



**Fast Forward Your BI:  
Automate Web Intelligence UNX Adoption  
for Database Upgrades & More**



# Today's Session

## *Key Topics*

### **Automating UNX Adoption**

- UNX Adoption Motivators
- UNX Adoptions Considerations
- APOS Automation - Customer Scenarios
  - Universe Conversion
  - Web Intelligence Report Migration
  - Universe Object Mapping
- Q&A - see webinar console

## Today's Presenters



**ALLAN PYM**

*Chief Operating Officer*  
APOS



**ALAN GOLDING**

*Solution Consulting Manager*  
APOS

## Who is APOS?

- Formed in 1992
- Enabling BI platform management, administration, migration, governance and compliance
- Simplifying, automating, extending SAP BusinessObjects and SAP Analytics Cloud
- 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**



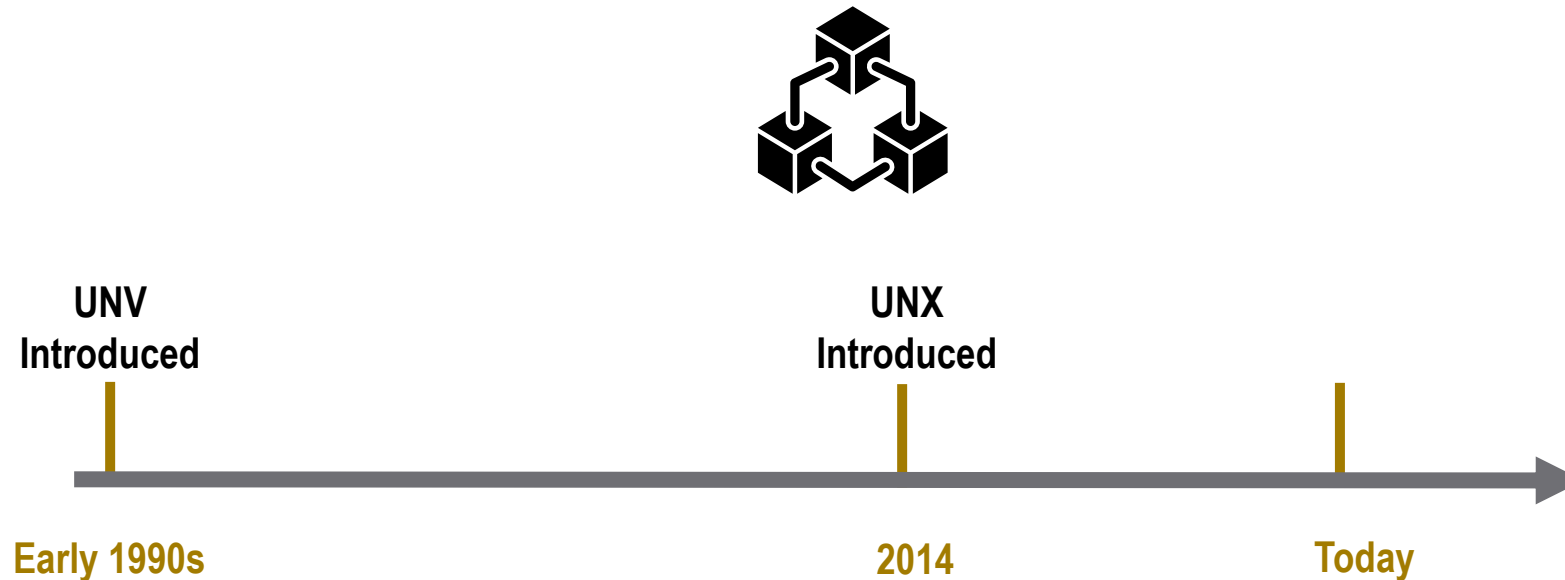
**Tell us how we did in the survey**

# SAP BusinessObjects Universe



## Universe Format Timelines

- UNV Universe introduced in early versions of BusinessObjects in the 1990s
- UNX Universe introduced in SAP BusinessObjects with SAP BI 4.0 in 2014



