



PGHBOUG

Boost Business Objects

Life Cycle Management

& Backup Disaster Recovery Best Practices

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GB&SMITH

Edge – 92K user deployments
1,000,000 administrated users

> 30 countries
> 98% renewal rate
> 500 clients
50 people

Boston – London – Lille

2015 Technology Fast 500 EMEA
and 3 times in a row

Deloitte.

Technology Fast 500™

2014 startup North of France



SAP BUSINESSOBJECTS PORTFOLIO



Secure your SAP BO
deployment



Backup, promote & version
BO content



Schedule and burst your BO
reports



Explore and analyze BO
metadata



Ensure BO license
compliance

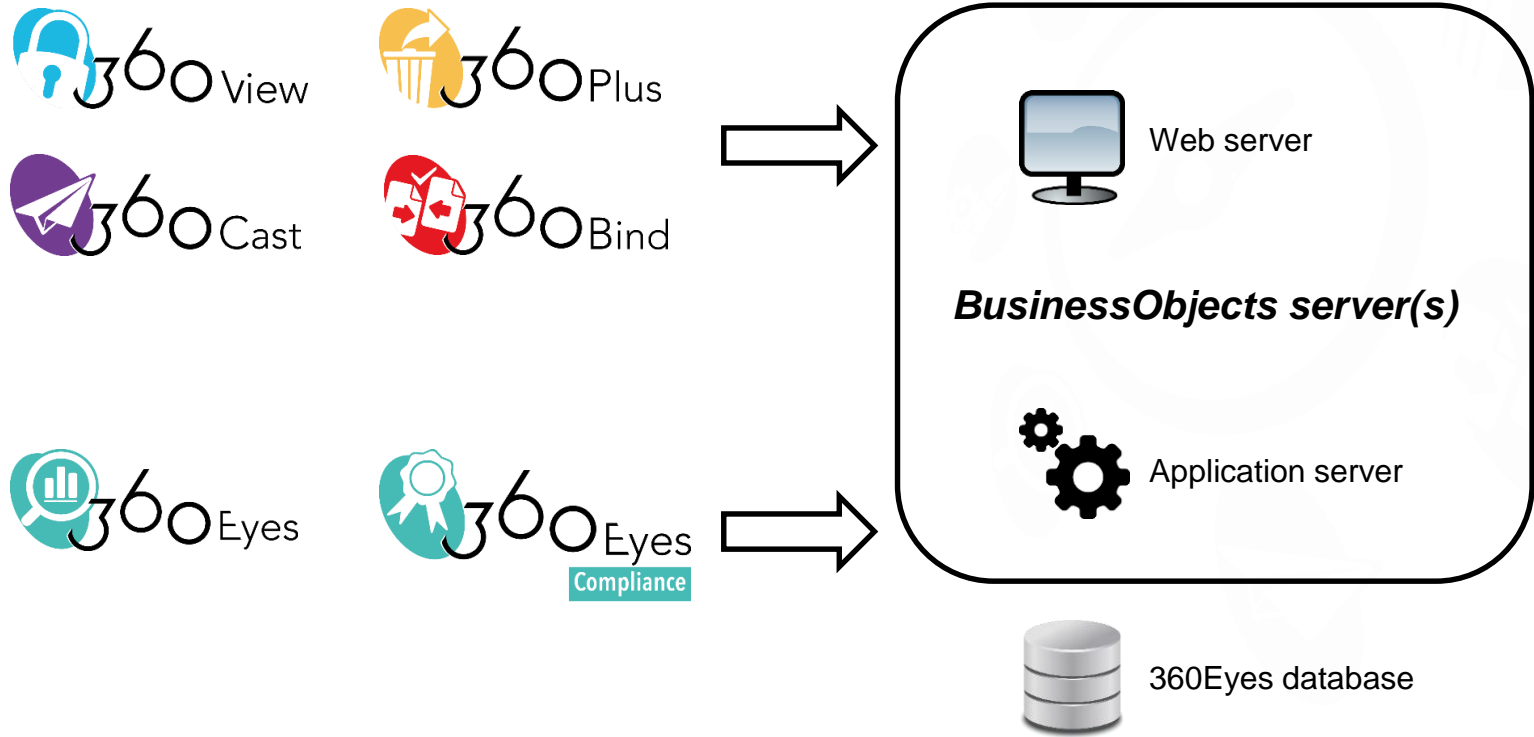


Automate report qualification
Non regression tests



SAP BusinessObjects











XIR2 / XI3 / BI4



STEP 1: SETUP THE BUSINESS OBJECTS BACKUP

- Specify storage (SAN, share drive ...)
- Create backup job
 - 1st run full
 - Any other run delta / incremental
 - Backup root for dynamism
 - Run the job every night
 - First run from hours to days
 - Daily run secs or minutes

STEP 1: JOB

Administrator@BOR4:6400	
 Versioning Task	
CMS:	<input type="text" value="BOR4:6400"/>
User Name:	<input type="text" value="Administrator"/>
Password:	<input type="password" value="••••••••"/>
Authentication:	<input type="text" value="Enterprise"/>
Task Title:	<input type="text" value="Full Backup"/>
Versioned Objects :	<ul style="list-style-type: none"> Users (0) User Groups (1) Documents (0) Folders (1) Universes (0) Universe Folders (1) Connections (0) Connection Folders (1) Custom Access Levels (1)
<input type="text" value="External"/>	<input type="text" value="http://localhost:8080/360R4/external/launchTask.js"/>
Events:	<input type="checkbox"/>
Max of versions:	<input type="text" value="5"/>
Include subfolders:	<input checked="" type="checkbox"/>
Instances:	<input checked="" type="checkbox"/> Number of Instances: <input type="text" value="20"/>
Favorites:	<input checked="" type="checkbox"/>

Dynamic backup (any root like root folder, root group...)

