Authorizations for BI Reporting

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Terminology and What We'll Cover...

Standard Authorizations

- **Development**
  - **Based on standard role and authorization concept of SAP**
  - **Was and still is used for BI administrator and developer activities**
- **Reporting**
  - **Based on standard role and authorization concept of SAP**
  - **Used to control which users can display/change/execute queries/Web templates/workbooks/formatted reports, etc…**

Covered in this presentation

Reporting Authorizations

- **Old security concept up to SAP NetWeaver '04 (up to SAP BW 3.5)**
- **Control for which data a user has access in a query**
- **Realized through the standard authorization concept which has many limitations**

Analysis Authorizations

- **New security concept as of SAP NetWeaver 2004s**
- **Controls which data a user has access to in a query**
- **Is <u>not</u> based on standard authorization concept in order to overcome the limitations**
- **Takes features of reporting and analysis in BI into consideration**

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Objectives

In this session you will

- **Learn how to grant access to reports on various levels**
- **Find out how the new authorization objects compare to the old auth objects and see any changes**
- **See customer examples on different options for implementing security**
- **Learn how to migrate to the new reporting authorizations**
- **Discover lessons learned from the ramp-up on standard reporting authorizations**

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Overview of Standard Reporting Authorizations

Comparison of Old and New Authorization Concept

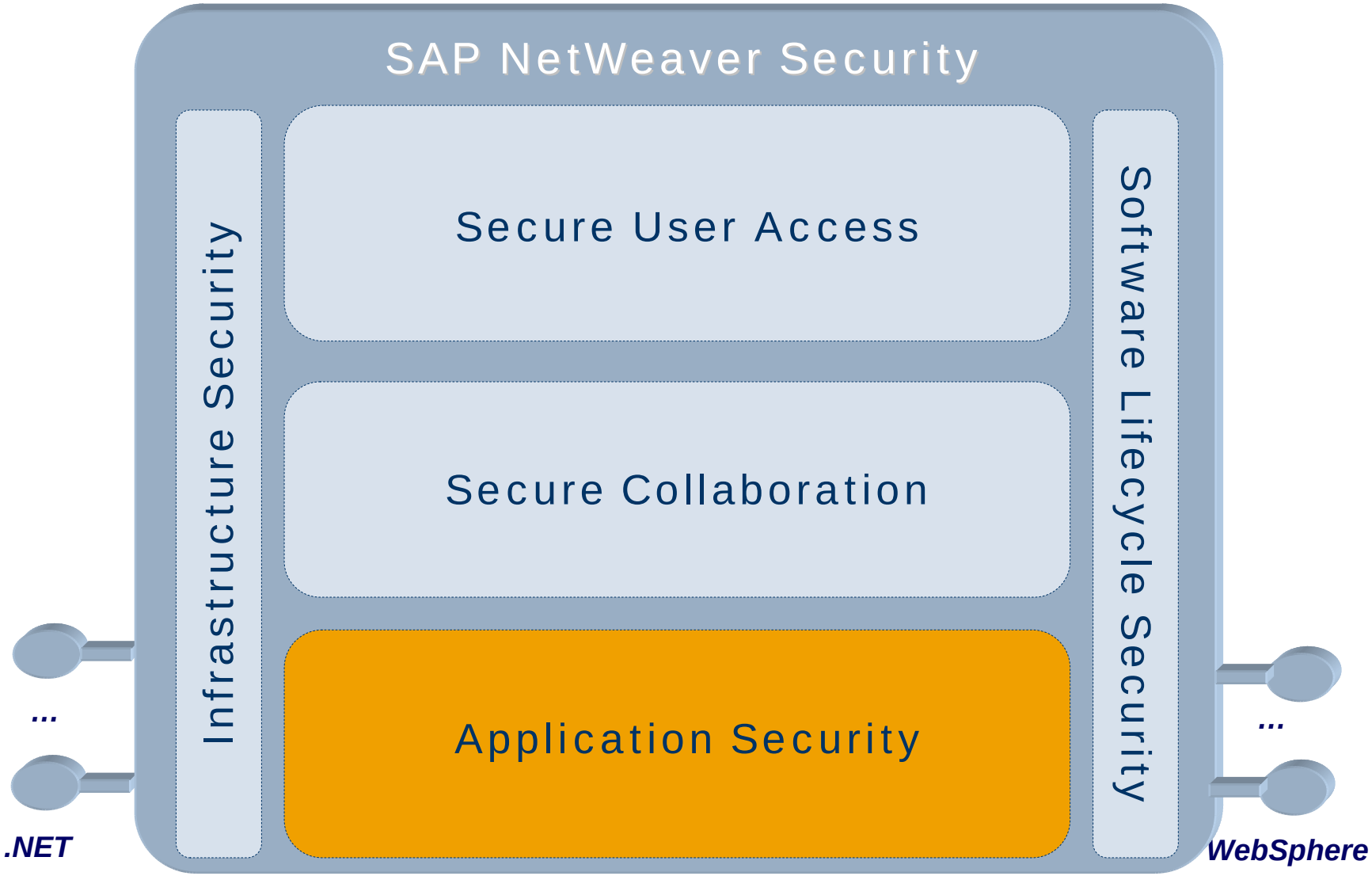
Examples of Implementation Scenarios

Migrating to the New World

Lessons Learned

Summary

SAP NetWeaver Security



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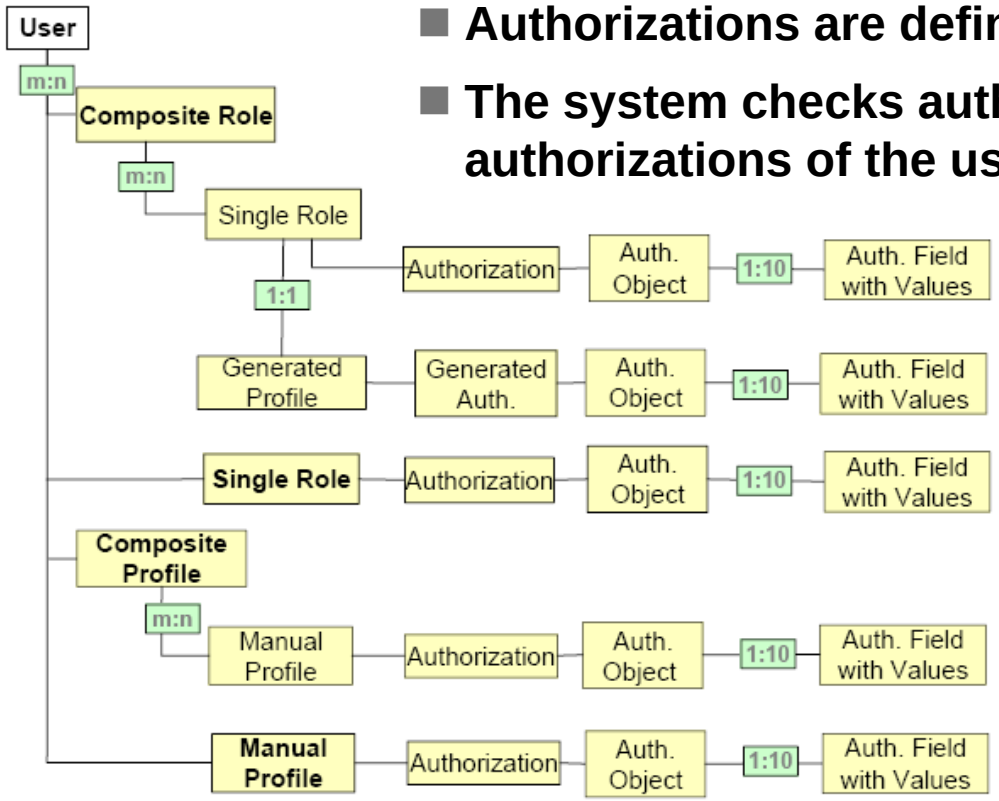
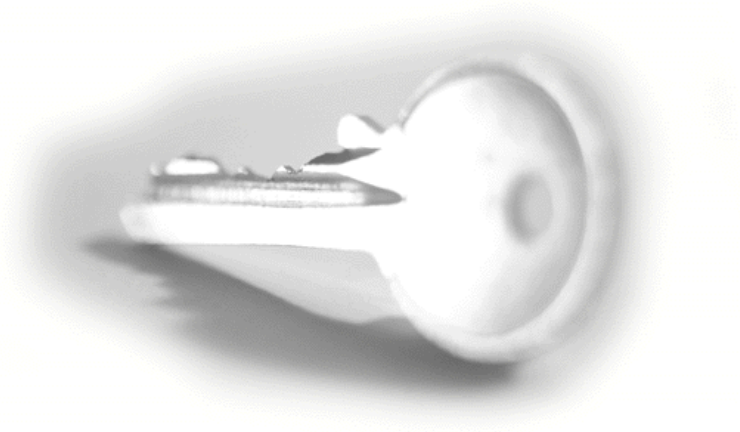
Application Security

- **Based on roles and authorization concept**
- **Users are assigned to roles**
- **Roles contain authorizations**
- **Authorizations are defined for authorization objects**
- **The system checks authorization objects against the authorizations of the user**





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Introduction to Reporting Authorizations – 1 –

Scenario: Query Authorizations

- **Controlled by Authorization Objects S_RS_COMP and S_RS_COMP1**
- **Very similar between SAP NetWeaver ’04 and SAP NetWeaver 2004s**
- **Minor changes between versions…**

Scenario: Workbook Authorizations

- **Controlled by roles using authorization objects S_USER_AGR and S_GUI**
- **No changes between SAP NetWeaver ’04 and SAP NetWeaver 2004s**

Scenario: Web Template Authorizations