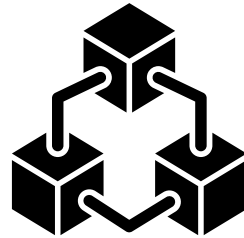
# 2015 UNX Universe Webinar Flashback



## Why UNX Universe? - Adoption Motivators

- Improved methodology and structure with various expanded features
- Primary format for future vendor development focus
  - Ongoing feature development
  - UNV support questions

What was your decision?



Where are you today?

### Stay fully on UNV

- No immediate action
- Falling behind, not current technology
- Missing opportunity with new capabilities

### Move fully to UNX

- Use new capabilities and stay current
- Updating skill sets
- Universe conversion effort
- Report re-pointing effort

### Run both UNV and UNX

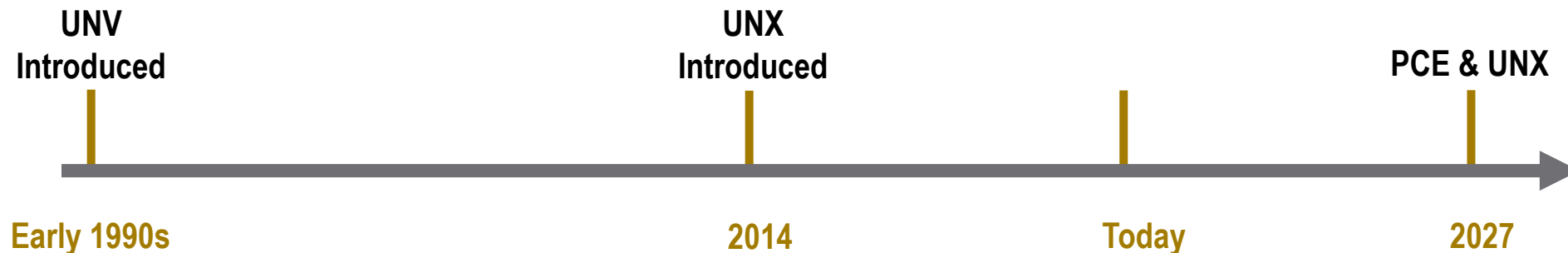
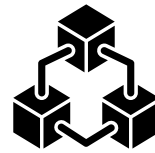
- New content on UNX, retain current UNV
- Double Maintenance
  - Field change maintenance
  - New reports on old UNVs
  - Two tool sets, two skill sets
  - Two documentation sets
  - Two testing processes

# UNIX Universe Adoption Considerations



## Adoption Motivators - Today

- SAP BusinessObjects Platform Upgrades
  - address upgrade during upgrade process
  - future support in PCE
- Development Focus and Features is UNIX
- Database version Support