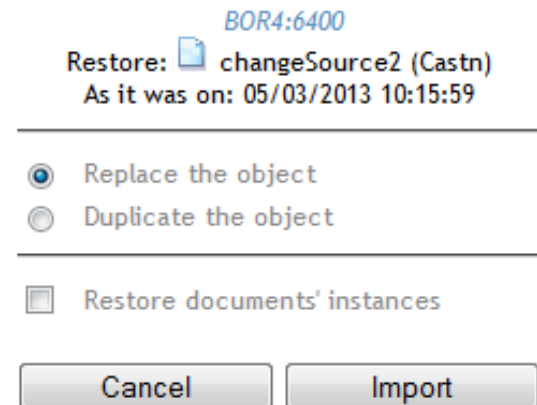
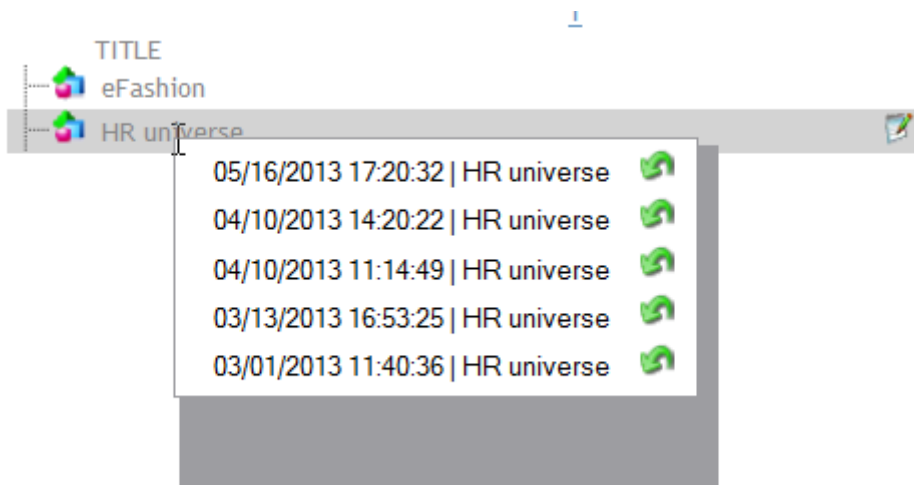
First run full backup, then delta / incremental nightly backups

You can keep 5 versions, backup or not instances

ROLLBACK

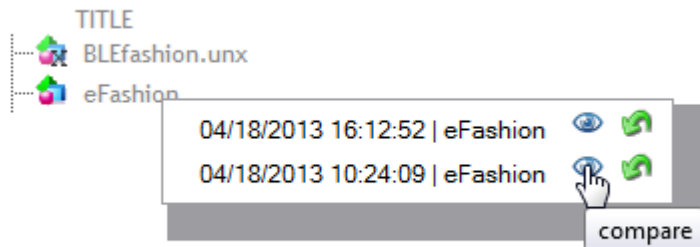
Restore any object one by one (universe, personal & corporate documents, users, CAL, instances, publications...).

Rollback/undo any action/object. 5 versions are available. Automatic cleaning.



COMPARE OBJECT VERSIONS

Prior restore, highlight differences or export them to Excel:



BOR4:6400

Current version	Versionned on : 04/08/2013 12:10:07
< Root	< Root
> CitySS	> CitySS
> Country	> Country
> Customer	> Customer
> Invoice Line	> Invoice Line
> Region	> Region
> Region Sline	> Region Sline
> Reservation Line	> Reservation Line
> Reservations	> Reservations
> Resort	> Resort
> Sales	> Sales
> Age Group	> Age Group
> Sales Person	
> Service	
> Service Line	
< Copie de CitySS	
City Id	
City	
Region Id	
Sales Person	
Indicateur	

Name : Sales Person
Description :
State : Active
Access : Confidential
Data type : date
Select Exp : C:\club.Sales_Person.sales_person
Where Exp :
Tables : Sales_Person