- **New within SAP NetWeaver 2004s**
- **Controlled by authorization objects S_RS_BTMP and S_RS_BITM**

Scenario: Broadcasting Authorizations

- **Controlled by authorization object S_RS_BCS**
- **Very similar between SAP NetWeaver ’04 and SAP NetWeaver 2004s**
- **Minor changes between versions…**

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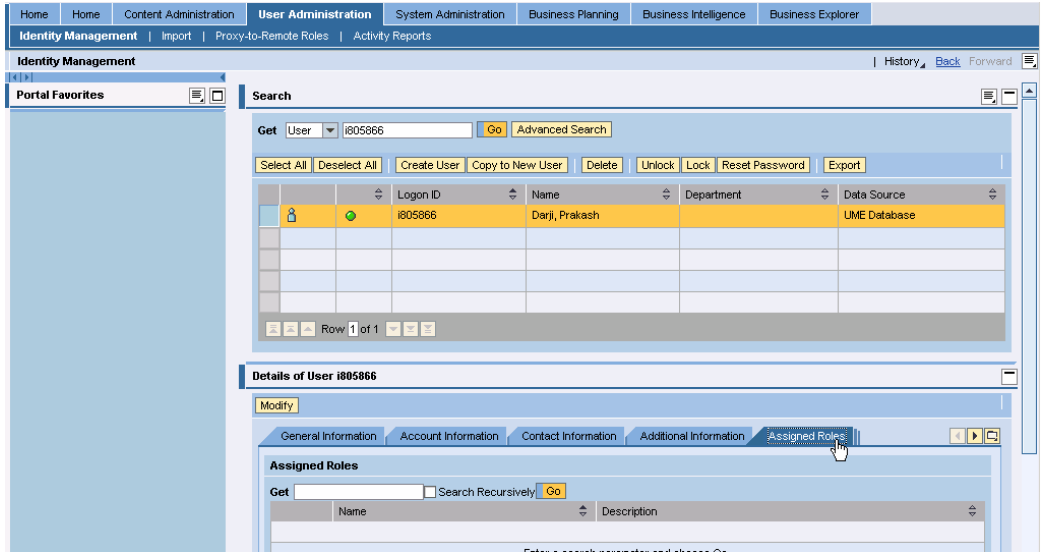
New Portal Based Access Requires Portal Roles

- **Standard roles are available on the Portal for Planning, BEx Web Analyzer, BEx Broadcaster, etc…**
- **Assignment of functionality is controlled by Portal roles and iViews**
- **New Identity Management within Portal simplifies assignment**



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Authorization Levels

Access Can Be Restricted by Authorizations...

- **On Query**
  - **By InfoCube, InfoArea, or Query Name**
- **On Query View**
  - **By InfoCube, InfoArea, or Query Name**
- **On Web Template**
  - **By Template Name**
- **On Web Item**
  - **By Item Name**
- **On Workbook**
  - **By Role**
- **On Enterprise Report**
  - **By Report Name**
- **On Enterprise Report Item**
  - **By Item Name**

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Comparing Authorization Concepts – 1 –

Authorization Object and Transaction Matrix

	<=SAP BW 3.x	SAP NetWeaver 2004s
S_RS_BITM	NOT CHECKED	CHECKED - NEW
S_RS_BTMP	NOT CHECKED	CHECKED - NEW
S_RS_COMP	CHECKED	CHECKED - CHANGED
S_RS_COMP1	CHECKED	CHEcKED - CHANGED
S_RS_ERTP	NOT CHECKED	CHECKED – NEW (SP7)
S_RS_EREL	NOT CHECKED	CHECKED – NEW (SP7)
S_RS_FOLD	CHECKED	CHECKED - NO CHANGE
S_USER_AGR	CHECKED	CHECKED – NO CHANGE
S_RS_BC	CHECKED	CHECKED – NO CHANGE
S_RS_BCS	CHECKED	CHECKED – CHANGED
S_RS_AUTH (Data)	NOT CHECKED	CHECKED – NEW

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Comparing Authorization Concepts – 2 –

Authorization Object and Transaction Matrix

	<=SAP BW 3.x	SAP NetWeaver 2004s
Standard Authorizations Development S_RS_CUBE S_RS_MPRO S_RS_ISET S_RS_ODSO	These are checked for the Administrator Workbench (RSA1).	These are checked for the DataWarehousing Workbench (RSA1). There are also many new auth objects for the DW Workbench.
Standard Authorizations Reporting S_RS_COMP S_RS_COMP1 S_RS_BTMP S_RS_BITM	These are checked to authorize query display, change, execute. S_RS_BTMP is not checked for web templates.	New Value (SOB) for selection object. S_RS_BTMP is checked for web templates.
Data Authorizations Transactions: RSSM PFCG RSECADMIN	PFCG and RSSM are used to assign auth objects to roles and flag relevant InfoProviders. Custom auth objects are assigned using using PFCG.	RSECADMIN and PFCG are used to assign auth objects to users or roles and specify relevant InfoProviders. Auth Object S_RS_AUTH is assigned to roles or users.