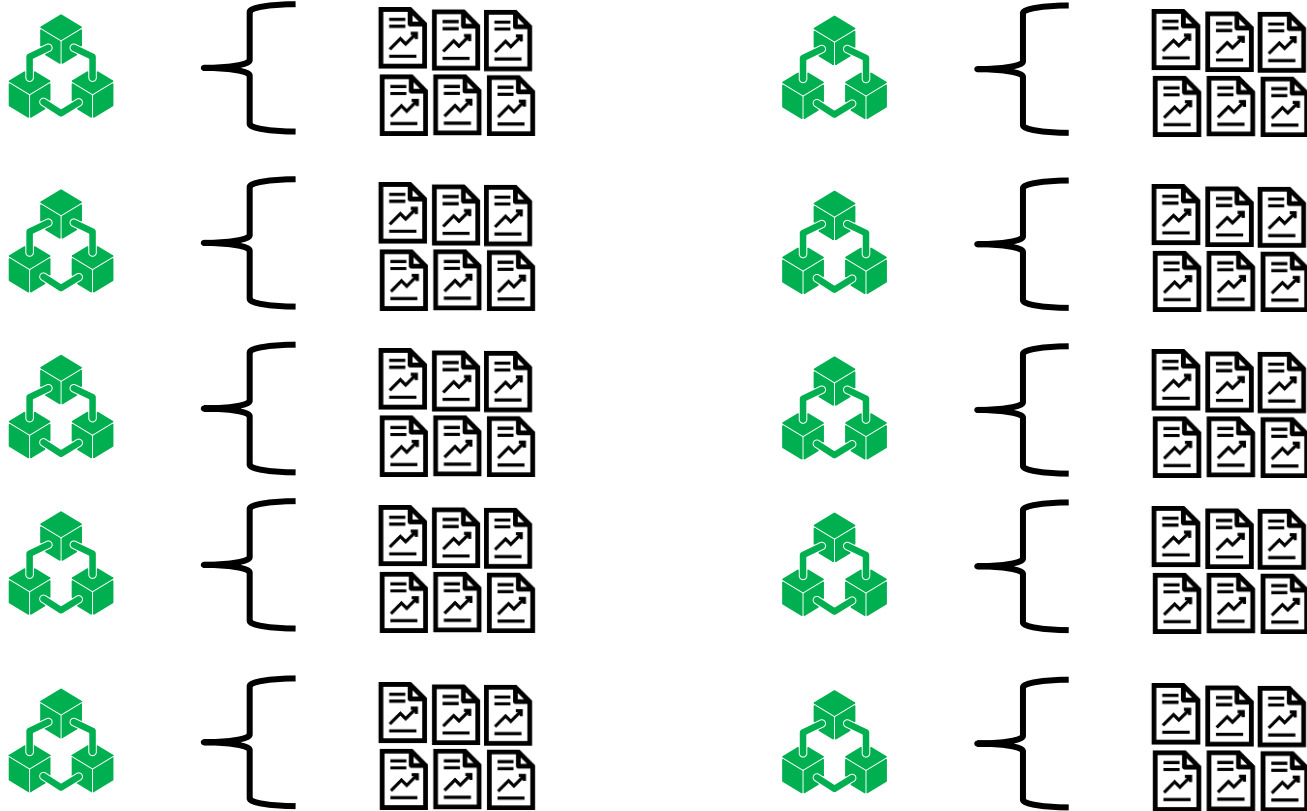
# UNIX Universe Adoption Considerations



## Adoption Challenges

- Time and effort required
  - Updated approach to building new universes
  - Managing upgrade of existing content
    - Convert Universes to UNIX
    - Repointing existing WebI reports to the new UNIX universes
- UNIX adoption introduces system change
  - adds an element of risk
- Risk management requires:
  - proper planning
  - proper controls
  - automation

