

SAP BusinessObjects Enterprise] Security Essentials]

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Session 409



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[Breakout Description

In this presentation, learn how the SAP BusinessObjects Enterprise security model works. Leverage features, such as inheritance, scope of rights, and custom access levels, to secure the business intelligence system, while reducing overall complexity and maintenance. Techniques will be demonstrated using SAP BusinessObjects Enterprise XI that are also applicable to SAP BusinessObjects Edge BI. Real-world scenarios drive home the concepts learned and give each attendee the confidence to implement the same techniques back home.

[About Dallas Marks

- Dallas is an SAP Certified Application Associate and authorized trainer for Web Intelligence, Information Design Tool, Universe Design Tool, Dashboards (formerly Xcelsius), and SAP BusinessObjects Business Intelligence administration. A seasoned consultant and speaker, Dallas has worked with SAP BusinessObjects tools since 2003 and presented at the North American conference each year since 2006.
- Dallas has implemented SAP BusinessObjects solutions for a number of industries, including retail, energy, health care, and manufacturing. He holds a master's degree in Computer Engineering from the University of Cincinnati.
- Dallas blogs about various business intelligence topics at <http://www.dallasmarks.org/>. You can follow him on Twitter at [@dallasmarks](https://twitter.com/dallasmarks).

[Poll

By a show of hands, are you:

- Not currently running SAP BusinessObjects Enterprise?
- Using “classic” version 6.x and earlier?
- Crystal Enterprise 10 and earlier?
- SAP BusinessObjects Enterprise XI R2?
- SAP BusinessObjects Enterprise XI 3.0?
- SAP BusinessObjects Enterprise XI 3.1 SP2 or higher?
- SAP BusinessObjects Enterprise XI 4.0 (beta)?

[Agenda

- Comparing XI R2 and XI 3.x Security
- Security Basics
 - Terminology
 - Folder and Group Inheritance
 - Breaking Inheritance
 - Custom Access Levels
 - Scope of Rights
- Demonstration
 - Custom Access Levels, Permissions Explorer and Security Query
- Best Practices
- Q&A



SAP BusinessObjects Enterprise Security Essentials

COMPARING XI R2 AND XI 3.X SECURITY

[Default Users and Groups

Users	XI R2	XI 3.x
Administrator	yes	yes
Guest	yes	yes
QaaWSServletPrincipal	no	yes
PMUser	yes	no
Set Administrator password during install?	no	yes
Guest user disabled by default?	no	yes
Groups	XI R2	XI 3.x
Administrators	yes	yes
Everyone	yes	yes
QaaWS Group Designer	no	yes
Report Conversion Tool Users	yes	yes
BusinessObjects NT Users	yes	no
Universe Designer users	yes	yes
Translators	no	yes

[Security Features

Feature	XI R2	XI 3.x
Folder Inheritance	yes	yes
Group Inheritance	yes	yes
Predefined Access Levels	yes	yes
No Access	yes	yes*
View	yes	yes
Schedule	yes	yes
View On Demand	yes	yes
Full Control	yes	yes
Advanced Rights	yes	yes
Custom Access Levels	no	yes
Break Inheritance	yes	yes
Scope of Rights	no	yes
Combined Access Levels	no	yes

[Security Applications

Application	XI R2	XI 3.x
Central Management Console	yes	yes!
Web Component Adapter (WCA)	yes	no
Administrative Launchpad	yes	no
Query Builder	yes	yes
Security Viewer Add-on	yes	no
Security Query	no	yes
Permissions Explorer	no	yes



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SECURITY BASICS

[Terminology

- Principal – a user or group
- Rights override - a rights behavior in which rights that are set on child objects override the rights set on parent objects
- General Global Rights – access rights enforced regardless of content type
- Content Specific Rights – access rights unique to content type (Crystal Report, Web Intelligence, etc)