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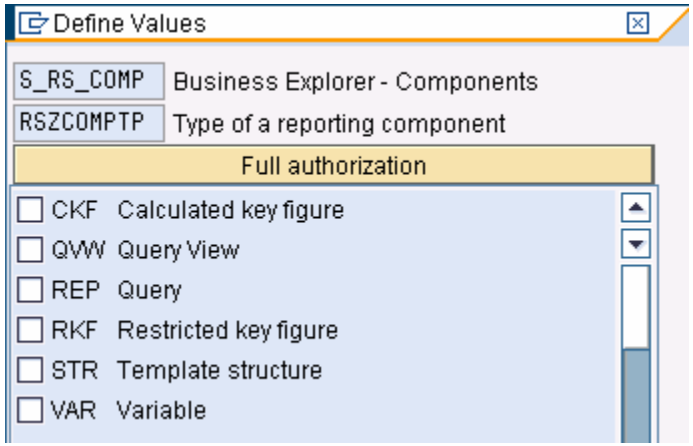
SAP Business Explorer Components – S_RS_COMP & S_RS_COMP1

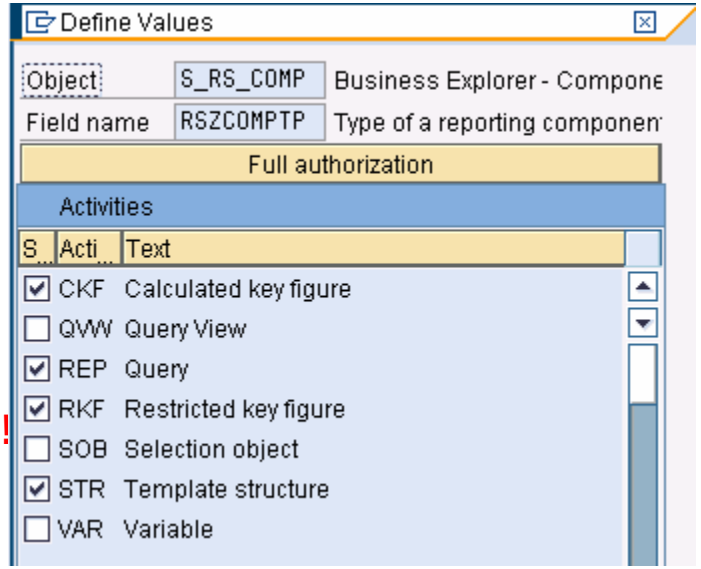
SAP BW 3.x

- **Allows for controlling BEx objects**
  - **CKF Calculated key figure**
  - **QVW Query View**
  - **REP Query**
  - **RKF Restricted key figure**
  - **STR Template structure**
  - **VAR Variable**



SAP NetWeaver 2004s

- **Allows for controlling BEx objects**
  - **CKF Calculated key figure**
  - **QVW Query View**
  - **REP Query**
  - **RKF Restricted key figure**
  - **SOB Selection object <= NEW!!**
  - **STR Template structure**
  - **VAR Variable**



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SAP Business Explorer - BEx Web Templates (SAP NetWeaver 2004s+) – S_RS_BTMP

SAP BW 3.x

- **No authorizations to enforce naming or security around Web templates**

SAP NetWeaver 2004s

- **New authorization object S_RS_BTMP allows you to control authorization for a web template by specifying a naming convention for a web template**
- **$USER can be used for owner to specify only change or delete access for your own web templates**
- **NOTE: This authorization object is only checked for Web templates created with the SAP NetWeaver 2004s BEx Web Application Designer. Web templates created with the SAP BW 3.x BEx Web Application Designer are NOT checked**

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Business Explorer - BEx Reusable Web items (SAP NetWeaver 2004s+) – S_RS_BITM

SAP BW 3.x

- **No authorizations to enforce naming or security around Web items within Web templates**

SAP NetWeaver 2004s

- **New authorization object S_RS_BITM allows you to control authorization for a Web item by specifying a naming convention for that Web item**
- **$USER can be used for owner to specify only change or delete access for your own web items**
- **NOTE: This authorization object is only checked for Web Items created with the SAP NetWeaver 2004s Web Application Designer. Web Items created with the SAP BW 3.x BEx Web Application Designer are NOT checked**

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SAP Business Explorer - BEx Enterprise Report – S_RS_ERPT

SAP BW 3.x

- **No authorizations to enforce naming or security around enterprise (formatted) reports as BEx Report Designer did not exist**

SAP NetWeaver 2004s

- **New authorization object S_RS_ERPT allows you to control authorization for a formatted report by specifying a naming convention for that report.**
- **$USER can be used for owner to specify only change or delete access for your own Web templates**

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SAP Business Explorer – Enterprise Report Item – S_RS_EREL

SAP BW 3.x

- **No authorizations to enforce naming or security around enterprise (formatted) report items as BEx Report Designer did not exist**

SAP NetWeaver 2004s

- **New authorization object S_RS_EREL allows you to control authorization for a report item by specifying a naming convention for that report item.**
- **$USER can be used for owner to specify only change or delete access for your own report items**

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BEx Broadcasting Authorization to Schedule – S_RS_BCS

SAP BW 3.x

- **Activities available for broadcasting:**
  - **01 Create or generate**
- **Broadcasting based on the following event types are possible:**
  - **DC Execution with Data Change in the InfoProvider**
  - **TP Execution at Predefined Time**
- **BI Object Types Available:**
  - **DP Data Provider**
  - **HT Web Template**
  - **QU Query**
  - **WB Workbook**

SAP NetWeaver 2004s

- **Activities available for broadcasting:**
  - **01 Create or generate**
  - **06 Delete <=NEW**
- **Broadcasting based on the following event types are possible:**
  - **DC Execution with Data Change in the InfoProvider**
  - **SE Direct Scheduling in the Background Processing <=NEW**
  - **TP Execution at Predefined Time**
- **BI Object Types Available:**
  - **BQ Query**
  - **BT Web Template Name**
  - **BV Query View <= NEW**
  - **DC Document <= NEW**
  - **RP Report <=NEW**
  - **WB Workbook**

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Workbook Authorizations – S_USER_AGR

SAP BW 3.x

- **Users can still save workbooks to their favorites**
- **Controlled by role – users must have access to a role to save, change, delete a query…**

SAP NetWeaver 2004s

- **No change**
- **Controlled by role – users must have access to a role to save, change, delete a query…**