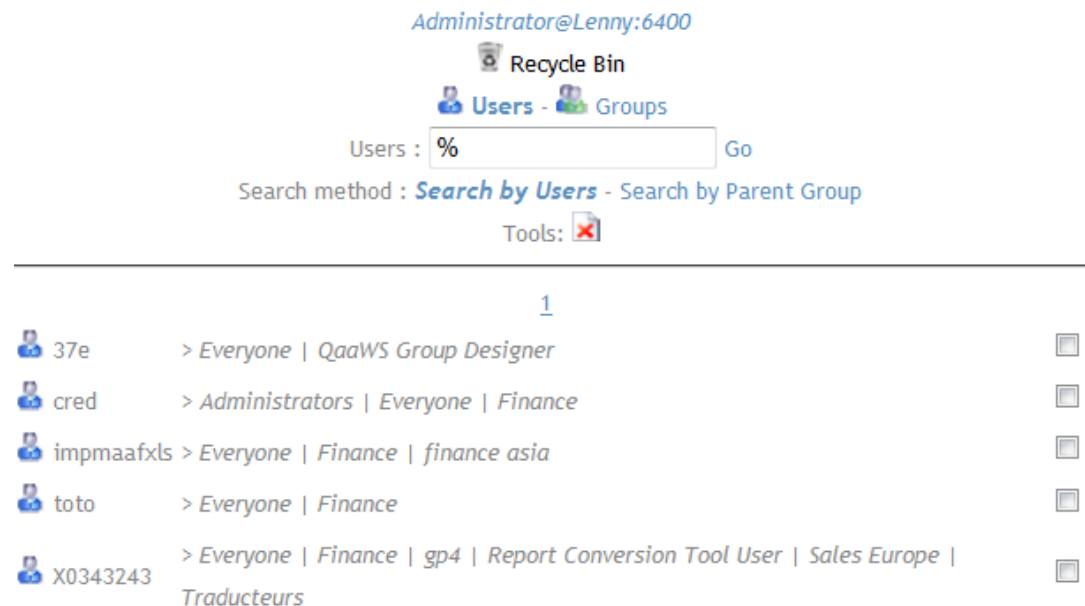
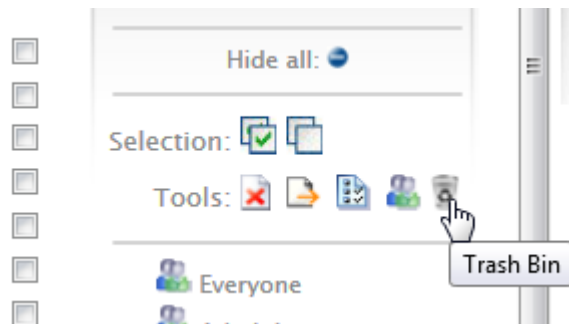
Legend

- The object exists in both versions but it has some different attributes.
- The object has been added in the current version.
- The object has been removed from the current version.

RESTORE LOST CONTENT (CORPORATE & PERSONAL)

Have you lost or accidentally removed objects/personal or corporate reports, universes or instances? Restore them using the Recycle Bin feature.


360Plus is a '**oops**' strategy software. Restore any lost object (same CUID, same security, personal document, instances...)



BUSINESS OBJECTS DISASTER RECOVERY

Full server backup schedule every Friday night (FRS+CMS)

To recover from a disaster, first restore the last full backup and then restore all the incremental backup between last Friday and today using 360Plus delta restore job:

Authentication:	Enterprise ▾
Task Title:	recovery after a disaster
Job type:	Restore Backup ▾
	<i>To restore the latest backup between the date bounds of your saved objects.</i>
Restore objects saved between :	00 ▾ 00 ▾ 2016/02/01
and:	00 ▾ 00 ▾ 2016/02/25
Restore Instances:	<input checked="" type="checkbox"/>
	
Frequency ▾	Now ▾

MANAGE & COMPARE MULTIPLE CMS

Log on and manage dev and prod CMS, then compare them

CMS	USER	CLUSTER
Lenny:6400	Administrator	@Lenny:6400
BOR3:6400	Administrator	@BOR3:6400



Universe Folders and Universes Management

Manage All Universes

Universe (4) 12 items - Search 1

- 360eyes universes (5)
- bcge (0)
- dev (1)
- HR (2)
- level1 (1)
- LNA Customer Profitability (1)



Administrator
Lenny:6400

QUICK ACCESS

SHORTCUTS

Hide all:

Selection:

Compare your environments

Compare CMS: Administrator@Lenny:6400

Compare with: Administrator@BOR3:6400

Compare: Universes

Different: ☐ ID, ☒ CUID, ☐ NAME

Do

Universe Folders and Universes Management

Manage All Universes

Universe (7) 8 items - Search 1

- 360eyes universes (5)
- dev (5)
- Migration (0)
- migRepo (1)



Administrator
BOR3:6400

QUICK ACCESS

SHORTCUTS

Hide all:

Only in Administrator@Lenny:6400	Only in Administrator@BOR3:6400
9 items - Search <u>1</u>	14 items - Search <u>1</u>
TITLE	TITLE
Activity	> AG2R
Activity	> eFashion (2)

PROMOTE USING DRAG & DROP

Promote content across environments

CMS Log on User Name CLUSTER
sapbi4.demo.gbs:6400 Administrator@sapbi4:6400
customer.internal:6400Administrator@customer:6400

