

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:



FRED WALTHER
Senior Solution Consultant



TOMMASO ALBERGHINI
Solution Consultant



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





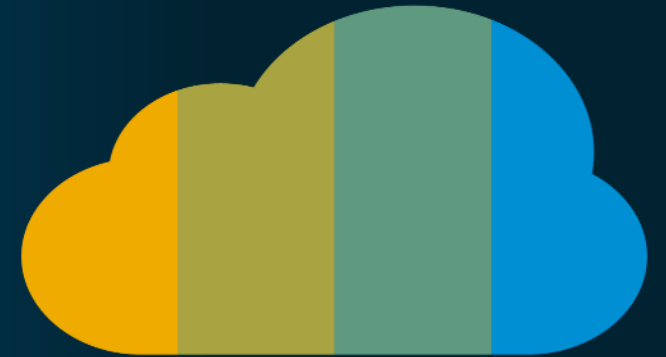
APOS



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

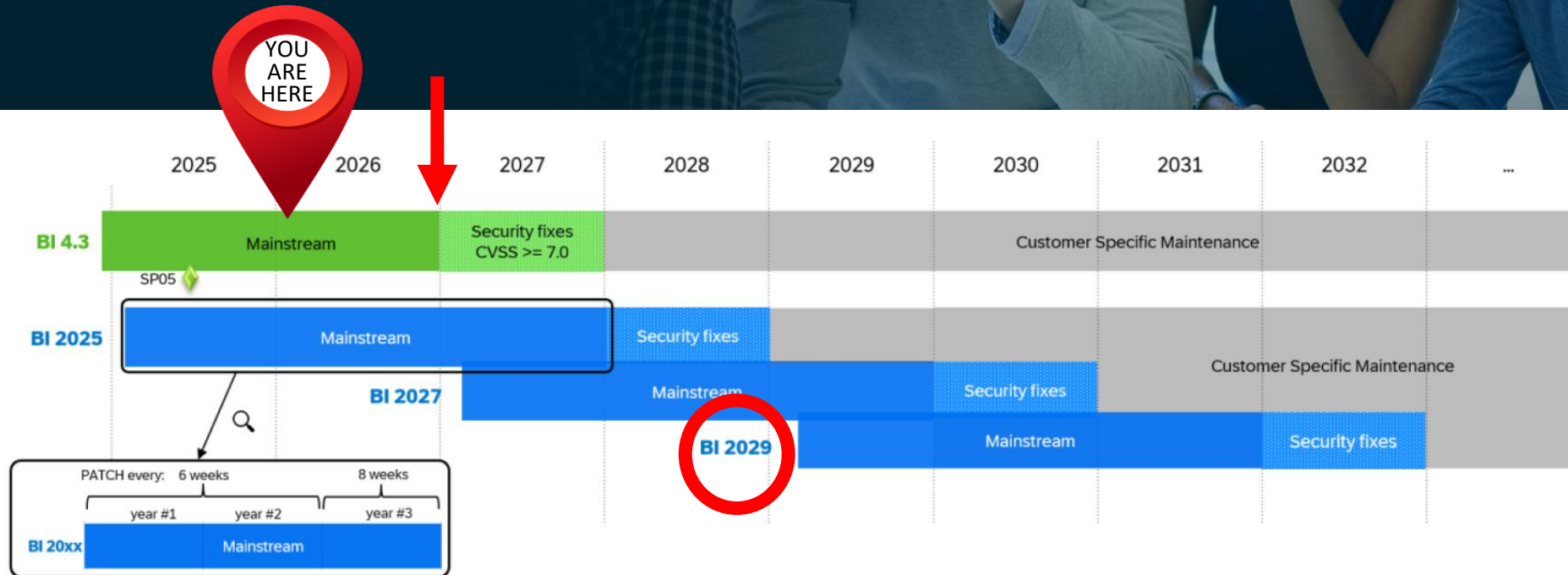


Download the
handouts in
the panel



Tell us how we
did in the
survey

Preparing for BI 2025:



Preparing for BI 2025:

The UNIX 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

UNIX Universe Adoption Considerations

Manual Upgrade Time Estimates

- Manual conversion of universes from UNV to UNIX format
 - 5 minutes per universe
- Publish new UNIX universe
 - 2 minutes per universe
- Manual repointing of Web Intelligence report to new UNIX 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