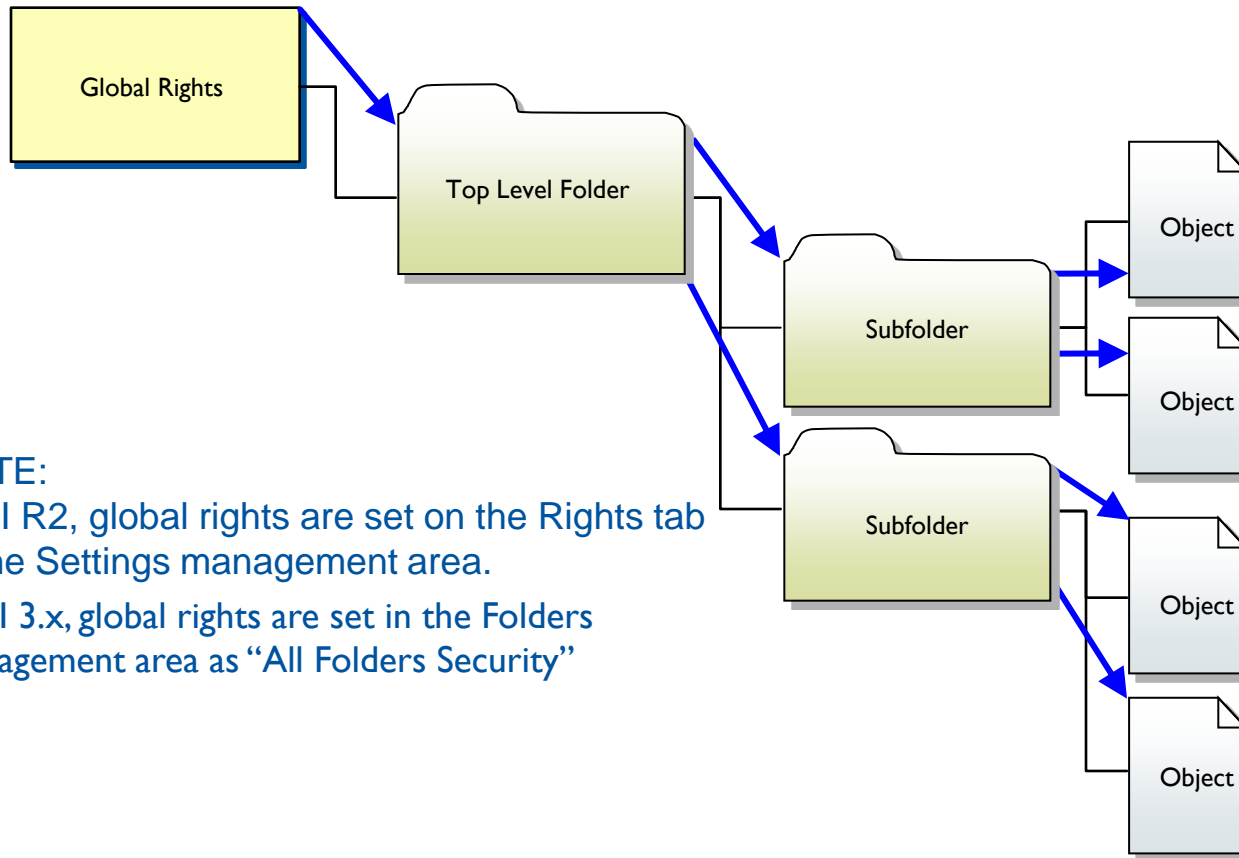
[Predefined Rights

Rights Option	Description	XI R2	XI 3.x
No Access	Unable to access an object	yes	slightly different
View	Able to view historical (scheduled) instances of an object	yes	yes
Schedule	Able to schedule instances of an object	yes	yes
View on Demand	Able to view live data on-demand	yes	yes
Full Control	Able to change or delete an object	yes	yes

[Advanced/Granular Rights

Rights Option	Description	XI R2	XI 3.x
Granted	The right is granted to a principal.	yes	yes
Denied	The right is denied to a principal.	yes	yes
Not Specified	The right is unspecified for a principal. By default, rights set to Not Specified are denied.	yes	yes
Apply to Object	The right applies to the object. This option becomes available when you click Granted or Denied.	no	yes
Apply to Sub-Objects	The right applies to sub-objects. This option becomes available when you click Granted or Denied.	no	yes