Folders and Objects Management

Manage all Objects

- Root Folder
30 items - 100 items per page - Search
- 360bind (0)
 - 360cast (2)
 - 360eyes jobs (7)
 - 360eyes reports (1)
 - 360eyes reports (specifics) (7)
 - 365eyes_DS (0)
 - Administration Tools (3)
 - Auditing (1)

Administrator
sapbi4.demo.gbs:6400

QUICK ACCESS

SHORTCUTS

Show all: +

Hide all: -

Selection: [Icons]

Tools: [Icons]

Folders and Objects Management

Manage all Objects

- Root Folder
47 items - 100 items per page - Search
- 360bind (0)
 - 360eyes jobs (7)
 - 360eyes reports (1)

Administrator
customer.internal:6400

QUICK ACCESS

SHORTCUTS

Show all: +

Promote: 360cast @ sapbi4.demo.gbs:6400
To: Root Folder @ customer.internal:6400
Delta Mode - Object Selection

New Object Newer Object Older Object Same Object

Objects

- 360cast
- eFashion global sells
- eFashion global sells burst

Cancel Import

SCHEDULE PROMOTION, REPLACE LCM

Schedule content promotion across environments:

Promote flagged content only (specified in the object description)

Schedule promotion using an Enterprise Job Scheduler (\$U, ControlM, UC4, Vtom etc)

The screenshot shows two configuration panels side-by-side. The left panel is for 'Source' and the right is for 'Destination'. Both panels have a 'Source type' or 'Destination type' dropdown set to 'CMS'. Below this, there are input fields for 'CMS Source' (BOR4:6400) and 'CMS Destination' (BOVT), followed by 'User Name' (Administrator) and 'Password' (masked with dots). An 'Authentication' dropdown is set to 'Enterprise'. Below these are lists of 'Source elements' and 'Destination elements' with icons and counts: Users (0), User Groups (0), Documents (0), Folders (0), Universes (0), Universe Folders (0), Connections (0), Connection Folders (0), QaaWS (0), QaaWS Folders (0), and Custom Access Levels (0).

Source type: CMS
CMS Source: BOR4:6400
User Name: Administrator
Password:
Authentication: Enterprise
Source elements:
Users (0)
User Groups (0)
Documents (0)
Folders (0)
Universes (0)
Universe Folders (0)
Connections (0)
Connection Folders (0)
QaaWS (0)
QaaWS Folders (0)
Custom Access Levels (0)

Destination type: CMS
CMS Destination: BOVT
User Name: Administrator
Password:
Authentication: Enterprise
Destination elements:
User Groups (0)
Folders (0)
Universe Folders (0)

This section contains three items: 'Migrate with Flag:' with a checked checkbox, 'Migration Flag:' with a text input field containing '#PromoteFromDevToUat', and 'Keep destination connection link in case of universe overwrite:' with an unchecked checkbox.

Migrate with Flag: ☒
Migration Flag: #PromoteFromDevToUat
Keep destination connection link in case of universe overwrite: ☐

A dropdown menu is open, showing three options: 'Frequency' (selected), 'Frequency Calendar', and 'External'. To the right of the menu is a text input field containing 'Now'.

Frequency
Frequency Calendar
External
Now


VERSIONING: CHECK IN/CHECK OUT OBJECTS

Lock reports/universes/connections

Create versions with automatic incremented numbers. Link them to projects


Compare and rollback previous version to manage all updates

Promote specific versions and follow lifecycle over time and environments

Lock the object :
 Expense per Year


☐ Open the Document after the lock process

Yes No

Unlock the object :
 Expense per Quarter

Project Finance

Change version ☒

Current Version Number: 1. 

Preview: 1.3

Current comment: Test work

New comment




















Added variable "Month"

Save instances: ☒

Only recurring: ☐

Number of instances to save:

Submit Cancel

Versions		
12/23/2015 14:36:28	Expense per Quarter 1.3	 Administrator   
11/12/2015 18:45:04	Expense per Quarter 1.2	 Administrator    
10/28/2015 14:52:45	Expense per Quarter 1.1	 Administrator    
09/22/2015 09:45:29	Expense per Quarter 1.1	 florent    

sapbi4:6400	 Expense per Quarter	1.1	09:44:31			Version Comment: First version of my object.
			2015/09/22 09:45:29	Create Version	florent	The Version 1.1 was created by florent.
sapbi4:6400	 Expense per Quarter	1.0	2015/09/22 09:46:46	Restore Version	Administrator	The object was restored to the Version 1.0 made by florent.
sapbi4:6400	 Expense per Quarter	1.0	2015/09/22 09:53:03	Export Version	Administrator	The Version 1.0 made by florent was exported to the CMS bor41:6400.
bor41:6400	 Expense per Quarter	1.0	2015/09/22 09:53:03	Import Version	Administrator	The Version 1.0 made by florent was imported from the CMS sapbi4:6400.
sapbi4:6400	 Expense per Quarter	1.1	2015/10/28 14:52:45	Create Version	Administrator	The Version 1.1 was created by Administrator.
sapbi4:6400	 Expense per Quarter	1.2	2015/11/12 18:45:04	Create Version	Administrator	The Version 1.2 was created by Administrator.
sapbi4:6400	 Expense per Quarter	1.3	2015/12/23 14:36:28	Create Version	Administrator	The Version 1.3 was created by Administrator.