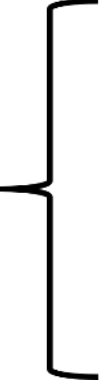
# Size of Adoption Challenge



# Size of Adoption Challenge



Size of Adoption Challenge

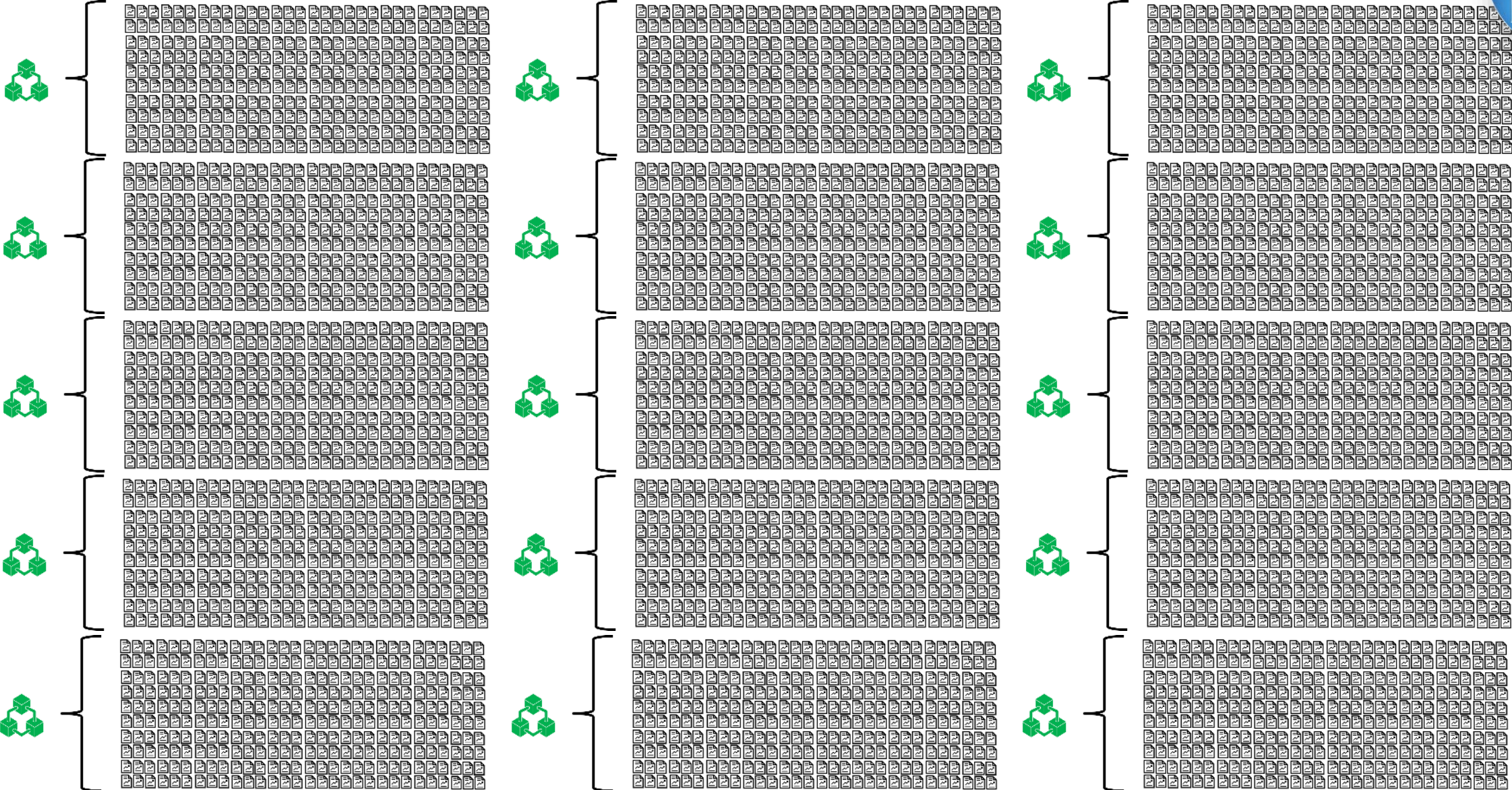


Size of Adoption Challenge



Size of Adoption Challenge

# Size of Adoption Challenge



# Size of Adoption Challenge



# Size of Adoption Challenge



**Size of Challenge = Volume of Content**

# Size of Adoption Challenge



## **Size of Challenge = Volume of Content**

Small size deployments – address manually?