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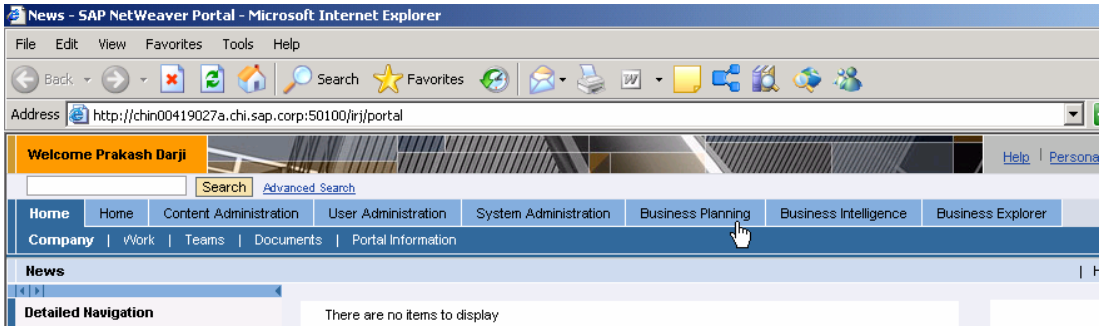
Portal Authorizations (1)

SAP BW 3.x

- **Portal authorizations were controlled independently of BEx as there was loose coupling between Portal iViews and Web applications in BI.**

SAP NetWeaver 2004s

- **BEx and Portal are tightly coupled. The new Web runtime runs based on components within the Portal and cannot be run independently of the SAP NetWeaver Portal**
- **There are 3 roles available on the Portal as displayed below: (Business Planning, Business Intelligence, and Business Explorer)**



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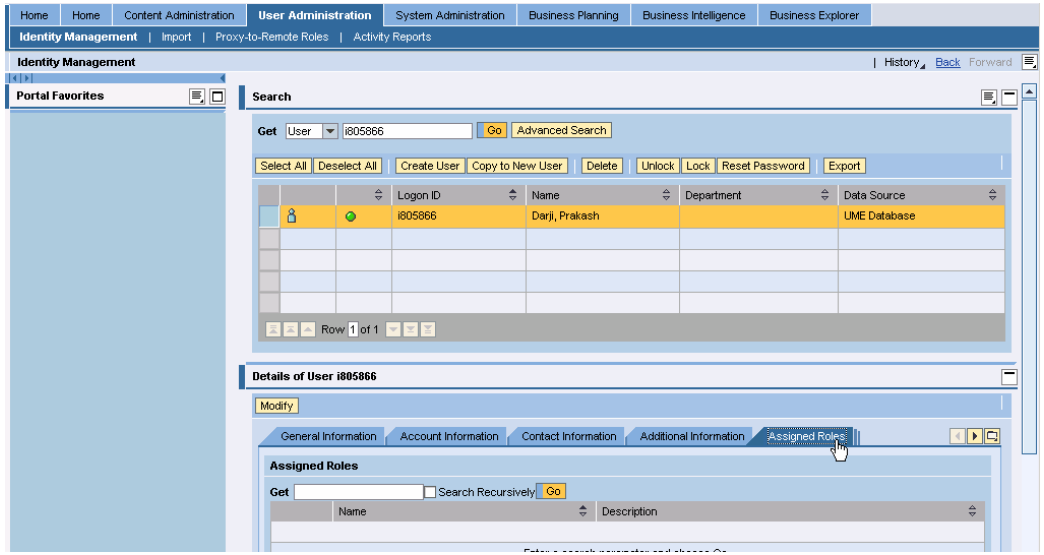
Portal Authorizations (2)

Identity Management

- **The new Identity Management on the Portal allows you to assign these roles!**



Roles

- **Business Explorer, Business Intelligence, and Business Planning**
- **In addition, the VCRole is needed for SAP NetWeaver Visual Composer development**

pcd:portal_content/com.sap.gm.cnt/core/VCRole	VCRole
pcd:portal_content/com.sap.pct/platform_add_ons/com.sap.ip.bi/Roles/com.sap.ip.bi.bi_showcase	Business Intelligence
pcd:portal_content/com.sap.pct/platform_add_ons/com.sap.ip.bi/Roles/com.sap.ip.bi.business_explorer_showcase	Business Explorer
pcd:portal_content/com.sap.pct/platform_add_ons/com.sap.ip.bi/Roles/com.sap.ip.bi.business_planning_showcase	Business Planning

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KM Authorizations

Knowledge Management

- **KM folders can be assigned authorization based on user, group or roles**
- **It is recommended to use roles as the method for securing KM folders**

Recommendation

- **Use KM Navigation iView and assign this navigation iView to point to a KM folder**
- **Assign this iView to a functional Portal role (for example Sales Role)**
- **Assign this role as permissions for the Sales KM folder**

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Authorizations for InfoProviders and Hierarchies

SAP BW 3.x

- **Authorization objects S_RS_ICUBE, S_RS_MPRO, S_RS_ISET and S_RS_ODSO are checked during query processing**
- **S_RS_HIER is checked for any hierarchy that is part of query**

SAP NetWeaver 2004s

- **Authorization objects S_RS_ICUBE, S_RS_MPRO, S_RS_ISET and S_RS_ODSO are <u>not checked</u> anymore during query processing**
- **S_RS_HIER is <u>not required</u> anymore**
- **Those authorization objects are still used for BI administrator and BI developer roles**
- **S_RS_AUTH is checked for data authorizations**

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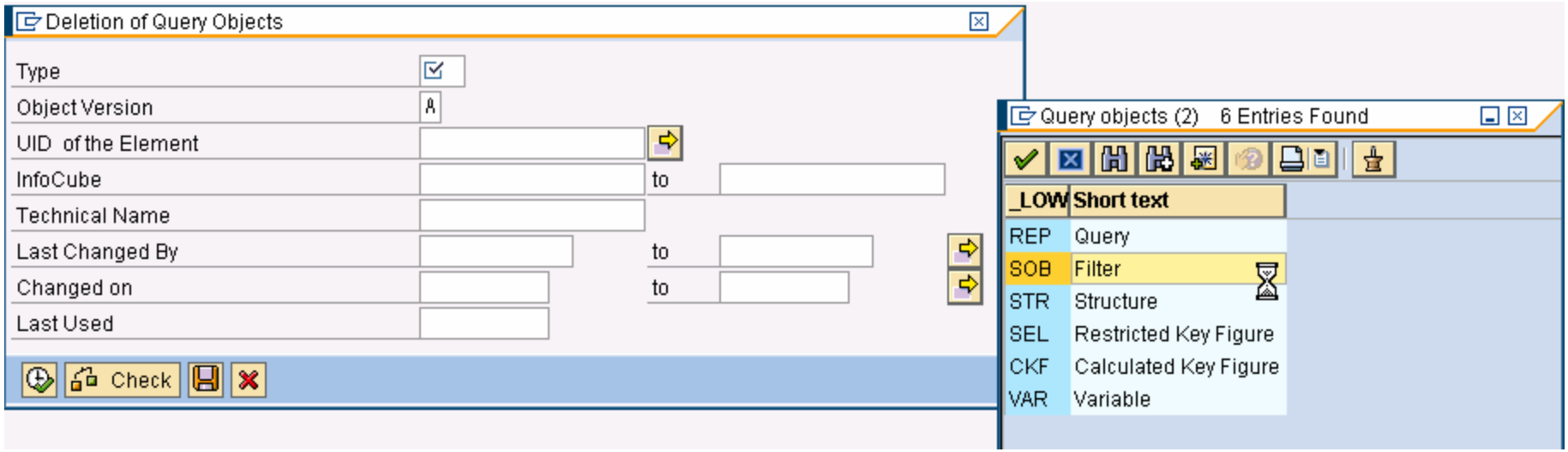
Updates to RSZDELETE