UNIX 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



Tommaso Alberghini
Solution Consultant
APOS

APOS Web Intelligence Migrator

(Web 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



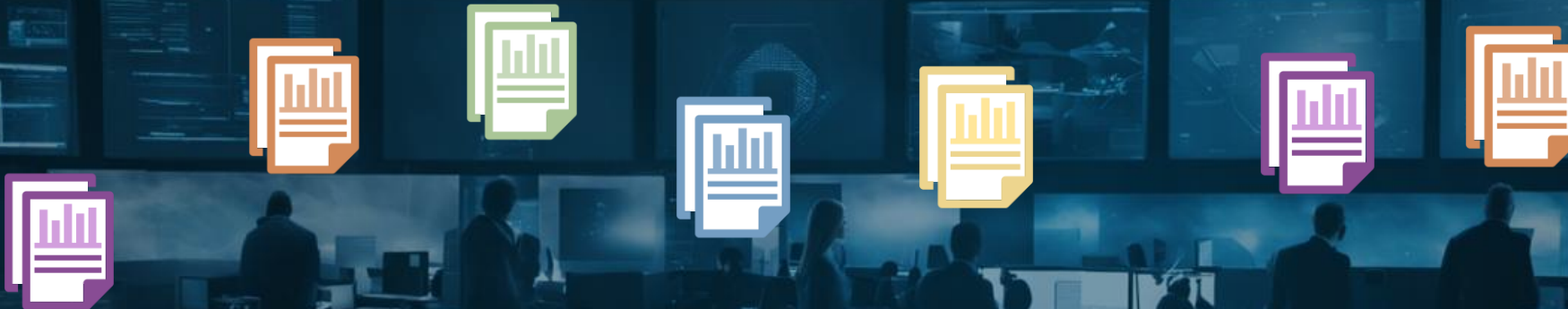
Scan System and Inventory Content

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

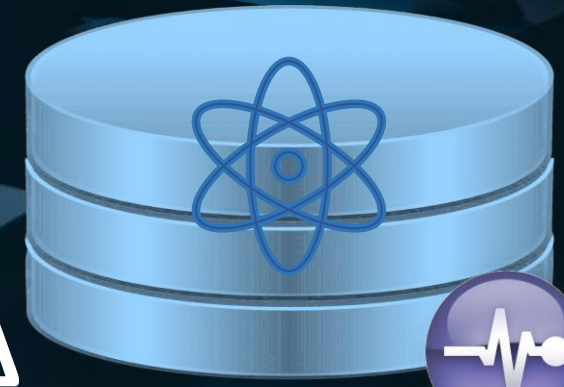


System & Content Usage

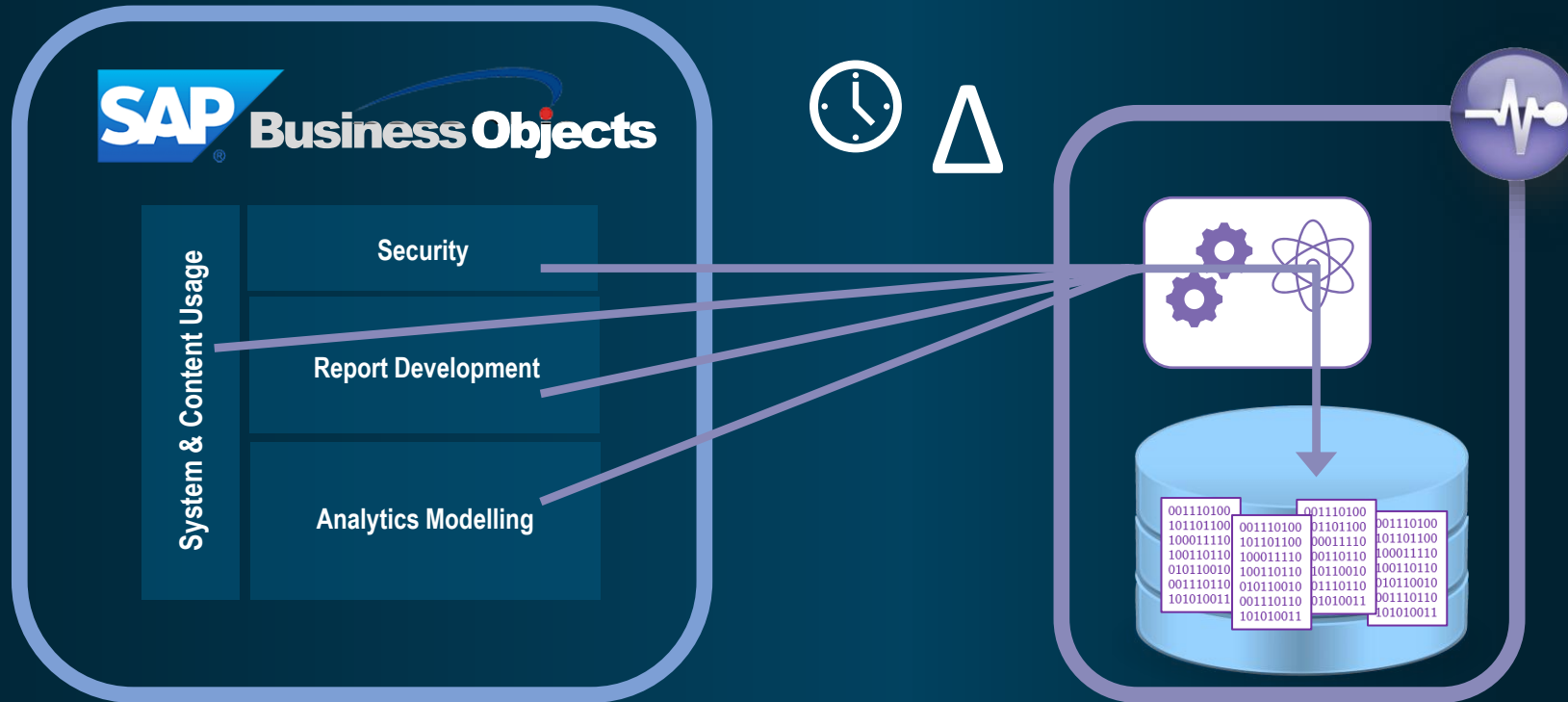
Security

Report Development

Analytics Modelling



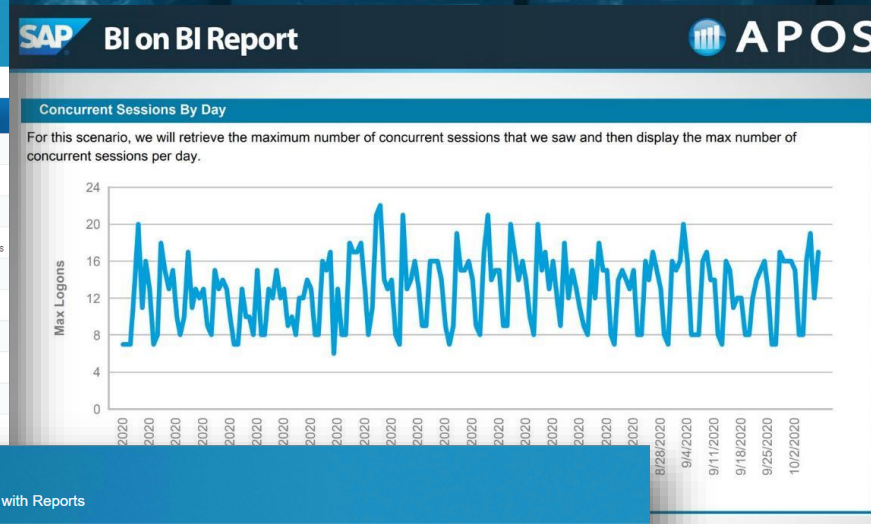
System Metadata



System Analysis

List Objects by Type for System: PRODUCTION	
Object Type	Number of Objects
ClientAction	469
Webi	129
Report	126
Folder	84
ClientActionUsage	68
ClientActionSet	66
MON.ManagedEntityStatus	28
CC/S.DataConnection	15
PlatformSearchContentExtra	11
TaskTemplate	10
MON.Probe	9

Object Type	Folder	1,146 SI ID	SI Name
AdminConsole	/Apos/Workshop1.6400/Application Folder/Root Folder 99	4404	BI Administration Console
AdminTool	/Apos/Workshop1.6400/Application Folder/Administrative Tools	608	Security Query Export
AdminTool	/Apos/Workshop1.6400/Application Folder/Administrative Tools	622	Update Authentication Group Membership
AdminTool	/Apos/Workshop1.6400/Application Folder/Administrative Tools	631	Update Authentication Group Membership and User Alias
AdminTool	/Apos/Workshop1.6400/Application Folder/Administrative Tools	4883	Principal File Import
AlertingApp	/Apos/Workshop1.6400/Application Folder/Root Folder 99	534	Alerting
AO.Plugin	/Apos/Workshop1.6400/Application Folder/Root Folder 99	4390	Analysis Office
	/Apos/Workshop1.6400/Application		





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/samplest/customer_dbo/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/samplest/customer_dbo/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/samplest/customer_dbo/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