[Folder Inheritance

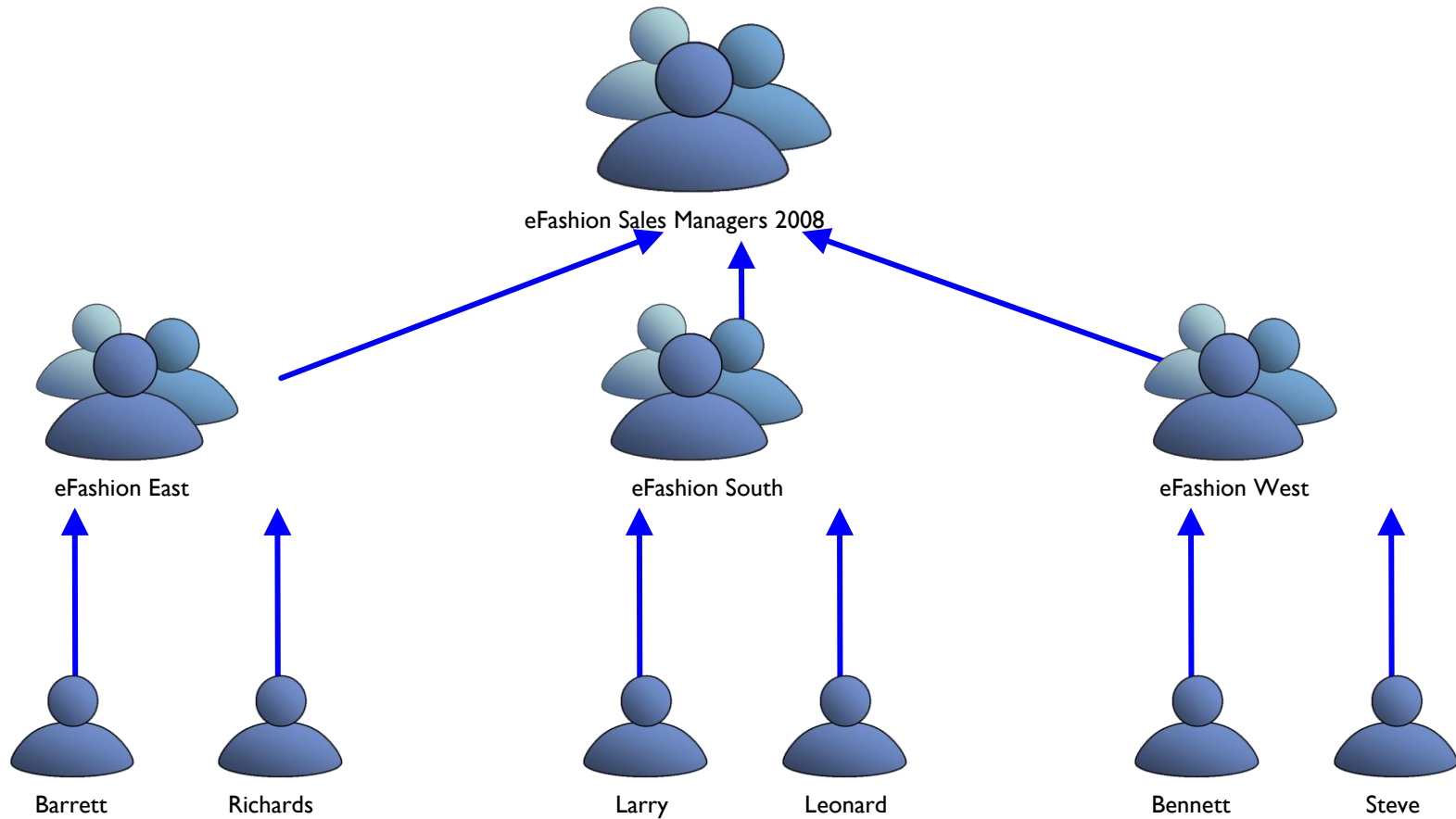


NOTE:

In XI R2, global rights are set on the Rights tab in the Settings management area.

In XI 3.x, global rights are set in the Folders management area as “All Folders Security”

[Group Inheritance Rules



[Breaking Inheritance

- Still possible in XI 3.x as it was in XI Release 2
- Can disable folder inheritance, group inheritance, or both
- May not be as necessary in XI 3.x because of new scope of rights features