Version Comment: Added variable Month.

MANAGE VERSIONS BY PROJECTS

Identify currently locked object across all environments

Analyze all versions for one project

Promote all reports/universes/connections in a specific version for a project

Rollback all of them to a previous version with single task

NAME	CUID	Parent Folder	Project	Lock Date	Locked by	Days Since Lock	Security Integrity	Promote Versions:
Expense per Quarter	ATMIXwCjdN5Er8fqhYUIP0w	Finance	Finance	2015/12/23	Administrator	0	✓	<input type="radio"/> None <input type="radio"/> Current Version <input checked="" type="radio"/> Specific Version : 1.3 Finance Filter by project
eFashion global sells	AbpiuRCF2rZBsL184kGIHTs	Development folder	Finance	2015/12/23	Administrator	0	✓	

NAME	CUID	Parent Folder	Project	Version Date	Version Number	Version Owner	Version Comment
Expense per City	AXYENdU3nTNBu47SK8hPhLg	Finance	Finance	2015/10/27 17:05:32	1.4	Administrator	
Expense per Quarter	ATMIXwCjdN5Er8fqhYUIP0w	Finance	Finance	2015/12/23 14:36:28	1.3	Administrator	Added variable Month
Expense per Day	AVK5MtN4.IVBvgOmF9P9gUM	Finance	Finance	2015/12/02 07:32:57	1.0	Administrator	
eFashion global sells	AbpiuRCF2rZBsL184kGIHTs	Development folder	Finance	2015/12/08 09:39:18	1.3	Administrator	
Expense per Month	AUwJFCMAXJ1Ju.WK4mIWGYA	Finance	Finance	2015/10/29 14:52:01	1.0	Administrator	

To rollback a Versioning Project to a specific version.

Current Version Number: 1.3

Target Version Number: 1.2

Projects: HR, Finance, Bind Process

Object Types to Restore: ☒ Documents, ☒ Universes, ☒ Connections

- Restore any lost content in a matter of minutes as oppose to hours/days
- Real time view to compare any incremental backup instance vs. current instance.
- Mitigate risks linked to businessobjects disaster recovery
- Real time view to compare Prod vs. Dev environment.
- Better quality of services

Replace the CMC by a user-friendly web application giving you a 360° view of your access rights



Secure your SAP BO deployment

- User-friendly security management web interface replacing the CMC
- Document your deployed security
- Audit and clean your CMS
- Repoint UNV to UNX
- GRC: Find who has access to what on a click and export security in xls
- Bulk Update content
- Find and Remove unbounded documents

Security Management on: Folders - (Administrator@Lenny:6400)

- admin local ☐
- Administrators ☐
- delegate admin ☐
- Everyone ☐
- Finance ☐
- gp1 ☐
- local admin ☐
- Marketing group ☒
 - Marketing EUR group ☒
 - marketing US group ☒
 - marketing NYC group ☒
- QaaWS Group Designer ☐
- Report Conversion Tool Users ☐
- Traducteurs ☐
- Universe Designer Users ☐

- Root Folder ☒
 - 360eyes (...) ☐
 - 360eyes jobs (...) ☐
 - 360eyes reports (...) ☐
 - 360eyes reports (specifics) (...) ☐
 - Administration Tools (...) ☐
 - Auditor (...) ☐
 - Feature Samples (...) ☐
 - FINANCES (...) ☐
 - HR (...) ☐
 - Marketing (...) ☒
 - EUR (...) ☒
 - US (...) ☒
 - Recycle bin (...) ☐
 - Report Conversion Tool (...) ☐