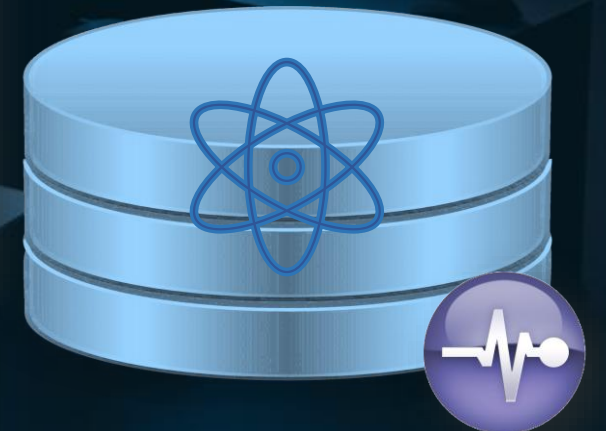
Report Name	Type	Create Date	Owner	Data Source	Last Updated
CEO Report 1	Report	2014-12-02 17:15:32	Administrator	Custom: C:\Program Files (x86)\SAP BusinessObjects\SAP BusinessObjects Enterprise XI 4.0\Sample\Emi	2015-02-04 11:52:15



APOS
Well Managed BI


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Email: info@apos.com • www.apos.com

APOS Insight		Universe List with Reports			
Folder and Name	Number of Reports	Universes/APOS Insight/Insight4 - SQL Server			
Report Folder Location	Report Name	Report Owner	Report File Size		
APOS Insight/Insight4 - SQL Server	Audit - All Report Activity	Administrator	123211		
APOS Insight/Insight4 - Oracle	Audit - Objects Scheduled by User	Administrator	102515		
Samples/eFashion.unx	Audit - Reports Refreshed by User	Administrator	100472		
Samples/Rio2016.unx	Audit - Unused Objects in Date Range	Administrator	88626		
Web/MigratorUNX/Web/Migrator.unx	Audit - User Logon Activity	Administrator	94653		
un/Test.unx	Audit - User Logon Activity Details	Administrator	101628		
shop1 \$400/Application Folder/Root connections/Insight4 - SQL Serve	Crystal - Search for Fields Used in Reports	Administrator	100847		
Monitoring TrendData Universes/ TrendData Universe	Crystal - Search for Tables Used in Reports	Administrator	100312		
Report Conversion Tool Universes/ version Tool Audit Universe	Crystal - Structure	Administrator	100085		
Web/Migrator/Web/Migrator	Crystal - Summary	Administrator	144565		
	Instances - Detail	Administrator	103991		
	Instances - Historical	Administrator	107194		
	Instances Status	Administrator	89286		
	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 WORD
Objects - Group Listing with Users	Insight4 - Oracle	UNV	AP_USERSANDGRO UPS	SI_NAME