[Custom Access Levels

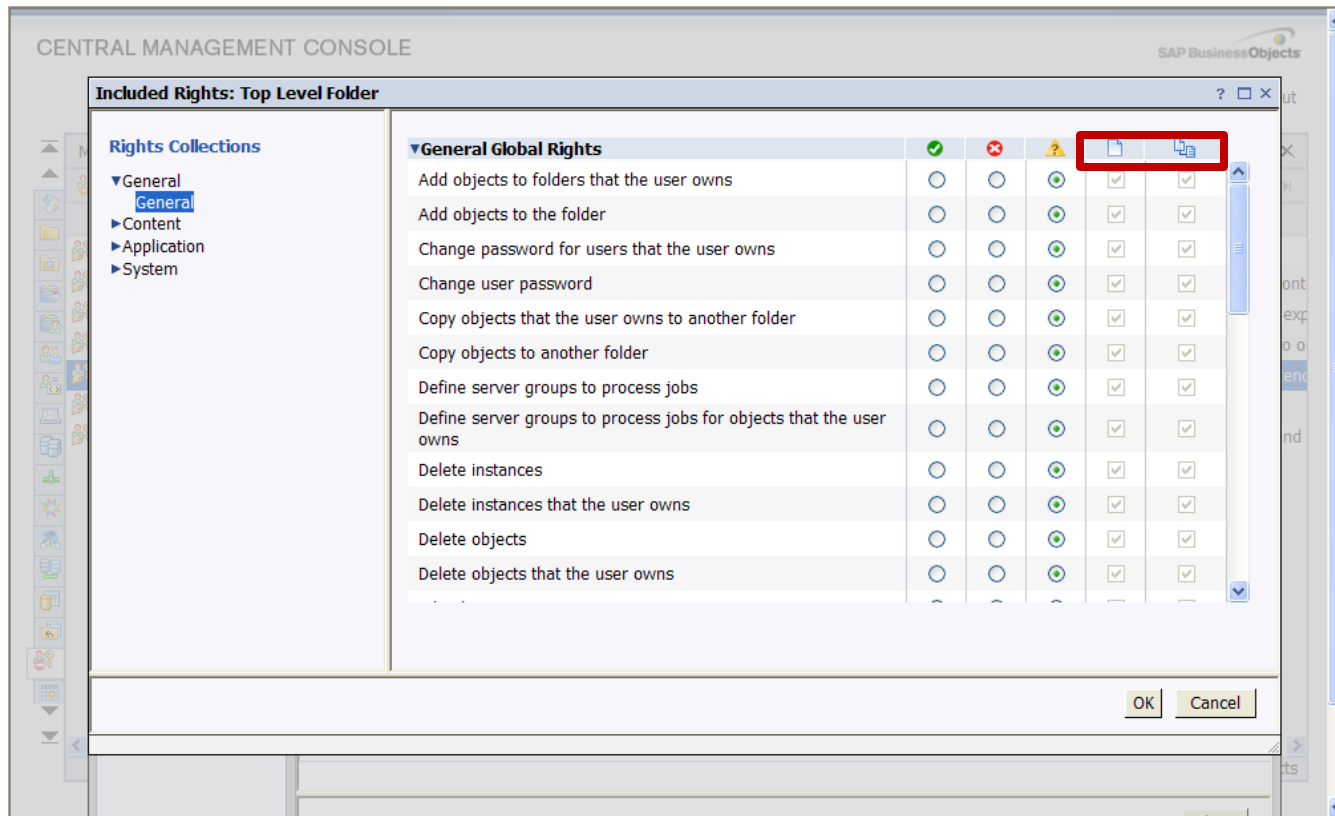
- New Management Area in CMC XI 3.x
- Can create new access levels or copy existing access levels
- Pre-defined rights (View, Schedule, View On Demand, Full Control) levels cannot be altered
- Easier to manage than setting Advanced rights

[Scope of Rights

- Scope of rights – new in XI 3.x, **the ability to limit the extent of rights inheritance** (Apply to Object, Apply to Sub-object)
- In BusinessObjects Enterprise XI R2, the administrator was forced to break inheritance when they wanted to give user rights to child folders that were different to those given to the parent folder
- In XI 3.x, rights are effective for both the parent object and the child objects by default (same as XI R2). However...

[Scope of Rights, cont.

- With BusinessObjects Enterprise XI 3.x, the administrator can now specify that a right set on a parent object should apply to that object only.





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DEMONSTRATION

[Demonstration

- Custom Access Levels
- Permissions Explorer
- Security Query

[Demonstration – Users & Groups

CENTRAL MANAGEMENT CONSOLE SAP BusinessObjects

Users and Groups Welcome: **Administrator** | Help | Preferences | About | Log Out

Manage ▾ Actions ▾ Search title ▾

1 of 1

Name	Full Name	Type	Description	Date Modified
Barbara	Barbara Boxer	User	Sample user for Auditor c	Aug 27, 2010 3:52 PM
Carly	Carly Fiorina	User	Sample user for Auditor c	Aug 27, 2010 4:09 PM
Jerry	Jerry Brown	User	Sample user for Auditor c	Aug 27, 2010 3:50 PM
Meg	Meg Whitman	User	Sample user for Auditor c	Aug 27, 2010 4:18 PM

Total: 4 objects

Demonstration – Folders and Content



CENTRAL MANAGEMENT CONSOLE

SAP BusinessObjects

Welcome: **Administrator** | [Help](#) | [Preferences](#) | [About](#) | [Log Out](#)