RSZDELETE has long been the mass clean-up program

- **New Object (SOB) for selection filters has been added.**



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Overview of Standard Reporting Authorizations

Comparison of Old and New Authorization Concept

Examples of Implementation Scenarios

Migrating to the New World

Lessons Learned

Summary

Flexibility, Maintenance, TCO

Primary Drivers of Reporting Security

- **Ease of use for reporting**
- **Prevent landscape from getting “messy”**
- **Provide correct differentiation between report users and report developers**

Primary Challenges of Reporting Security

- **Reduce maintenance effort**
- **Ability to react to change quickly**
- **Ability to scale**

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Implementation Scenario 1 – Lowest TCO

InfoArea Level Security

- **Use naming conventions of InfoAreas for reporting authorizations**
  - **ZBW_REP* for reporting and ZBW_DEV* for development**
  - **For S_RS_COMP values for InfoCube, you will always assign "*" an authorizations will be controlled by InfoArea**

Multi-Provider Reporting Only

- **Abstraction has been recognized as the best way to ensure the lowest Total Cost of Ownership (TCO) and most flexibility**
- **It is strongly recommended that reporting only takes place on Multi-Providers**
- **These reporting Multi-Providers will be assigned to particular InfoAreas and no Cube or ODS will be assigned to the reporting InfoAreas**

XYZ Differentiation

- **Z Queries are created in development and transported to production**
- **Y Queries are built ad-hoc in production and are permanent queries**
- **X Queries are built ad-hoc in production and are deleted via a process chain monthly**

User Designation

- **Super users can build Y Queries in production**
- **Power users can build X Queries in production**
- **End users can use the BEx Web Analyzer or run queries built by power users or super users**
- **Power users can request that their queries be saved as Y queries by asking their super users**

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InfoArea Level Security

- **Use Naming Conventions of InfoAreas for Reporting Authorizations**
  - **ZBW_REP* for Reporting and ZBW_DEV* for development**
  - **In this scenario, note the naming conventions for each sub InfoArea require the parent InfoArea as part of the name**

BW Reporting	ZBW_REP	Change
Finance Reporting	ZBW_REP_FIN	Change
HR Reporting	ZBW_REP_HR	Change
Sales Reporting	ZBW_REP_SLS	Change
Delivery Detail Reporting	ZBW_REP_SLS_DLV	Change
Sales Document Detail Reporting	ZBW_REP_SLS_ORD	Change
Trade Reporting	ZBW_REP_SLS_TRD	Change
Delivery Multiprovider	ZMDLV	Change

  - **For example, in this scenario, you would have a sales role for an end user defined as such:**

Manually	Business Explorer - Components	S_RS_COMP	
Manually	Business Explorer - Components	T-NS39001300	
	Activity	03, 16, 22	ACTVT
	InfoArea	ZBW_REP_SLS*	RSINFOARE
	InfoCube	*	RSINFOCUB
	Name (ID) of a reporting compo	X*, Y*, Z*	RSZCOMPID
	Type of a reporting component	CKF, QVW, REP, RKF, SOB, STR, VAR	RSZCOMPTP
Manually	Business Explorer - Components	T-NS39001301	
	Activity	16	ACTVT
	InfoArea	ZBW_REP_SLS*	RSINFOARE
	InfoCube	*	RSINFOCUB
	Name (ID) of a reporting compo	*	RSZCOMPID
	Type of a reporting component	REP	RSZCOMPTP

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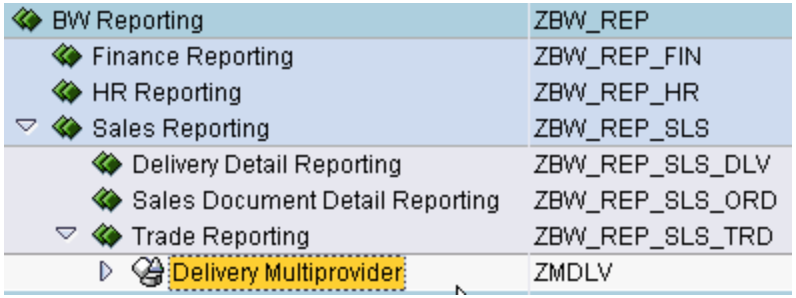
Implementation Scenario 1 – Multi-Provider Reporting Only

Multi-Provider Reporting Only

- **Abstraction has been recognized as the best way to ensure the lowest TCO and most flexibility**
- **It is strongly recommended that reporting only takes place on Multi-Providers**
- **These reporting Multi-Providers will be assigned to particular InfoAreas and no Cube or ODS will be assigned to the reporting InfoAreas**
- **For example, in this scenario, the delivery Multi-Provider is assigned to the trade reporting InfoArea.**
- **Developers can assign Multi-Providers to InfoAreas without having to update security roles!!!**



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Implementation Scenario 1 – XYZ Differentiation

XYZ Differentiation

- Z Queries are created in development and transported to production
- Y Queries are built ad-hoc in production and are permanent queries
- X Queries are built ad-hoc in production and are deleted via a process chain monthly

Why?

- This tiered approach allows for maximum flexibility while still maintaining a minimal number of objects in the system
- If a user wants to prototype a query or build a query for one-time use, it can be saved with X*
- Allows the most flexibility as you aren't worried about people building lots of garbage, as it will be deleted soon
- Keep in mind that this naming and approach works well with queries, but special consideration needs to be given to variables, CKF, RKF, selection objects, structures, and query views…

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Implementation Scenario 1 – User Designation

User Designation

- **Super users can build Y Queries in production**
- **Power users can build X Queries in production**
- **End users can use the BEx Web Analyzer or run queries built by power users or super users**
- **Power users can request that their queries be saved as Y queries by asking their super users**
- **RSZDELETE can be scheduled in a process chain to delete all queries or Web templates that start with X*.**

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Implementation Scenario 1 – Web Design

Web Template

- **Allow X, Y, Z differentiation for Web templates creation**
- **Keep in mind that this setting is global and is not controlled by InfoArea or InfoCube**
- **Your super users, power users, and end users for Web templates may or may not necessarily be a 1 to 1 with your super users, power users, and end users for query design**

Formatted Reports

- **Allow X, Y, Z differentiation for enterprise (formatted) report creation**
- **Keep in mind that this setting is global and is not controlled by InfoArea or InfoCube**
- **Your super users, power users, and end users for report design may or may not necessarily be a 1 to 1 with your super users, power users, and end users for query design**

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Implementation Scenario 2 – Higher TCO

Query or Query View Level Security

- **Use naming conventions for queries for reporting authorizations**
  - **More roles may be needed to support this model…**

Info-Cube/ODS/Multi-Provider Reporting

- **Changes require longer as queries may need to be moved due to activities like logical partitioning**

Differentiation

- **Z Queries are created in development and transported to production**
- **Y Queries are built ad-hoc in production and are permanent queries**
- **No X Queries are allowed**
  - **This may lead to people building a lot of Y Queries for one-time use and may lead to larger numbers of objects in the system**

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Summary

Steps for Migration of Authorizations

No Automatic Migration is Available for Standard Reporting Authorizations!!!