Medium size deployments – automation brings big efficiencies

Large and Extra-large deployments – automation is a must



# APOS Web Intelligence Migrator



**EXTEND**  
SAP ANALYTICS





**Alan Golding**  
Solution Consulting Manager  
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.**

- Time Savings
- Timely Project Execution
- Accurate Project Execution
- Project Controls



# 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.**

- BI Platform Upgrades
  - SP Version upgrades (Sp1 to Sp8)
  - Major Version upgrades (4.1 to 4.3)
- Database Upgrades
  - Version upgrades
  - Platform migration
  - Database vendor changes



# Customer Scenario #1



- **Customer:** US Division 1 University
- **BusinessObjects:**
  - Version 4.2 Sp8
  - 80 UNV Universes
  - 50,000 Web Intelligence Reports
- **Key Motivator:**
  - Moving to Oracle version 19c
    - UNV connectivity not fully supported
- **Key Objectives:**
  - Convert 80 UNV Universes to UNX
  - Reprint 50,000 Web Intelligence reports to the UNX Universes
  - Validate to make sure nothing is broken
  - Execute the upgrade with limited personnel resourced available
  - Complete the project in a timely manner, without extensive project timelines



# Key Upgrade Process Considerations



Bulk Conversion of Universes

Bulk Repointing of Reports

Bulk Validation of Upgrade Success

Strong Process Controls

# APOS Web Intelligence Migrator



*Demonstration*

# Customer Scenario #2



**Customer:** Global Technology Manufacturer

- **BusinessObjects:**

- Version 4.2
- 250,000 Web Intelligence reports

- **Key Motivator:**

- Moving from legacy data warehouse to Snowflake DW

- **Key Objectives:**

- Migrate all 250,000 reports to leverage UNX
- Aggressive upgrade process timelines
- Massive volumes of reports requires rapid execution of report connection upgrades
- Massive volumes of content requires multiple personnel involved
- Needing strong content and project controls
- System metadata integration



# Key Upgrade Process Considerations



High Volume of Content

High Speed Needed

High Scalability Needed

High Process Controls & Integration



# High Volume Requirements



High Volume

UNV Reports

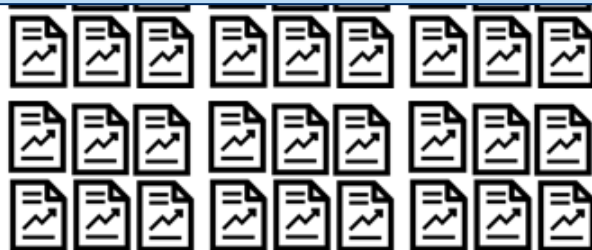


- Customer had over 250,000 reports
- Biggest concern was it even possible to migrate the reports manually. Was deemed simply not possible.
- Needed to be able to migrate reports in larger chunks at the same time in a more automated approach
- WebI Migrator would help overcome this challenge

WebI Migrator



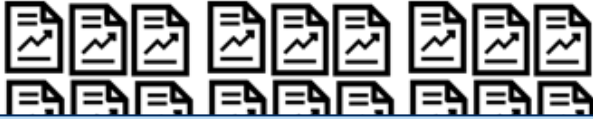
UNX Reports



# High Speed Requirements



## UNV Reports



- Given the volume of reports, and requirements to deal with process migration in larger chunks doing it manually could take years
- They wanted WebI Migrator to have maximum performance in the migration process
- Customizations were made to maximize performance



## High Speeds

WebI Migrator



## UNX Reports



# High Scalability Requirements



UNV Reports



## High Scalability

Webi Migrator



Webi Migrator



Webi Migrator



Webi Migrator



UNIX Reports



- Customer had aggressive timelines for project. Even with customizations for Volume, and Speed, they wanted a scalable solution to help meet aggressive timelines
- APOS enabled them to execute the migration process across multiple nodes of Webi Migrator instances