Folders

Manage ▾ Actions ▾ Organize ▾

Search title

1 of 2+

Title	Type	Description	Date Modified
Average Number of Users Logged On	Object Package	How many users are on my system?	Jun 5, 2010 10:16 PM
Average Refresh Time	Object Package	What is the average time for documents to be refreshed?	Jun 5, 2010 10:16 PM
Average Session Duration	Object Package	What is the average session duration?	Jun 5, 2010 10:16 PM
Average Session Duration per Client	Object Package	What is the average session duration per client?	Jun 5, 2010 10:16 PM
Average Session Duration per User	Object Package	What is the average session duration per user?	Jun 5, 2010 10:16 PM
Document Information Detail	Object Package	Document Analysis	Jun 5, 2010 10:16 PM
Document Scheduling and Viewing	Object Package	How often have documents been viewed?	Jun 5, 2010 10:16 PM
IP Addresses Accessing My Cluster	Object Package	From where are users logging in?	Jun 5, 2010 10:16 PM
Job Services on the System	Object Package	How many Job Services do I have?	Jun 5, 2010 10:16 PM
Job Summary	Object Package	How many jobs are there?	Jun 5, 2010 10:16 PM
Jobs per Job Service Type	Object Package	How many jobs were processed per job service type?	Jun 5, 2010 10:16 PM
Jobs per User	Object Package	How many jobs were processed per user?	Jun 5, 2010 10:16 PM
Last Login for User	Object Package	When was the last time a specific user logged in?	Jun 5, 2010 10:16 PM
Least Accessed Documents	Object Package	What are the 10 least viewed, e...	Jun 5, 2010 10:16 PM
Most Accessed Documents	Object Package	What are the 10 most viewed, e...	Jun 5, 2010 10:16 PM

Total: 62 objects



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DEMONSTRATION – CUSTOM ACCESS LEVELS

Demonstration – Custom Access Levels

CENTRAL MANAGEMENT CONSOLE

SAP BusinessObjects

Welcome: **Administrator** | Help | Preferences | About | Log Out

Access Levels

Manage ▾ Actions ▾ Organize ▾

Search title ▾

1 of 1

Name ^	Description	Date Modified
Full Control	Grants full access	Aug 27, 2010 3:53 PM
Schedule	Grants view rights for objects, view-on-demand content objects, and grants rights	Aug 9, 2010 9:08 PM
Space Creator	Explorer CAL for advanced users who create and explore information spaces.	Aug 20, 2010 10:33 PM
Space Explorer	Explorer custom access level for limited users who only explore information space	Aug 20, 2010 10:34 PM
Top Level Folder	Grant access to the top-level folder but do not extend rights to subobjects	Aug 20, 2010 10:45 PM
View	Grants view rights for objects	Aug 20, 2010 10:37 PM
View On Demand	Grants view rights for objects, and view-on-demand content objects	Aug 27, 2010 3:53 PM

Custom Access Level demo...

Total: 7 objects



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PERMISSIONS EXPLORER AND SECURITY QUERY

[Permissions Explorer (*object centric*)

- Use the Permissions Explorer to determine the rights a principal has on an object
- Improvement upon **Check User Rights** button in XI Release 2. Check User Rights only identified the effective rights – the source of the rights assignment was still unknown
- Available from any object (folder, document, universe, connection, etc.) that can have rights assigned

Permissions Explorer

CENTRAL MANAGEMENT CONSOLE

SAP BusinessObjects

User Security: Simple eFashion Report

Permissions Explorer: Simple eFashion Report

Principal
eFashion Executives (User Group)

Object(s) related objects
Simple eFashion Report (Web Intelligence Report)
eFashion (Universe)

Assigned Access
View On Demand (inherited)
Folder://SBOUC 2010 Security

Simple eFashion Report Common Filter Settings: Assigned Rights

Collection	Type	Right Name	Status	Apply To
General	General	View document instances	✓	
General	General	Pause and Resume document instances	✓	
General	General			
General	General			
General	General			
General	General	Schedule document to run	✓	
General	General	View objects	✓	
General	General	Schedule to destinations	✓	
General	General	Pause and Resume document instances that the user owns	✓	
General	General	Delete instances that the user owns	✓	
General	General	Reschedule instances	✓	
General	General	Copy objects to another folder	✓	
Content	Note	Allow discussion threads	✓	
Content	Web Intelligence	Refresh the report's data	✓	