1. **Identify reporting security objects that have changed:**
   1. **S_RS_COMP – Update object type “SOB” for selection lists**
   2. **S_RS_COMP1 – Update object type “SOB” for selection lists**
   3. **S_RS_BCS – Update report types and additional event type**
2. **Implement new security objects for reporting**
   1. **S_RS_BTMP – Add security for Web templates**
   2. **S_RS_BITM – Add security for Web items**

Tip

Use naming conventions for Web templates and Web items to allow an XYZ differentiation as well!!!

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Before You Start

Migration is Manual

- **Make decisions around your security model first, as migration is manual**
- **It is strongly recommended to use the new analysis authorizations for data as well. This is not covered in this presentation, see appendix for more details.**

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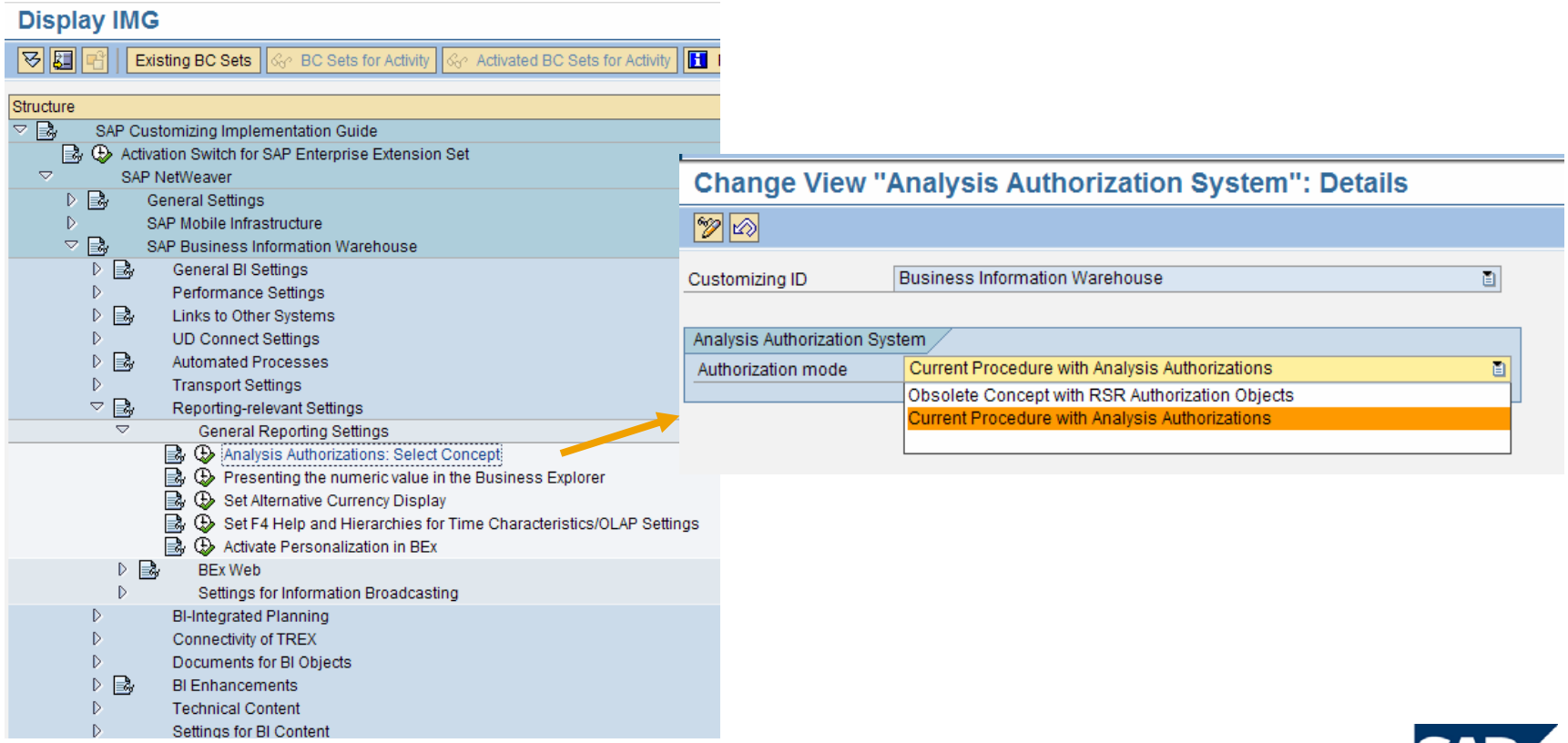
Before You Start

Recommendation

- **It is <u>highly recommended to migrate to the new concept</u>**
- **The former authorization concept won‘t be supported any longer**
- **You can, however, switch back to the former concept – in some exceptional cases (IMG setting)**



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SAP BW 3.x Tools and SAP NetWeaver 2004s Tools

Recommendation

- **Because query objects are converted from SAP BW 3.x to SAP NetWeaver 2004s, it is strongly recommended to use security to disallow change of global elements when using both tools**
- **For example, if a variable is converted to the SAP NetWeaver 2004s format by opening it within the new BEx Query Designer, any query using that variable will no longer be able to opened with the old tool.**
- **You should control CKF, RKF, and STR as well to ensure their impact.**
- **Migration for BEx objects should be done in a phased approach and by InfoArea or InfoCube to ensure all objects within a particular cube are running the same type of query (BEx 3.x or BEx 2004s).**

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Related BLOGS

Troubleshoot your SAP NetWeaver 2004s BI Frontend Installation:
https://www.sdn.sap.com/irj/sdn/weblogs?blog=/pub/wlg/4087

To Federate or not to Federate:
https://www.sdn.sap.com/irj/sdn/weblogs?blog=/pub/wlg/4477

Rolling out the new 2004s Frontend Tools:
https://www.sdn.sap.com/irj/sdn/weblogs?blog=/pub/wlg/4495

Constant Selection:
https://www.sdn.sap.com/irj/sdn/weblogs?blog=/pub/wlg/4478

Define your Publishing Strategy:
https://www.sdn.sap.com/irj/sdn/weblogs?blog=/pub/wlg/4326

Accessing BI Data in External Application via Web Services (Security):
https://www.sdn.sap.com/irj/sdn/weblogs?blog=/pub/wlg/4332

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SAP BW 3.x Tools and SAP NetWeaver 2004s Tools (2)

Recommendation

- **If an object is converted from SAP BW 3.x to SAP NetWeaver 2004s, the version within the RSZCOMPDIR table will be greater than 100.**

Table Entry Edit Goto Settings Utilities(M) Environment System Help

Data Browser: Table RSZCOMPDIR Select Entries 306

Check Table...