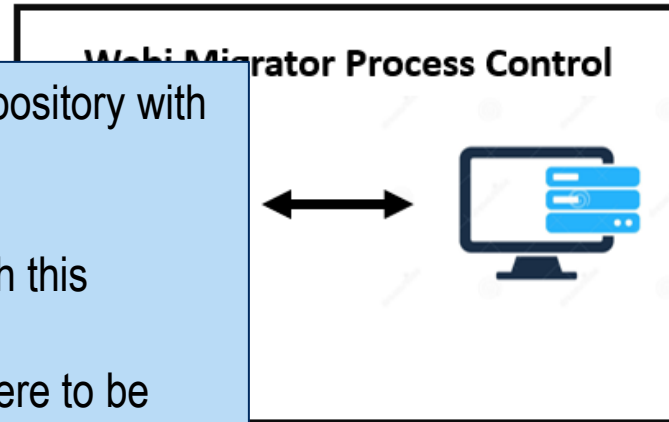
# High Process Control Requirements



## High Process Control

UNV Reports

UNIX Reports



- Customer had a 3<sup>rd</sup> party metadata repository with information about the reports
- Needed Web Migrator to integrate with this repository so they could
  - Properly identify which reports were to be migrated and when
  - Keep track of what has been migrated and what has not, given volume

# Customer Scenario #3



- **Customer:** Large Financial Institution
- **BusinessObjects:**
  - Version 4.2