Activate multiple select: ☐

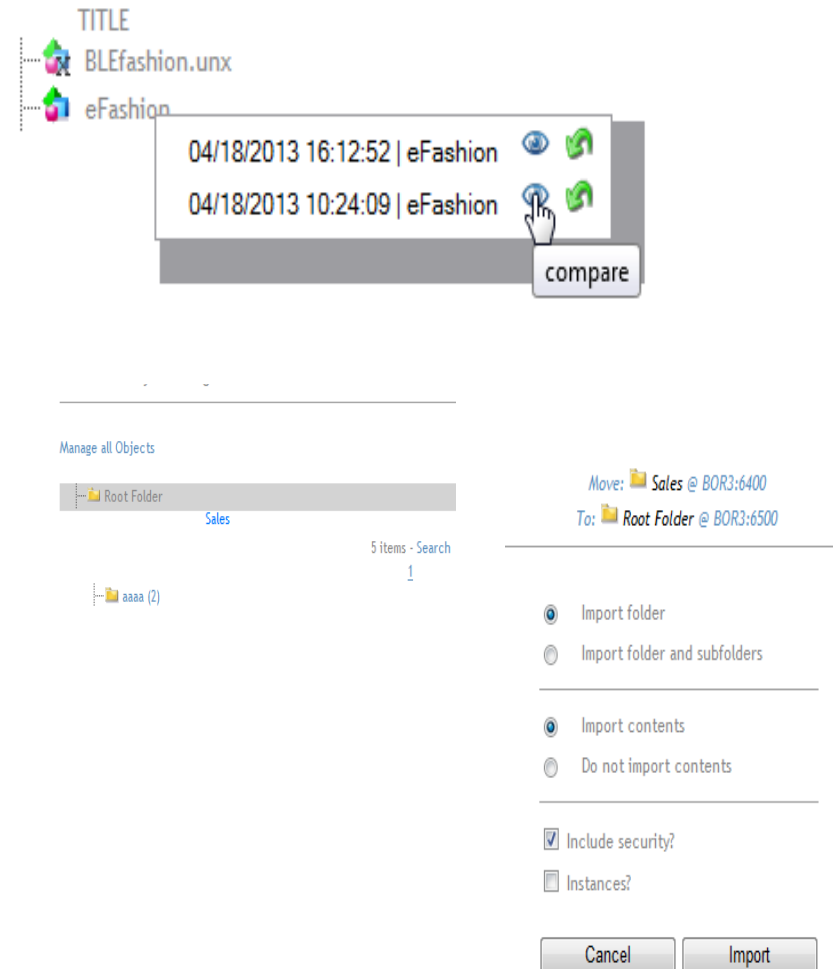
	Marketing group				
		Marketing EUR group	marketing US group		
				marketing NYC group	
	Root Folder				
	Marketing	View_D	View_D	View_D	View_D
	EUR	View_D	View_D		
	US	View_D		View_D	View_D

Backup, Incremental promote Restore & manage versions



More than a simple
Back up

- Set up a powerful backup strategy allowing restoring any object selectively (similar to rolling back or undoing changes on objects)
- Visual comparison of different versions of a given object
- 1 Bar per Object!
- Restore deleted content using our unique recycle bin, including personal files
- Manage versions
- For large deployments replace import wizard or LCM
- Drag and drop objects accross CMS or Schedule promotions
- Schedule promotion of flagged content across platforms.
- Log on to multiple environments and compare them



Compare different versions

Highlight differences or export them to Excel:



BOR4:6400

Current version	Versionned on : 04/08/2013 12:10:07
< Root	< Root
> CitySS	> CitySS
> Country	> Country
> Customer	> Customer
> Invoice Line	> Invoice Line
> Region	> Region
> Region Sline	> Region Sline
> Reservation Line	> Reservation Line
> Reservations	> Reservations
> Resort	> Resort
> Sales	> Sales
> Age Group	> Age Group
> Sales Person	Name : Sales Person
> Service	Description :
> Service Line	State : Active
< Copie de CitySS	Access : Confidential
City Id	Data type : date
City	Select Exp : C:\club.Sales_Person.sales_person
Region Id	Where Exp :
Sales Person	Tables : Sales_Person
Indicateur	

Legend

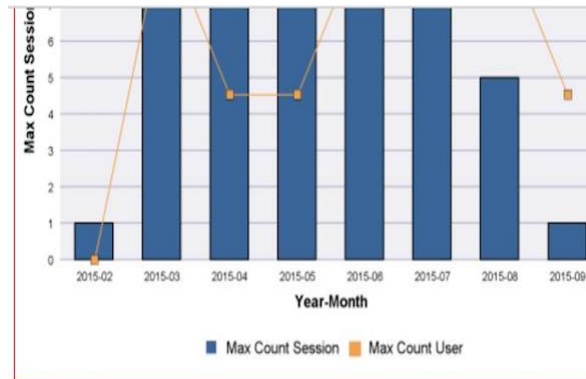
- The object exists in both versions but it has some different attributes.
- The object has been added in the current version.
- The object has been removed from the current version.

Compare Webi, Crystal and Deski report outputs over time and across versions

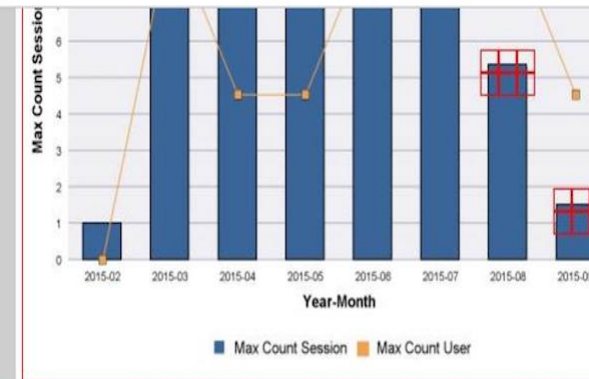


Automate report qualification
Non-regression testing

- Schedule report exports
- Compare report data in just a few clicks and highlight differences for fast potential regression discovery
- Optimize your non-regression tests and BO migration projects
- Maintain accuracy and consistency of BusinessObjects reports to mitigate risks



Max Count Session per Month		
Year-Month	Max Session Count	Max User Count
2015-02	1	
2015-03	7	
2015-04	9	
2015-05	9	
2015-06	8	
2015-07	7	
2015-08	5	
2015-09	1	