Bulk Conversion of Universes

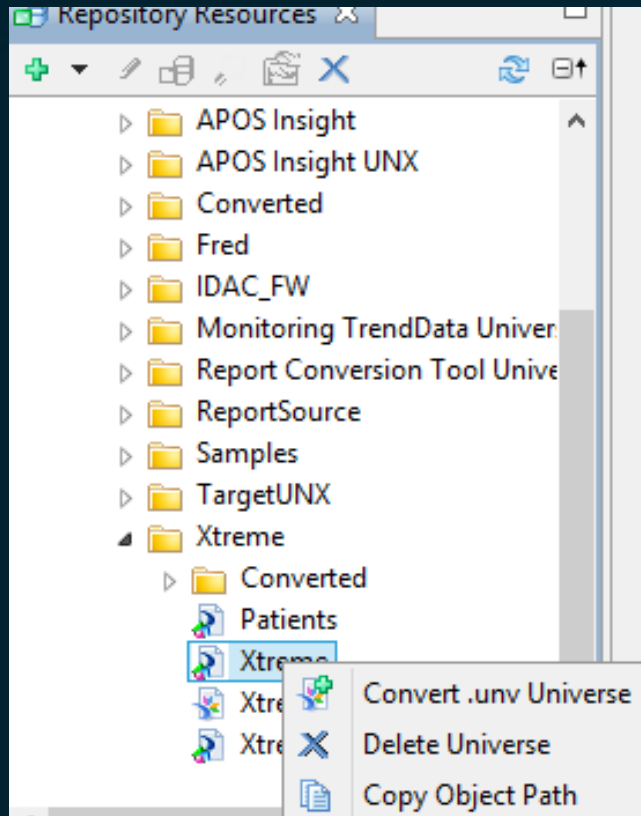
Key Considerations

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



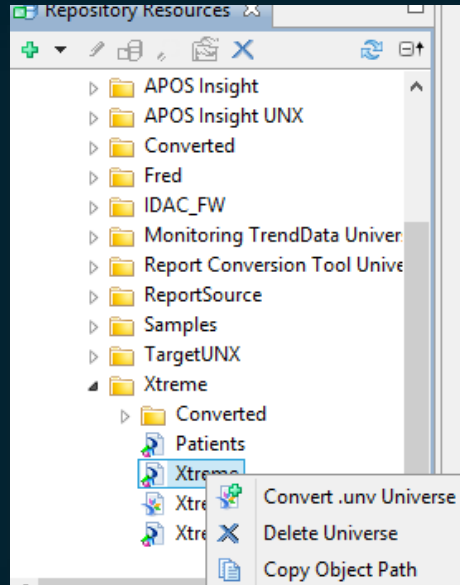
Conversion of Universes

- Convert 1 by 1 in the IDT

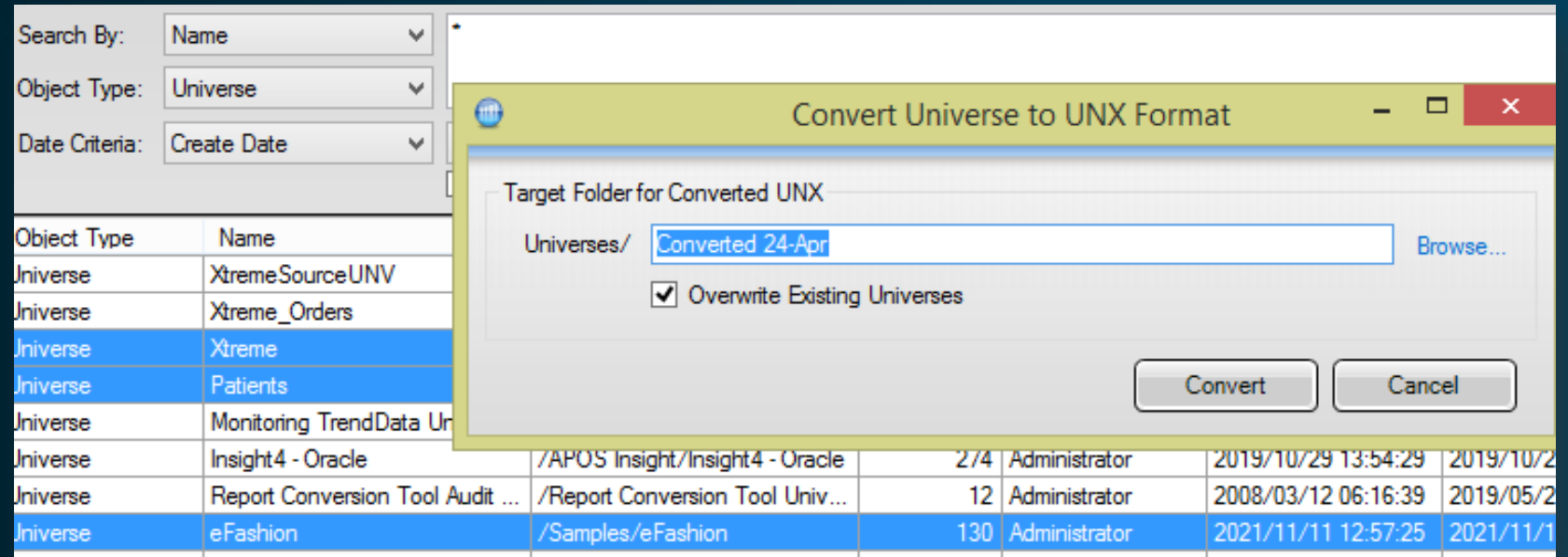


Conversion of Universes

- Convert 1 by 1 in the IDT



- Convert in bulk: WebI Migrator



Bulk Repointing of Reports

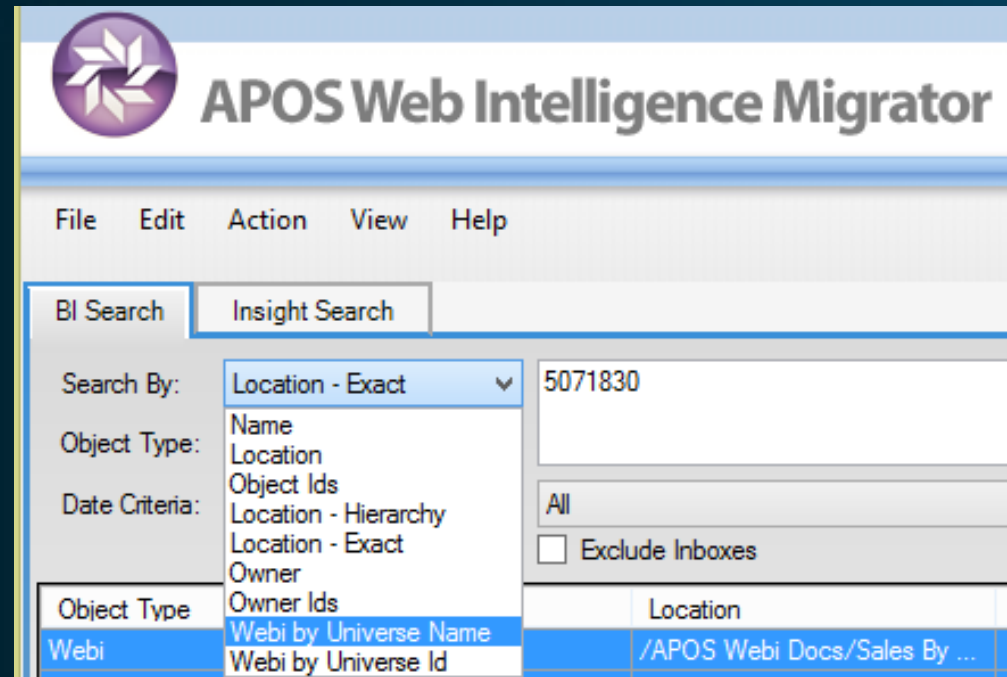
Key Considerations

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



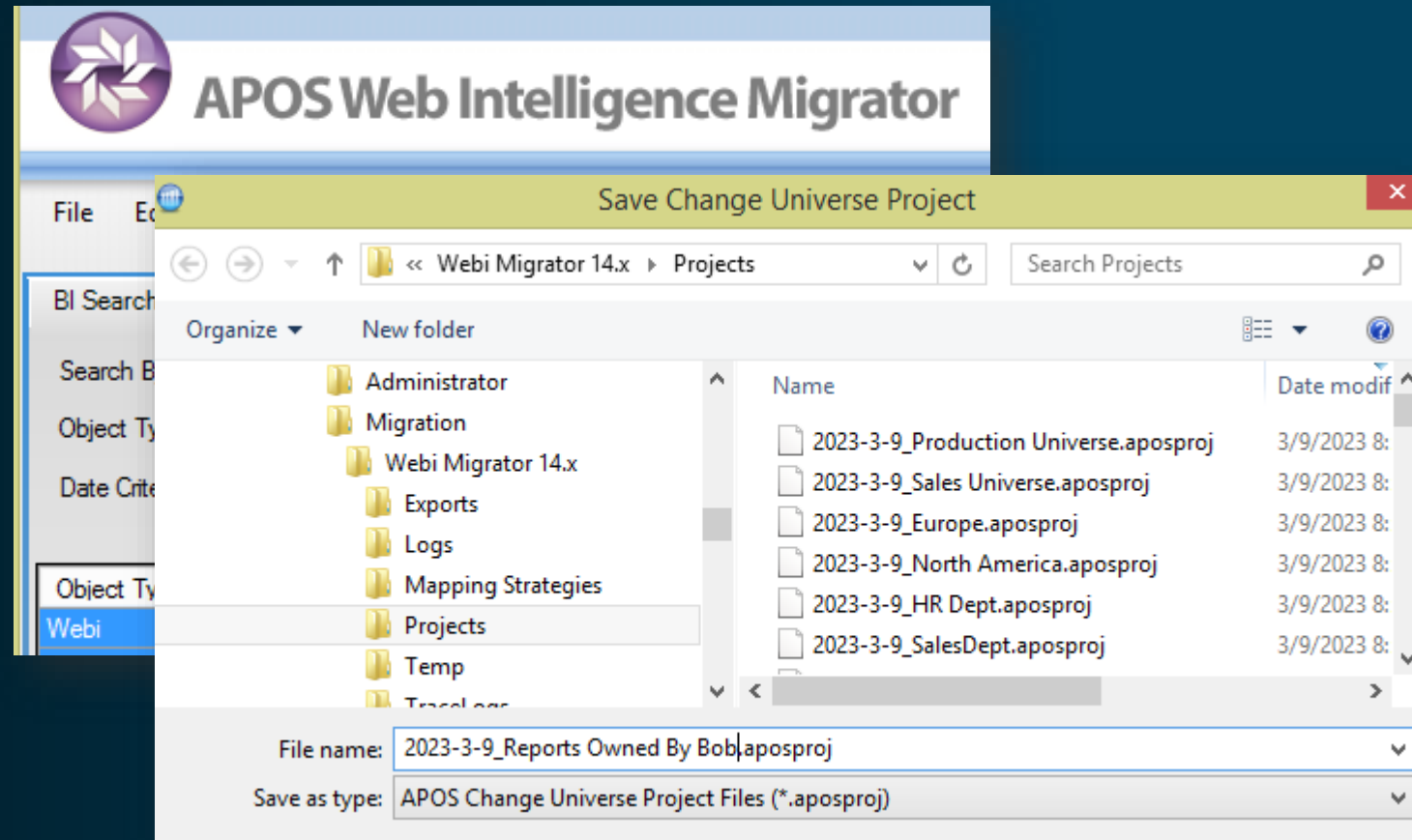