- **Key Motivator:**
  - Building new versions of UNX Universes to replace the UNV version, including field/object changes
- **Key Objectives:**
  - Migrate the Web Intelligence reports from the old UNV to the newly created UNX Universes
  - Somehow apply a mapping strategy between the universe objects as they are completely different on the UNV than they are on the UNX



# Key Upgrade Process Considerations



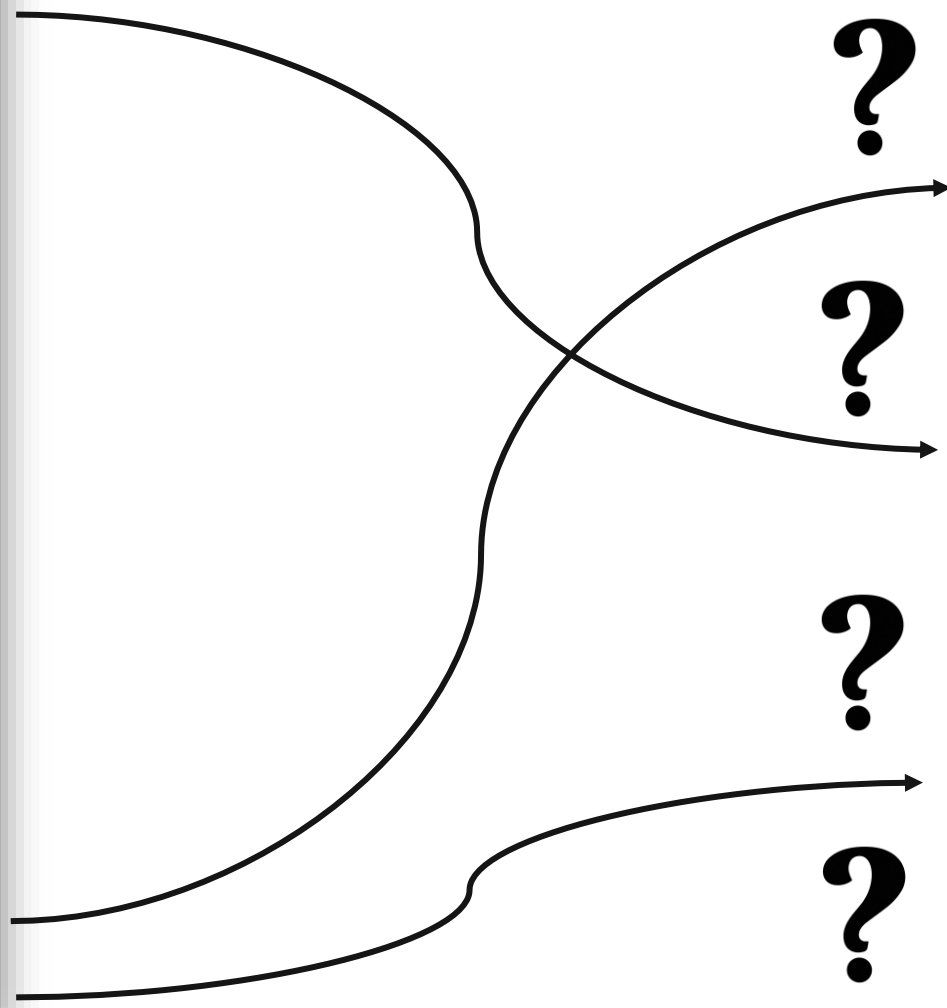
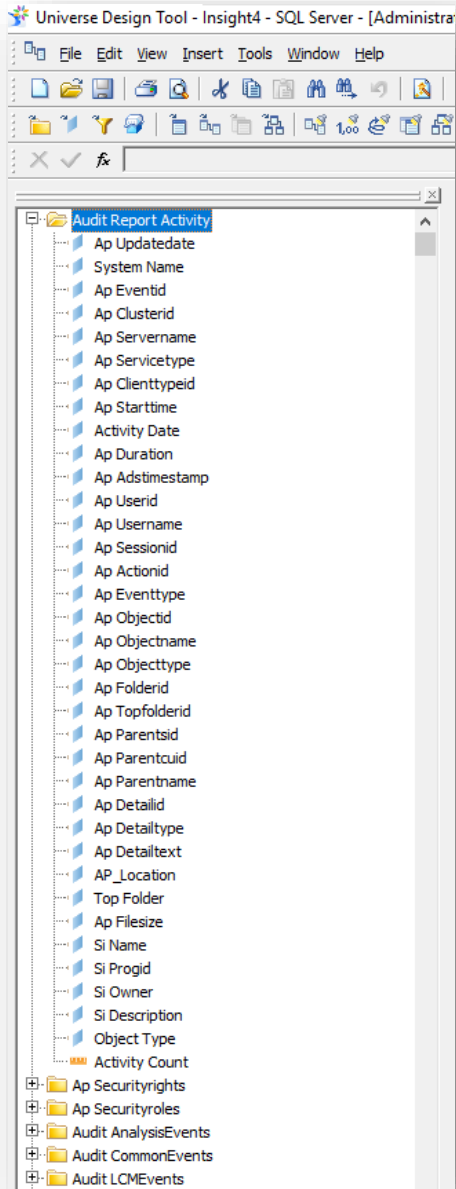
Creating fresh new UNX Universes