Table: RSZCOMPDIR
Displayed Fields: 16 of 18 Fixed Columns: 2 List Width 0250

COMPUID	OBJVERS	COMPID	VERSION	COMPDIM	OBJSTAT	CONTREL	CONTTIMESTMP
6N0VKUL89XTJVCP7MWJMGTFJW	A	0T_CM02	0	0	ACT	3.2/01	20,030,410,095,221
6NA655ALDA5IXQSUWMQG31GNQ	A	0TCT_MC11_Q0140	13	1	ACT	7.0/02	20,051,116,055,811
6NGOUXOG7ZGLW108SPX8E5P9Q	A	0I_CMON4	0	0	ACT	3.3/01	20,030,813,122,021
6V1Y06DND7DB4CYRQIE2XS4YJ	A	ZCONOPP	101	1	ACT		0
6Z7YZSDFWFDSNIEIQSK215THZ	A	0TCT_MC23_Q0304	13	1	ACT	7.0/02	20,051,011,124,635
6ZHY1M240F27KKPHAMA4ZX5LK	A	0TCT_MC23_CK224	11	0	ACT	7.0/02	20,051,007,163,450
6ZSA2RGKL2TPWP20934E3LP5K	A	0TCT_MC03_CK200	11	0	ACT	7.0/02	20,051,008,155,714
711EFEBX8UQZB2ITHX6H1TEOV	A	0D_SOLDT	0	0	ACT	1.2/02	0
75FKHSI3IYFGDRNR6CC3G7TLK	A	0T_MP3FY	0	0	ACT	7.0/02	20,050,927,134,604

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Overview of Standard Reporting Authorizations

Comparison of Old and New Authorization Concept

Examples of Implementation Scenarios

Migrating to the New World

Lessons Learned

Summary

Summary

- **BI reporting authorization have new authorization objects for Web runtime!**
- **It is strongly recommended to take advantage of the new data authorizations within SAP NetWeaver 2004s**
- **InfoArea security, Multi-Provider reporting, and XYZ differentiation will lead to low TCO!**
- **Security roles are available on the SAP NetWeaver Portal for BEx Web Analyzer, BEx Broadcaster, and Planning**
- **Information broadcasting object has more options!**
- **Migration is manual**
- **Use naming conventions for Everything!!!**

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Appendix

Authorization Objects and Delta from SAP BW 3.x

Auth Object	Description	Authorization Type	Exists in BW 3.x
RSANPR	Authorization for Analysis Process	APD / DataMining	
RSCRM_TG	Authorization to Create Target Groups	APD / DataMining	
RSCRMBUPA	Authorization to Create Business Partners in CRM	APD / DataMining	
RSCRMEXTR	Authorization to Create Table and File Extracts	APD / DataMining	
RSCRMRTUPD	Realtime Update from CRM	APD / DataMining	
RSDMEENGIN	Authorisation for Datamining Engine	APD / DataMining	
RSDMEMBW	Authorisation Object for Upload of Mining Results to BW	APD / DataMining	
RSDMEMCUS	Data Mining Customizing	APD / DataMining	
RSDMEMODEL	Authorisation for mining models	APD / DataMining	
S_RSANCLVM	CLTV Model	APD / DataMining	1
S_RSANRESP	Response Model	APD / DataMining	1
S_RSANRFMF	RFM Response Rate Model	APD / DataMining	1
S_RSANRFMS	RFM Segmentation Model	APD / DataMining	1
S_RSANRPMS	Response Prediction Models	APD / DataMining	1
S_RSMRM_AC	Authority object RSMRM Accural Determination Models	APD / DataMining	1
S_RSMRM_CO	Authorization for RSMRM - Coupon Redemption Models	APD / DataMining	1

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Authorization Objects and Delta from SAP BW 3.x (2)

Auth Object	Description	Authorization Type	Exists in BW 3.x
S_RS_ADMWB	Data Warehousing Workbench - Objects	Development	1
S_RS_CTT	Data Warehousing Workbench - Currency Translation Type	Development	
S_RS_DMOD	Data Warehousing Workbench - Data Model (not used yet)	Development	
S_RS_DS	Data Warehousing Workbench - DataSource (Release > BW 3.x)	Development	
S_RS_DTP	Data Warehousing Workbench - Data Transfer Process	Development	
S_RS_HIER	Data Warehousing Workbench - Hierarchy	Development	1
S_RS_ICASS	InfoCatalog - User Assignment	Development	1
S_RS_ICUBE	Data Warehousing Workbench - InfoCube	Development	1
S_RS_INFO	InfoCatalog	Development	1
S_RS_IOBC	Data Warehousing Workbench - InfoObject Catalog	Development	1
S_RS_IOBJ	Data Warehousing Workbench - InfoObject	Development	1
S_RS_IOMAD	Data Warehousing Workbench - Maintain Master Data	Development	1
S_RS_ISET	Data Warehousing Workbench - InfoSet	Development	1
S_RS_ISNEW	Data Warehousing Workbench - InfoSource (Release > BW 3.x)	Development	
S_RS_ISOUR	Data Warehousing Workbench - InfoSource (Flexible Update)	Development	1
S_RS_ISRCM	Data Warehousing Workbench - InfoSource (Direct Update)	Development	1
S_RS_MPRO	Data Warehousing Workbench - MultiProvider	Development	1
S_RS_ODSO	Data Warehousing Workbench - DataStore Object	Development	1
S_RS_OHDST	Data Warehousing Workbench - Open Hub Destination	Development	
S_RS_PC	Data Warehousing Workbench - Process Chains	Development	
S_RS_RSTT	Authorization Object for RS Trace Tool	Development	
S_RS_THJT	Data Warehousing Workbench - Key Date Derivation Type	Development	
S_RS_TR	Data Warehousing Workbench - Transformation	Development	
S_RS_UOM	Data Warehousing Workbench - Quantity Conversion Type	Development	

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Authorization Objects and Delta from SAP BW 3.x (3)