Max Count Session per Month		
Year-Month	Max Session Count	Max User Count
2015-02	1	
2015-03	7	
2015-04	9	
2015-05	9	
2015-06	8	
2015-07	7	
2015-08	5.4	
2015-09	1.6	

Audit and control your metadata over time and across versions with Impact analysis



Explore & analyze BO metadata

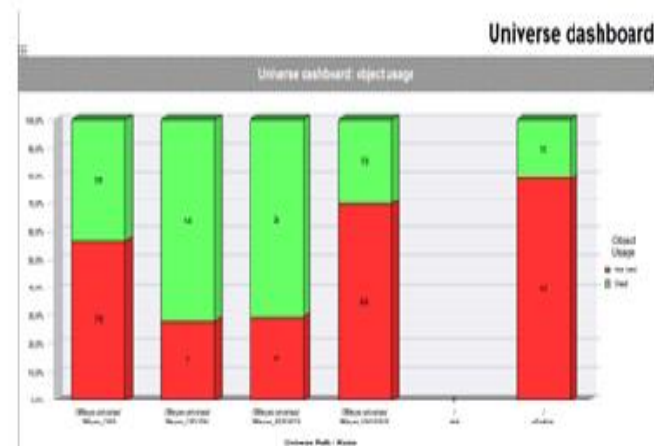
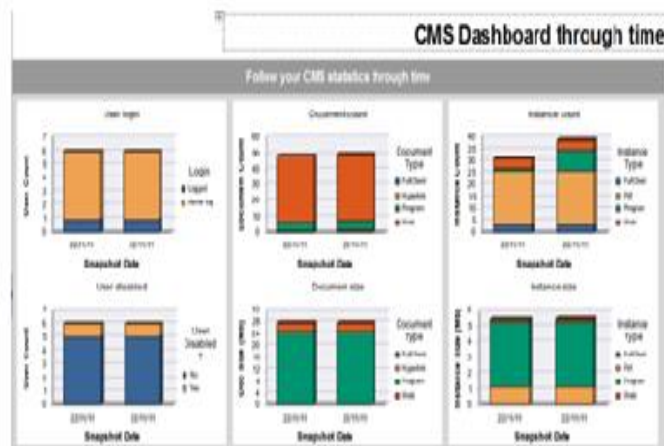
- Load your SAP BusinessObjects data (CMS, universes, documents and audit data) from a datawarehouse
- Query and analyze this data using pre-built BO universes and Webi reports
- Perform impact analysis

- Document your deployment
- Detect unused documents and universes, dormant users
- Follow the evolution of your metadata over time
- Compare environments or BO versions during migrations

Audit and control your metadata over time and across versions



Explore & analyze BO metadata



Unused universe objects

Show the unused objects in universes (only for Desk/Webi docs)

Universe	Class Full Name	Object Name	Used in universe	Used in report	Ratio
360eyes universes/360eyes_CMS	Eye Connection	Connection Array Bind Size	Yes	Yes	100
	Eye Connection	Connection Array Fetch Size	Yes	Yes	100
	Eye Connection	Connection Authentication Mode	Yes	Yes	100
	Eye Connection	Connection Connect Init	Yes	Yes	100
	Eye Connection	Connection Connectivity Type	Yes	Yes	100
	Eye Connection	Connection Cycle	Yes	Yes	100
	Eye Connection	Connection Database	Yes	Yes	100

Desk/Webi Impact Analysis

Impact Analysis on Universe Object for Desk/Webi documents

Database	Object Class	Object Name	Document Path	Document Name	Document Type	DataProvider Name
efashion	Store	Store name	/Root/Folder/Finance	Sales per store	Webi	Query 1 of efashion
efashion	Store	Store name	/Root/Folder/Finance	Sales per store (Backup ID: 2192)	Webi	Query 1 of efashion
efashion	Store	Store name	/Root/Folder/Finance/Finance Anal	Product lines	Webi	Query 1 of efashion
efashion	Store	Store name	/Root/Folder/Finance/Marketing	Product lines	Webi	Query 1 of efashion
efashion	Store	Store name	/Root/Folder/Finance	Sales per store	Webi	Query 1 of efashion
efashion	Time period	Year	/Root/Folder/Finance	Sales per store	Webi	Query 1 of efashion
efashion	Time period	Year	/Root/Folder/Finance	Sales per store	Webi	Query 2 of efashion
efashion	Time period	Year	/Root/Folder/Finance	Sales per store (Backup ID: 2192)	Webi	Query 1 of efashion
efashion	Time period	Year	/Root/Folder/Finance	Sales per store (Backup ID: 2192)	Webi	Query 2 of efashion
efashion	Time period	Year	/Root/Folder/Finance	Sales per store	Webi	Query 1 of efashion
efashion	Time period	Year	/Root/Folder/Finance	Sales per store	Webi	Query 2 of efashion

How good is your current licence coverage? Run 360Eyes compliance prior to LMBl. Unique BO license compliance expertise for >8years



Ensure BO license compliance

Users Deployed Licenses

Deployed Licenses Detail

Snapshot Id	Snapshot Cms	Snapshot Date	Snapshot Name
32 @Bordeaux:6400		Feb 9, 2012 6:56:56 PM	COMPLIANCE

