the link in the message



Register at [www.apos.com](http://www.apos.com)

# APOS Solutions for SAP BusinessObjects



## APOS Insight

### BI System Auditing

- System Inventory
- Security Analysis
- System Usage Analysis
- Report Impact Analysis

### BI Report Testing

- Automated Report Testing
- Regression Testing
- Validation of Report Data
- Report Performance Testing

### BI System Monitoring

- Advanced System Monitoring
- Operating Environment Monitoring
- Database Monitoring
- Process Monitoring

### BI Query Surveillance

- Real-time BI Query Monitoring
- Query Performance Alerting & Auditing
- Query Intervention; Remote Cancelling
- Sensitive Data Audit



## APOS Administrator

### Object Management

- Bulk Security Management
- Bulk Settings Management
- System Objects Promotion
- Connections Maintenance

### Schedule Management

- High-volume schedule management
- Multiple schedule properties editing
- Grid scheduling interface
- Repeatable scheduling templates

### Instance Management

- Manage entire instance inventory
- Granular instance search
- Stop, pause, release, reschedule
- Rapid recovery to failed schedules

## APOS Storage Center



- System Backup
- Content Archiving
- Content Versioning
- Selective Restoration
- Automated System Clean Up

## APOS Publisher



- Systematic Content Delivery
- Advanced Document Bursting
- Enhanced Content Distribution
- Security and Encryption
- Statement Generation

## APOS Web Intelligence Migrator



- Bulk conversion of Universes from UNV to UNX
- High-Volume Repoint Web Intelligence reports
- Success validation
- Controlled, project-based workflow



# APOS Solutions for SAP Analytics Cloud



## APOS Publisher for Cloud

- Automated broadcasting and distribution of personalized SAC reports to target user groups
- Distribute reports to the right people, right time, right location, right format
- Analysis for Office broadcasting and scheduling



## APOS Data Gateway

- Live connectivity from SAC to wide range of data sources
- Import data from wide range of sources into SAC
- Extract and Export data from SAC

# STAY CONNECTED



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on LinkedIn and request to join



# QUESTIONS?

Please enter your questions in the Q&A panel.



# Thank you!

## Get in touch

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