Objects/Classes differ from UNV to UNX

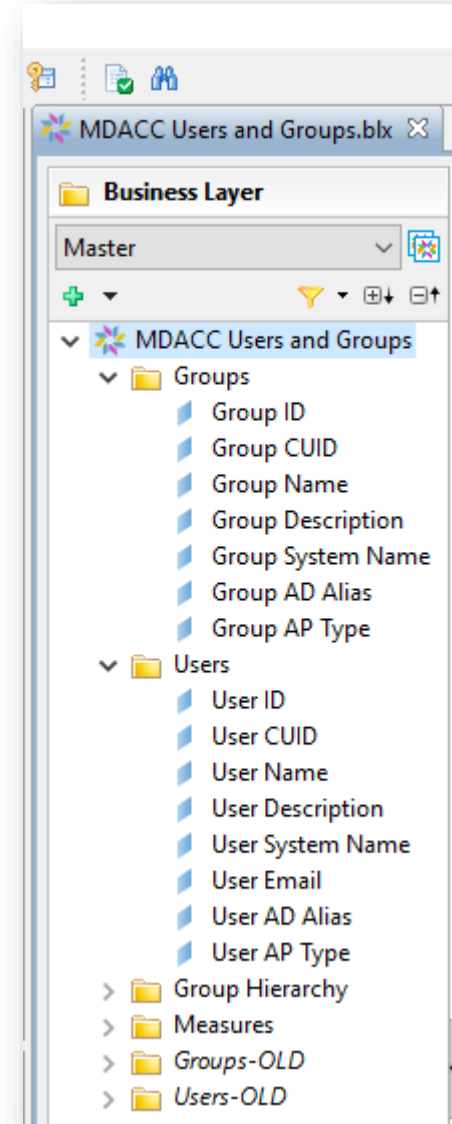
Need way to automate mapping

Need way to apply mapping strategy

# UNV Universe



# UNV Universe



# Mapping Strategy applied during migration process



Universe Mapping Configuration

Source Universe (Insight4 - SQL Server - Universes/APOS Insight)

Name	Type	Path
Ap Securityrights	Folder	\Ap Securityrights
Ap Applytoobjects	Dimension	\Ap Securityrights\A...
Ap Applytosubobjects	Dimension	\Ap Securityrights\A...
Ap Object Location	Dimension	\Ap Securityrights\A...
✓ Ap Object Name	Dimension	\Ap Securityrights\A...
Ap Objectcuid	Dimension	\Ap Securityrights\A...
Ap Objectguid	Dimension	\Ap Securityrights\A...
Ap Objectid	Dimension	\Ap Securityrights\A...
Ap Objectruid	Dimension	\Ap Securityrights\A...
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Ap Principalruid	Dimension	\Ap Securityrights\A...
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Target Universe (Insight4 - SQL Server.unx - Universes/Insight\_UNX)

Name	Type	Path
Ap Securityrights	Folder	\Ap Securityrights
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Universe Links

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# APOS Web Intelligence Migrator



**A migration solution focused on automating time and labor-intensive activities of upgrading to the UNX Universe within SAP BusinessObjects.**

- Time Savings
- Timely Project Execution
- Accurate Project Execution
- Project Controls

## **Size of Challenge = Volume of Content**

Small size deployments – address manually?

Medium size deployments – automation brings big efficiencies

Large and Extra-large deployments – automation is a must

# 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

### Web Intelligence Migration

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

## 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 Solutions for SAP Analytics Cloud



## APOS Live Data Gateway

- High-performance live data connectivity
- Virtualized, governed, self-service connectivity
- Connect to Relational databases
- Connect to OLAP data sources
- Connect to Cloud data environments
- Connect to SAP Application data

## APOS Publisher for Cloud

- Automate secure information delivery
- Deliver timely information
- Create a flexible messaging environment
- Simplify administration
- Use multiple formats & destinations
- Burst stories with multiple filters
- Burst conditionally
- Collate stories
- Personalize PowerPoint bursting



## APOS Insight for Cloud

Monitor – tracking & alerting for:

- SAC story performance
- System response measures

Validation automated comparisons across SAC versions of:

- SAC story data
- SAC story performance
- SAC story structure

Impact analysis – granular auditing of SAC story structure metadata

## APOS Semantic Layer Migration

- Capture SAP BI Universe data connection and data modelling logic
- Project-based, wizard-driven interface
- Scan your SAP BI content for relevant data connections
- Harmonize SAP BI and HANA data modelling throughout Hybrid BI
- Translate SAP BusinessObjects modelling to SAP HANA Calculation Views
- Translate SAP BusinessObjects modelling to a unified semantic layer



# Upcoming Events



## Automated Report Testing for SAP BusinessObjects - Flashes of Insight *Webinar*

December 2, 2021 – 11 am EST

- Content validation is a necessary step in the implementation of new versions and SPs of **SAP BusinessObjects**. Automated report testing ensures your reports stay the same through environmental changes (database, universe, operating system/software upgrades), compliance, upgrade testing, and day to day testing, while eliminating much of the drudgery of this part of the process.
- Topics
  - We will discuss:
  - Regression Testing
  - Upgrade/Migration Testing
  - Report Modification Governance
  - ... and more



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

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# QUESTIONS?

Please enter your questions in the Q&A panel.



# Thank You!

## Get in Touch

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