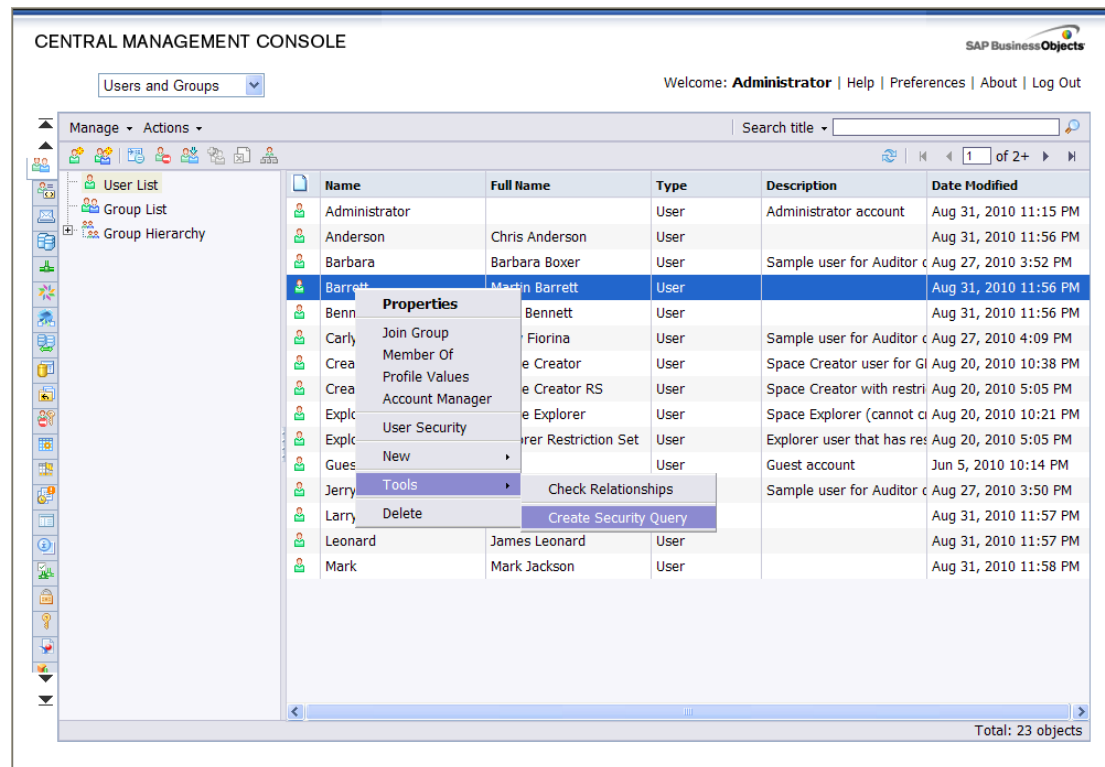
Permissions Explorer demo...