Bulk Repointing of Reports

- 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

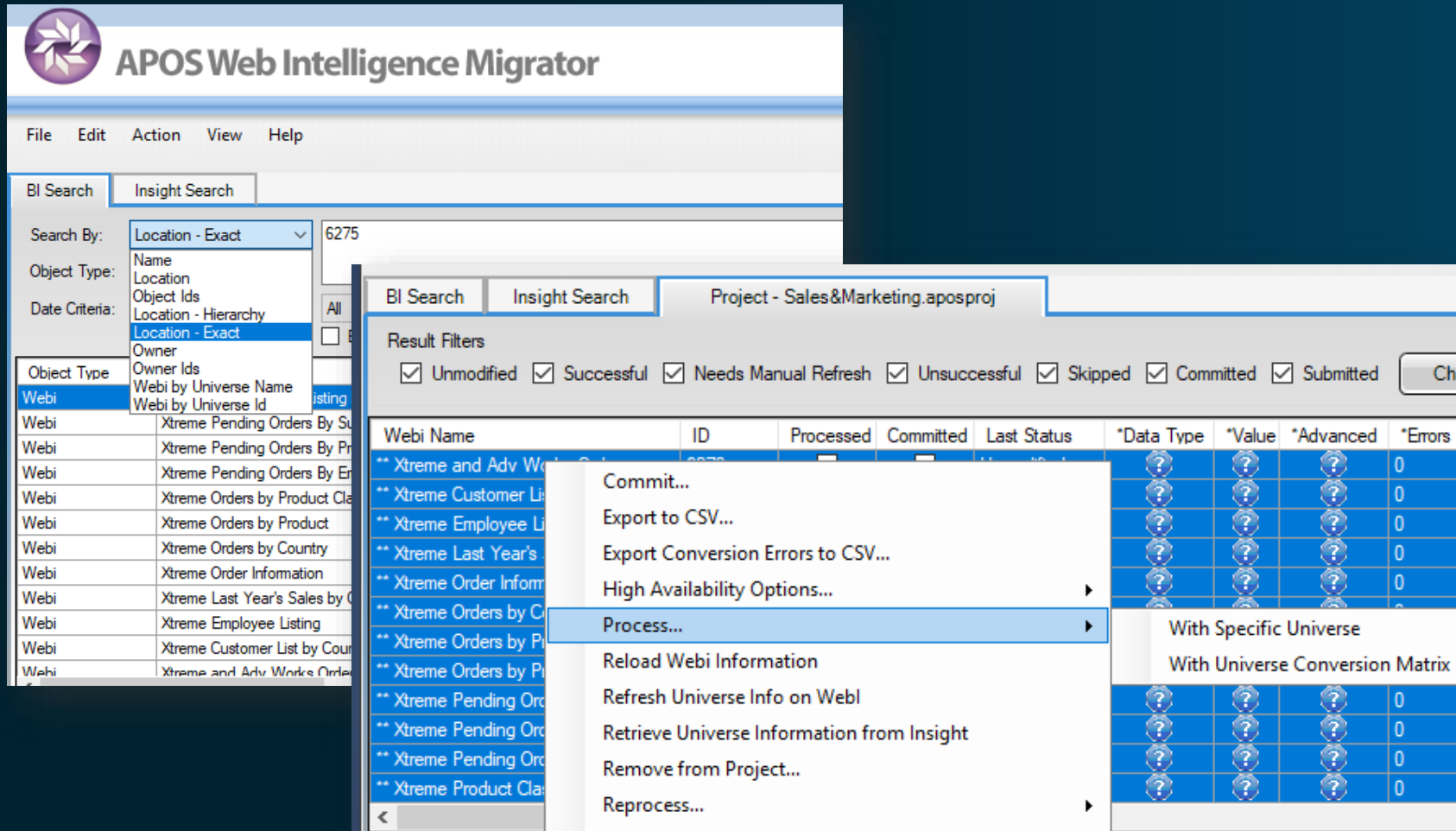


Bulk Repointing of Reports

- 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



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

Project - 2023-3-7

ssful ☒ Unsuccess

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 Recurring 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:

☐ Skip first rows

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, the main window shows a search results table with columns for Object Type and Name. A 'Webi Commit Options' dialog box is open in the foreground, titled 'Specify Webi Commit Options'. The dialog contains several options for committing a Webi document:

- ☒ 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

At the bottom of the dialog are 'Commit' and 'Cancel' buttons. Below the dialog, a checkbox labeled 'Discard results of previous validations' is visible. To the right, another dialog box titled 'on Options' is partially visible, showing fields for 'Recurring Instance', 'User: Felix', and 'Skip first 1 rows'.