Web Intelligence

	Web Intelligence			
	Web Intelligence	Web Intelligence Explorer	Web Intelligence Interactive	Web Intelligence Reporter
admin17	1	1	1	1
Administrator	1	1	1	1
cred	1	1	1	1
konrad	1	1	1	1
user bdx	1	1	1	1
user bdx 2	1	1	1	1
Sum:	6	6	6	6

Desktop Intelligence

	Desktop Intelligence	
	Desktop Intelligence	Desktop Intelligence Explorer
314076	1	
admin1	1	1

- Compare your SAP BO license pool with currently deployed licenses

- Make an accurate count of deployed licenses

- License compliance is just a mouse click away

- Unique and reliable solution and expertise

Users Deployed Licenses

Deployed Licenses

Snapshot Id	Snapshot Cms	Snapshot Date	Snapshot Name	Scheduling in Use
29 @Bordeaux:6400		Jan 25, 2012 2:33:27 PM	COMPLIANCE	Yes
30 @Nancy:6400		Jan 25, 2012 2:56:10 PM	COMPLIANCE	Yes

	Total Users
BOE Professional / BOE Premium / BI Package	26
DesktopIntelligence	6
WebIntelligence	5
WebIntelligence Interactive Viewing	4
Performance Management	

Dynamic and automatic report bursting management



Schedule & burst your BO reports

- Schedule and burst your BO reports using dynamic data
- Create your recipient lists using XLS files, SQL queries or BO reports
- For each recipient, specify different values to dynamically fill prompts or filters
- Customize values, format (PDF, XLS), destination (e.g. E-mail, SharePoint, Inbox)
- Schedule distribution jobs, then manage everything from the recipients list

- Any change to Excel / CSV Automate your report publications
- Easy to Install. Just a webapp.
- Schedule and burst BO reports using your Enterprise Job Scheduler (Dollar Universe, Control-M, UC4...)
- BO scheduling and report bursting is integrated along with other scheduling jobs, such as ETL jobs
- Link data warehouse loading and BO scheduling very easily

XLS Destination Lists



CSV Destination Lists



SQL Destination Lists



Succeeded tasks (5)

Task Title	Processing Start Date	Duration
sales revenue weekly	02/18/2013 15:24	2m 22s
sales revenue per city	02/18/2013 08:39	1m 17s
test nov	02/14/2013 16:13	2m 16s
monthly revenue	02/14/2013 15:26	2m 22s

BUSINESS OBJECTS BI4.2 MIGRATION

SAVE 80% TIME & MONEY

10 Steps How to Migrate toward SAP BusinessObjects BI4.2?

1 Prepare
Document your source environment

3 Clean Up
Reports, univers objects, instances, inboxes...

5 Impact Analysis
Track calculation engine changes, modified objects

7 Qualify
Automated regression testing

9 Secure
Define access rights using our unique matrix

2 Pinpoint
Duplicated or unused reports, unused universe objects...

4 Define the license pool
Analyze your session peaks

6 Compare
Highlight source and target differences. Follow evolution

8 Promote
Drag&drop and automatic bulk-promotion

10 Backup
Mitigate risks linked to backup, disaster recovery



Time savings



Cost efficiency



Optimized migration

1M Users

Since 2007



With **360 Suite**

GB&SMITH
Administration Intelligence

FUTURE PORTFOLIO: SELF-SERVICE SECURITY ADMINISTRATION

One single screen to manage & compare several applications simultaneously

Click to change
-View
-Write
-Etc..

ENTERPRISE APPLICATION		RESOURCES	ACTORS					
			FINANCE			HR		MKG
			FIN FR	FIN USA		HR FR	HR USA	
APPLICATION 1	FINANCE		WRITE	WRITE	WRITE			
		FIN FR	WRITE	WRITE	WRITE			
		FIN USA	WRITE	WRITE	WRITE			
	HR					WRITE		WRITE
		HR FR				WRITE	WRITE	WRITE
APPLICATION 2	FINANCE		WRITE	WRITE	WRITE			
		FIN FR	WRITE	WRITE	WRITE			
		FIN USA	WRITE	WRITE	WRITE			
	HR					WRITE		WRITE
		HR FR				WRITE	READ	WRITE
APPLICATION 3	FINANCE		WRITE	WRITE	WRITE			
		FIN FR	WRITE	WRITE	WRITE			
		FIN USA	WRITE	WRITE	WRITE			
	HR							
		HR FR						



Microsoft, IBM, Oracle
AD, Sharepoint, Cognos, OBI...

Control rights inheritance
-Explicit rights
-Inherited rights
-Double inheritance

Spot inconsistencies!

CONTACT

www.tinyurl.com/bobjbackup

[http://www.gbandsmith.com/mitigate backup risks disaster recovery in sap bo](http://www.gbandsmith.com/mitigate_backup_risks_disaster_recovery_in_sap_bo)

Take a look at our solutions on:

www.youtube.com/360suite

REQUEST A FREE TRIAL!

sebastien@gbandsmith.com

www.gbandsmith.com

617 319 3563