OK Close

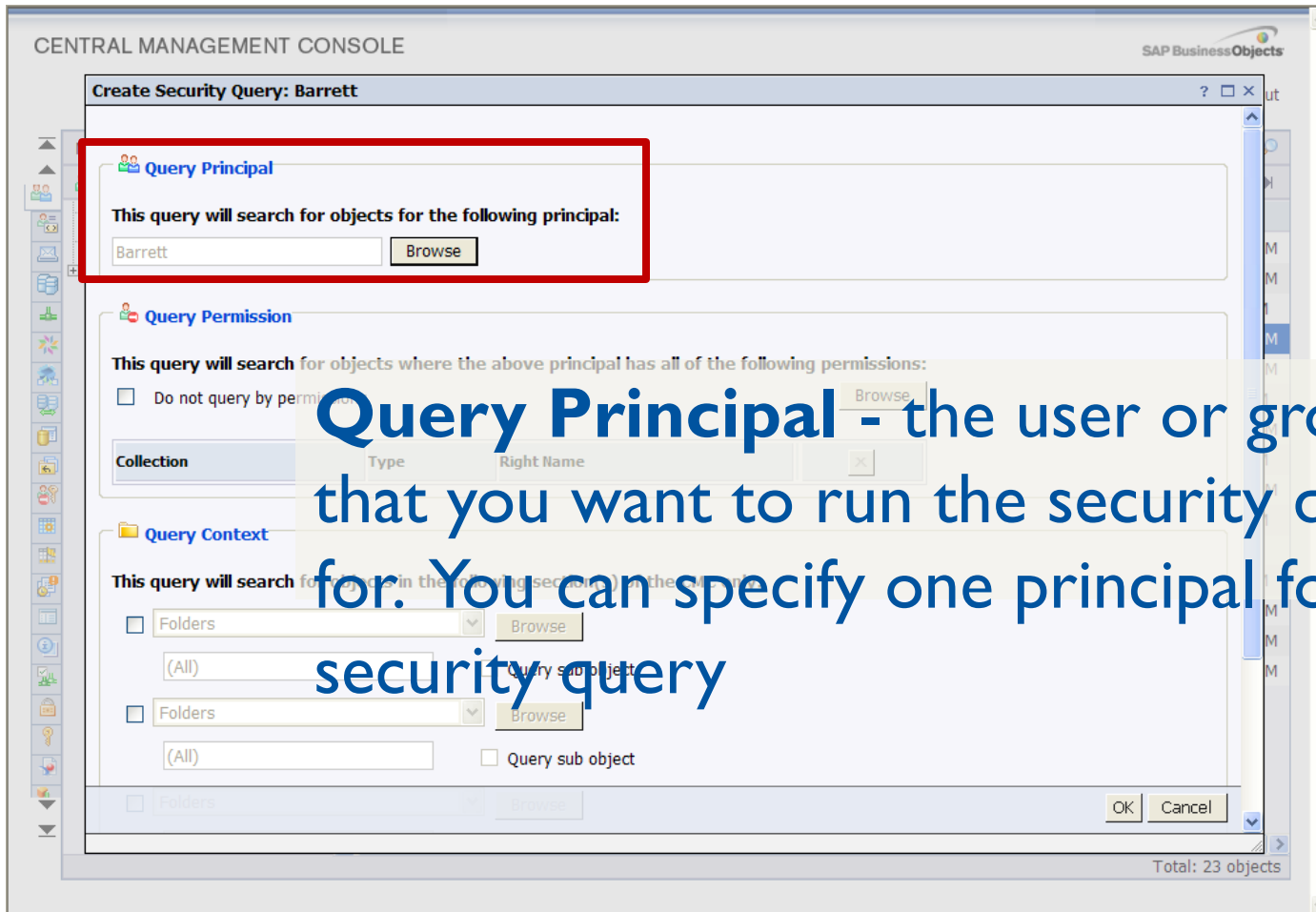
Total: 1 objects

Security Query (user centric)

- Use Security Query to determine the objects to which a principal has been granted or denied access.
- Available from Users and Groups or Query Results



Security Query – Query Principal



Query Principal - the user or group that you want to run the security query for. You can specify one principal for each security query

[Security Query – Query Permission

CENTRAL MANAGEMENT CONSOLE

SAP BusinessObjects

Create Security Query: Barrett

Query Principal

This query will search for objects for the following principal:

Barrett [Browse]

Query Permission

This query will search for objects where the above principal has all of the following permissions:

Do not query by permissions [Browse]

Collection	Type	Right Name		
General	General	View objects	✓	[X]

Query Context

This query will search for objects in the following section(s) of the CMC only:

Folders (All) [Query sub object]