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 Orde

Web Intelligence Migrator Overview

Solution Demonstration

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



Process Control Features

- Projects Structure
 - High Availability



Projects Structure

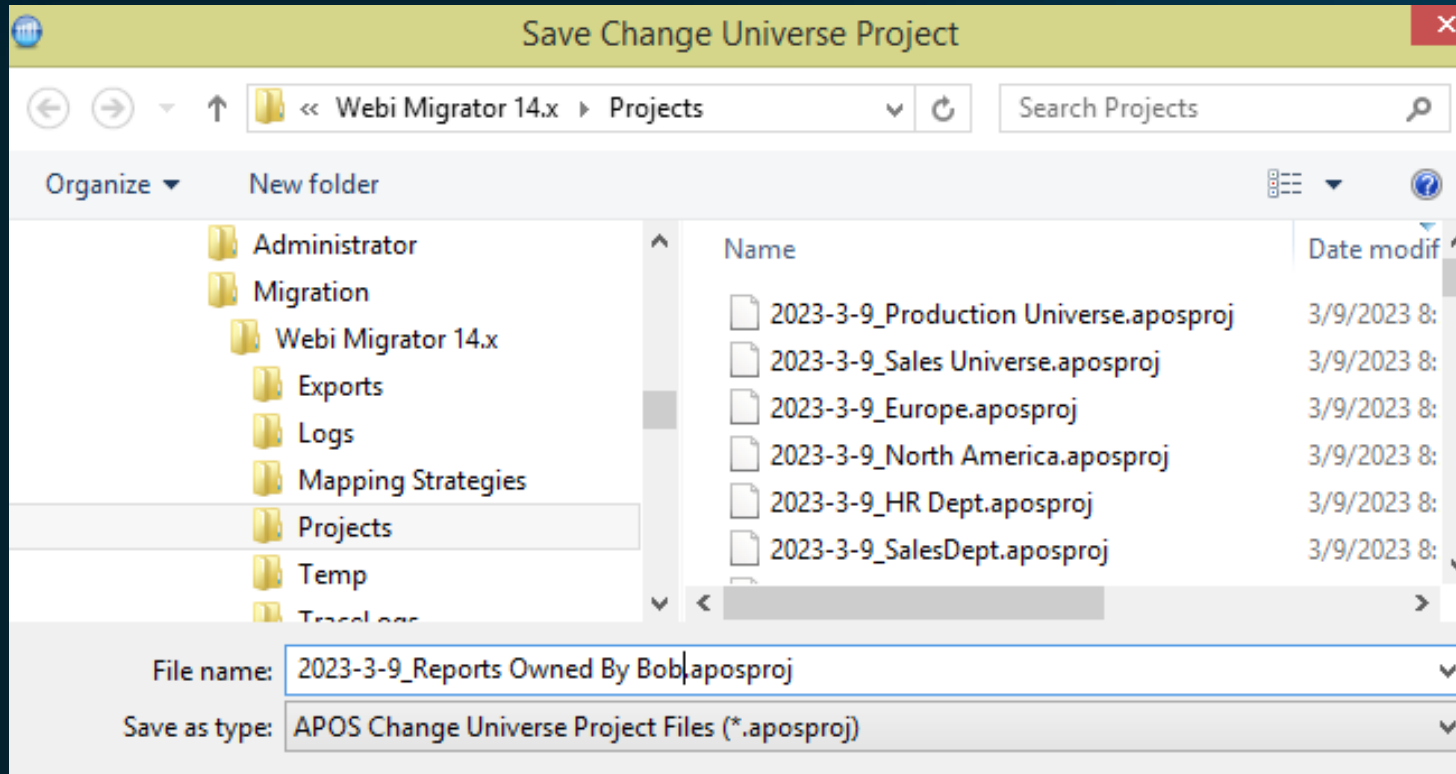
Key Considerations

- Organized approach to repointing
- Work in manageable chunks

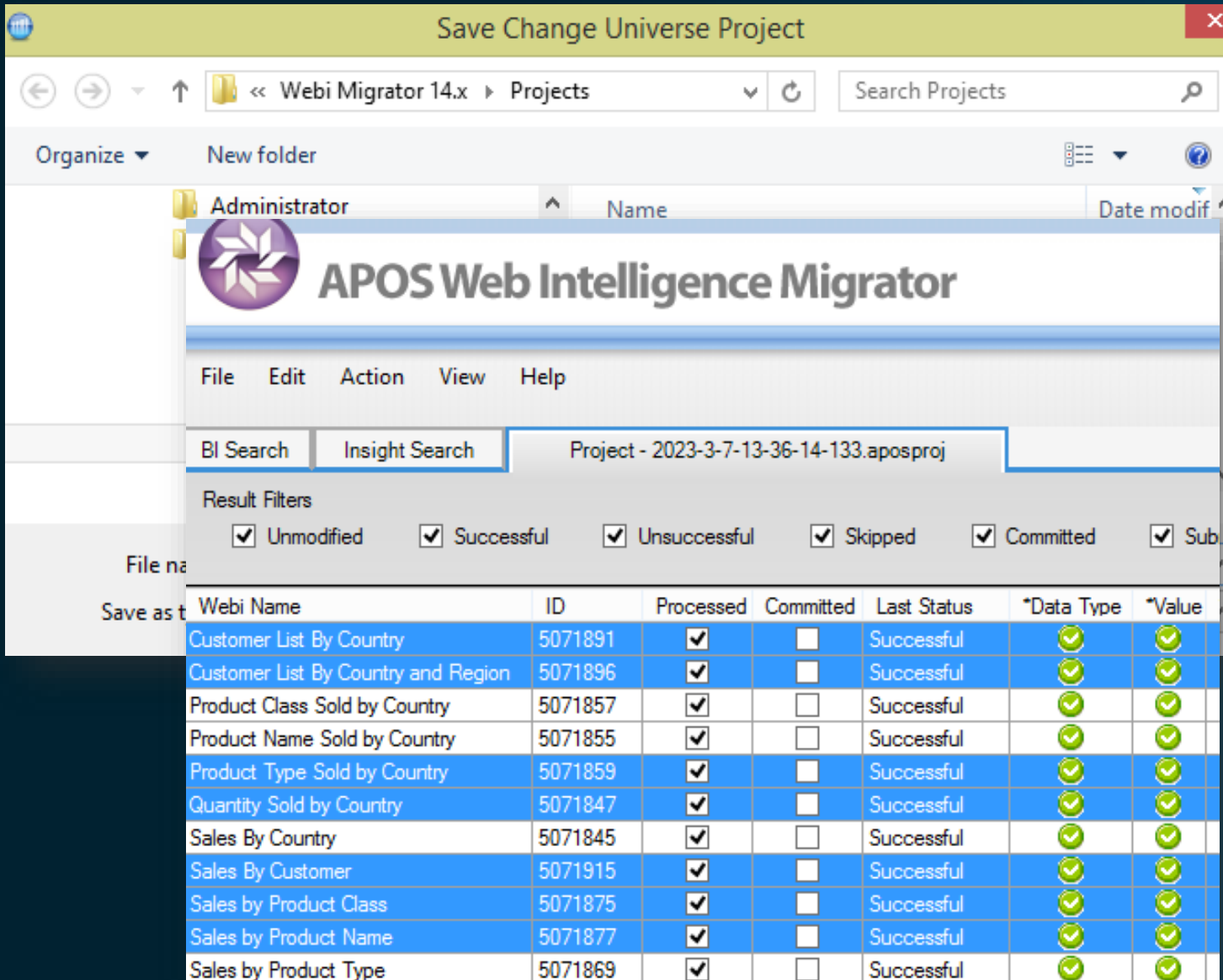


Projects Structure

- Name the projects meaningfully



Projects Structure



The screenshot shows the 'Save Change Universe Project' dialog box in the APOS Web Intelligence Migrator application. The window displays a file explorer view of the 'Projects' folder, showing a list of project files. The application interface includes a menu bar (File, Edit, Action, View, Help) and a toolbar with buttons for 'BI Search' and 'Insight Search'. The 'Insight Search' tab is active, showing a search result for 'Project - 2023-3-7-13-36-14-133.aposproj'. Below the search results, there is a table with columns: Webi Name, ID, Processed, Committed, Last Status, *Data Type, and *Value. The table lists various project items, all of which are marked as 'Successful'.

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

Webi Migrator High Availability System Status

Current Status | Completed Jobs

Summary

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

Details

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

Show <All Job Types> submitted from <All Source Machines>

Export Details to CSV | Pause Pending | Resume Paused

☒ Automatically update system status every 10 seconds

Close



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



APOS Web Intelligence Migrator

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

BI Search | Insight Search | Mapping Project - Xtreme_Source_to_Target.aposumproj