Auth Object	Description	Authorization Type	Exists in BW 3.x
S_RS_ADMWB	Data Warehousing Workbench - Objects	Development	1
S_RS_CTT	Data Warehousing Workbench - Currency Translation Type	Development	
S_RS_DMOD	Data Warehousing Workbench - Data Model (not used yet)	Development	
S_RS_DS	Data Warehousing Workbench - DataSource (Release > BW 3.x)	Development	
S_RS_DTP	Data Warehousing Workbench - Data Transfer Process	Development	
S_RS_HIER	Data Warehousing Workbench - Hierarchy	Development	1
S_RS_ICASS	InfoCatalog - User Assignment	Development	1
S_RS_ICUBE	Data Warehousing Workbench - InfoCube	Development	1
S_RS_INFO	InfoCatalog	Development	1
S_RS_IOBC	Data Warehousing Workbench - InfoObject Catalog	Development	1
S_RS_IOBJ	Data Warehousing Workbench - InfoObject	Development	1
S_RS_IOMAD	Data Warehousing Workbench - Maintain Master Data	Development	1
S_RS_ISET	Data Warehousing Workbench - InfoSet	Development	1
S_RS_ISNEW	Data Warehousing Workbench - InfoSource (Release > BW 3.x)	Development	
S_RS_ISOUR	Data Warehousing Workbench - InfoSource (Flexible Update)	Development	1
S_RS_ISRCM	Data Warehousing Workbench - InfoSource (Direct Update)	Development	1
S_RS_MPRO	Data Warehousing Workbench - MultiProvider	Development	1
S_RS_ODSO	Data Warehousing Workbench - DataStore Object	Development	1
S_RS_OHDST	Data Warehousing Workbench - Open Hub Destination	Development	
S_RS_PC	Data Warehousing Workbench - Process Chains	Development	
S_RS_RSTT	Authorization Object for RS Trace Tool	Development	
S_RS_THJT	Data Warehousing Workbench - Key Date Derivation Type	Development	
S_RS_TR	Data Warehousing Workbench - Transformation	Development	
S_RS_UOM	Data Warehousing Workbench - Quantity Conversion Type	Development	

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Authorization Objects and Delta from SAP BW 3.x (4)

Auth Object	Description	Authorization Type	Exists in BW 3.x
S_RS_ALVL	Planning: Aggregation Level	Planning	
S_RS_PLENQ	Lock Settings	Planning	
S_RS_PLSE	Planning Function	Planning	
S_RS_PLSQ	Planning Sequence	Planning	
S_RS_PLST	Planning Service Type	Planning	
S_RS_PPMAD	PPM - Authorization for Planning Session and Subplan	Planning	

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Authorization Objects and Delta from SAP BW 3.x (5)

Auth Object	Description	Authorization Type	Exists in BW 3.x
S_GUI		Reporting	
S_RS_BEXTX	Business Explorer - BEx Texts (Maintenance)	Reporting	
S_RS_BITM	Business Explorer - BEx Reusable web items (NW 7.0+)	Reporting	
S_RS_BTMP	Business Explorer - BEx Web Templates (NW 7.0+)	Reporting	
S_RS_COMP	Business Explorer - Components	Reporting	1
S_RS_COMP1	Business Explorer - Components: Enhancements to the Owner	Reporting	1
S_RS_DAS	Business Explorer - Data Access Services	Reporting	
S_RS_FOLD	Business Explorer - Folder View On/Off	Reporting	1
S_USER_AGR	Saving to Roles	Reporting	
S_RS_BCS	BEx Broadcasting Authorization to Schedule	Reporting - Broadcasting	1
S_RS_AUTH	BI Analysis Authorizations in Role	Data	

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New Authorization Objects (Object class RS):

Authorization objects for working with the Data Warehousing Workbench:

- S_RS_DS: Authorizations for working with the DataSource or its sub-objects (as of SAP NetWeaver 2004s)
- S_RS_ISNEW: Authorizations for working with new InfoSources or their sub-objects (as of SAP NetWeaver 2004s)
- S_RS_DTP: Authorizations for working with the data transfer process and its sub-objects
- S_RS_TR: Authorizations for working with transformation rules and their sub-objects
- S_RS_CTT: Authorizations for working with currency translation types
- S_RS_UOM: Authorizations for working with quantity conversion types
- S_RS_THJT: Authorizations for working with key date derivation types
- S_RS_PLENQ: Authorizations for maintaining or displaying the lock settings.
- S_RS_RST: Authorization object for the RS trace tool
- S_RS_PC: Authorizations for working with process chains
- S_RS_OHDEST: Open Hub Destination

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New Authorization Objects

Authorization objects for working in the SAP Business Explorer:

- **S_RS_DAS: Authorizations for working with Data Access Services**
- **S_RS_BTMP: Authorizations for working with BEx Web templates**
- **S_RS_BEXTX: Authorizations for the maintenance of BEx texts**
- **Authorization objects for the administration of analysis authorizations:**
- **S_RSEC: Authorization for assignment and administration of analysis authorizations**
- **S_RS_AUTH: Authorization object to include analysis authorizations in roles**
- **Changed Authorization Objects:**
- **S_RS_ADMWB (Data Warehousing Workbench: Objects):**
- **New sub-objects:**
  - **CONT_ACT – Installing Business Content**
  - **USE_DND - Drag & Drop to InfoAreas and application components**
  - **CNG_RUN - Attribute change run**

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New activities:

- **Installing Business Content (63)**
- **Managing Business Content (23)**
- **Drag&Drop to InfoAreas and application components in the DW Workbench (16)**
- **Execute attribute change run (16)**

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New Authorization for Accessing Routines

For display and change of routines, the authorization is mapped to the SAP NetWeaver authorization object S_DEVELOP.

- **Required field assignments:**
  - **Activity; display (03), change (02)**
- **Package:**
  - **BWROUT_UPDR: Routines for update rules**
  - **BWROUT_ISTS: Routines for transfer rules**
  - **BWROUT_IOBJ: Routines for InfoObjects**
  - **BWROUT_TRFN: Routines for transformations**
  - **BWROUT_ISIP: Routines for InfoPackages**
  - **BWROUT_DTPA: Routines for DTPs**
  - **Or BWROUT_* for all routines**
- **Object name: GP***
- **Object type: PROG**
- **Authorization group: $BWROUT**

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New Authorization Objects and Role Template

New Role Templates:

- **S_RS_NEW_NW04S: New authorizations for SAP NetWeaver 2004s**
- **S_DEVELOP (Display/change BI routines)**
- **S_RS_ADMWB (Install Business Content, manage Content, Drag&Drop to InfoAreas and application components, execute attribute change run)**
- **S_RS_PC (all)**
- **S_RS_OHDEST (all)**

Changed Role Templates:

- **Existing authorization templates were enhanced with new authorization objects.**
- **Deleted role templates: None**

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New in Authorization Objects, Front-End (3.0)

S_RS_COMP

- New Authorizations Check for Variables in Query Definition
- Object type is ‘VAR’

S_RS_COMP1

- Is checked additionally with S_RS_COMP
- Checks for authorizations on query components dependent on the owner (creator RSZOWNER)
- Authorizations are necessary, e.g., for creating queries

S_RS_FOLD

- Suppress InfoArea view of BEx elements
- Specify ‘X’ (true) in the authorization maintenance for suppressing

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New Authorization Objects, Backend (3.0)

S_RS_IOBJ

- Authorization object for working with InfoObjects
- Is checked if authorization is not available via S_RS_ADMWB
- Additional checks for update rule authorizations

S_RS_ISET

- For displaying / maintaining InfoSets (new object in BW)

S_RFC

- Authorization for GUI activities
- Add following RFC_NAMEs with RFC_TYPE ‚FUGR‘ and ACTVT ‚16‘
  - RRXWS: BW Web Interface
  - RS_PERS_BOD: Personalization of Bex Open Dialog
  - RSMENU: Roles and Menus

S_GUI

- Authorization for GUI activities. Add the activity 60 (upload)

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