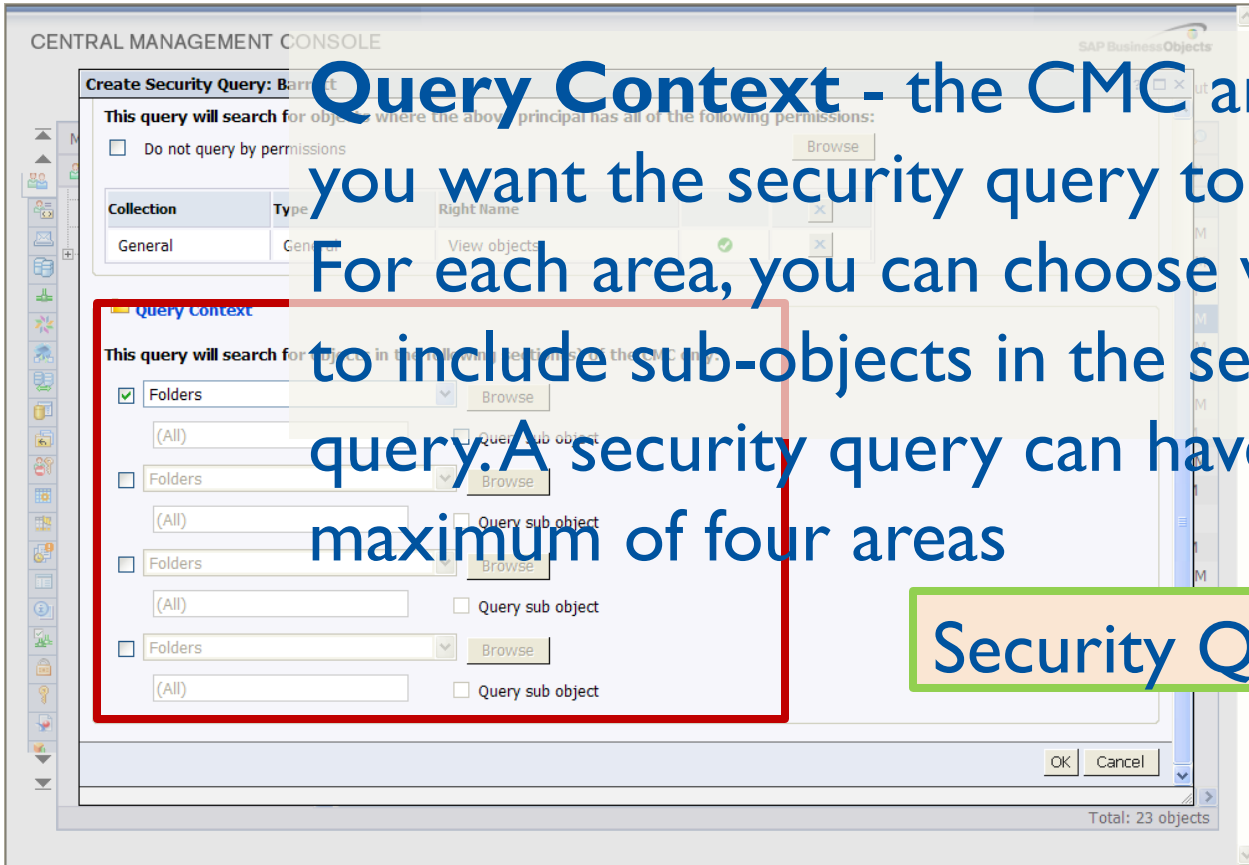
Folders

OK Cancel

Total: 2 objects

Query Permission - the right or rights you want to run the security query for, the status of these rights, and the object type these rights are set on

[Security Query – Query Context



Query Context - the CMC areas that you want the security query to search. For each area, you can choose whether to include sub-objects in the security query. A security query can have a maximum of four areas

Security Query demo...



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BEST PRACTICES

[Security Best Practices

XI R2 or XI 3.x

- Grant rights to groups on folders. Although rights can be granted on individual objects or users, the security model can become difficult to maintain.
- Use pre-defined rights wherever possible. Understand the additional complexity that advanced rights can introduce.
- Avoid breaking inheritance, while understanding it is sometimes necessary
- Add multiple users to Administrators group rather than sharing Administrator user account to improve traceability
- Document and maintain your security structure outside of the CMC – MS Excel is a good choice

[Security Best Practices

XI 3.x

- Allot time in your upgrade/migration for administrative staff to understand both the new CMC interface/workflows as well as its new features
- Use custom access levels where you would have previously resorted to advanced rights.
- Identify opportunities to limit the scope of rights instead of breaking inheritance
- Take advantage of the Permissions Explorer and Security Query tools to diagnose and correct security issues



Deploying BI to the Masses

NEXT STEPS


[Relevant ASUG SBOUC 2010 Breakout Sessions



- **I can CAL, can you?**
(Custom Access Levels)
Sandra Brotje | Session 0405
Tuesday, October 5, 2010 | 4:00 PM – 5:00 PM

[Recommended Reading

- SAP BusinessObjects Enterprise Administrator's Guide
- SAP BusinessObjects Enterprise XI 3.0/3.1 Upgrade Guide
- SAP BusinessObjects 5/6 to XI 3.1 Migration Guide



Visit the SAP Help Portal at <http://help.sap.com> to download these resources.

Relevant Education

- **SAP BusinessObjects Enterprise XI 3.0/3.1:
Administration and Security**
2 days - course code BOE310
- **SAP BusinessObjects Enterprise XI 3.0/3.1:
Administering Servers**
3 days - course code BOE320
- **SAP BusinessObjects Enterprise XI 3.0/3.1:
Designing and Deploying a Solution**
3 days - course code BOE330

Official SAP BusinessObjects curriculum is available on-site at your location or at authorized education centers around the world.

Thank you for participating.

Please remember to complete and return your evaluation form following this session.

For ongoing education on this area of focus, visit the Year-Round Community page at www.asug.com/yrcc

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