Universe Mappings

Source Universe Name	Source Universe Path	Target Universe Name	Target Universe Path
XtremeSourceUNV	Universes/Xtreme	XtremeTargetUNX.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
Customername	Dimension	\Customer\Customername
Region	Dimension	\Customer\Region
Orders	Folder	\Orders
Orderdate	Dimension	\Orders\Orderdate
Orderid	Dimension	\Orders\Orderid
Quantity	Measure	\Orders\Quantity
Unitprice	Measure	\Orders\Unitprice

☐ Hide Items which have been matched to a target item

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

☐ Hide Items which have been matched to a source item

Universe Links

Source Name	Source Type	Source Path	Target Name	Target Type	Target Path
Customername	Dimension	\Customer\Customername	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





APOS Web Intelligence Migrator



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

- Reprint 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

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

Upcoming Event



Supercharge Your Report Broadcasting with Agentic AI & Multi-Platform Support

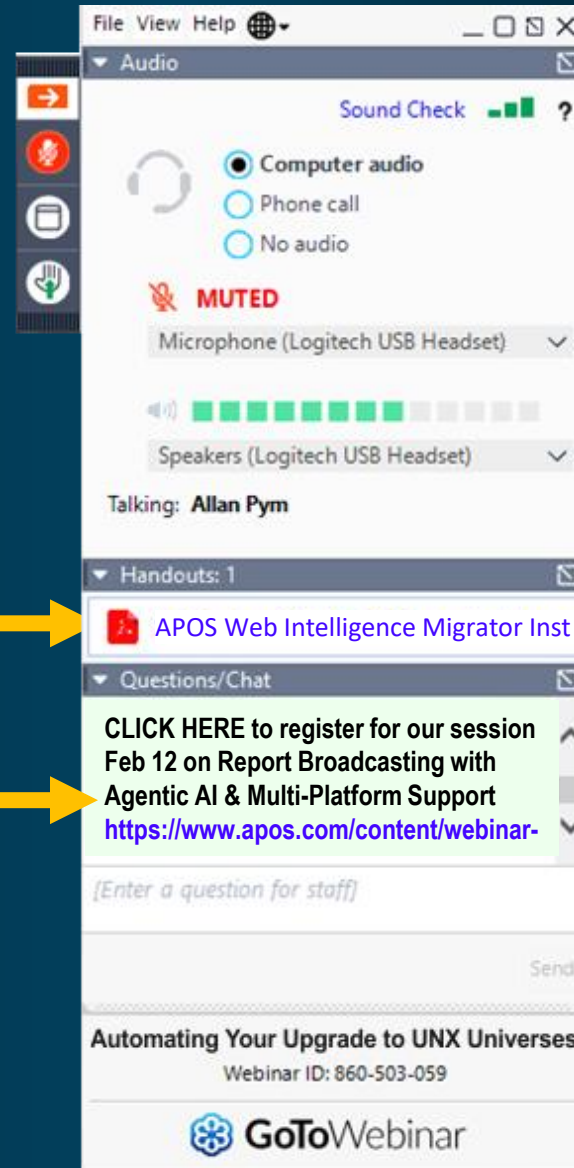
Expand the role of automated and orchestrated report broadcasting in your analytics, and support the adoption and acceleration of agentic AI use cases within your organization.

Our upcoming webinar will show you how Publisher for Cloud's automated processes can work with your analytics platforms, including SAP Analytics Cloud, Analysis for Office, Power BI, Tableau, and Google Looker.

February 12 - 11am EST / 8am PST / 4pm GMT / 5pm CET

Register for Feb. 12

- ✓ 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



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QUESTIONS?

Please enter your questions in the Q&A panel.



Thank you!

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