## SAP Governance, Risk & Compliance Access Control 5.3

## Post-Installation → Superuser Privilege Management



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We belong to the GRC Regional Implementation Group (RIG) located in USA, Germany and India

> As recognized experts, our mission is to enable others to successfully implement SAP GRC solutions.

- > We ensure:
  - high-adoption rates,
  - > 100% customer satisfaction, and customer references.
- > We are committed to continuous improvement of GRC products and services

#### **RIG Installation Methodology**

> We recommend the following installation methodology

- 1. Install SAP Netweaver AS JAVA 7.0 SP12+
- 2. Run Pre-Installation Flash Movie
- 3. Deploy Access Control Software (including latest Support Packages)
- 4. Run Post-Installation Flash Movies
  - a. Post-Installation Risk Analysis and Remediation
  - b. Post-Installation Superuser Privilege Management
  - c. Post-Installation Compliant User Provisioning
  - d. Post-Installation Enterprise Role Management
- 5. Start Customizing Access Control 5.3 according to customer requirements

#### Post-Installation Activities Overview - Superuser Privilege Management -

- Step 1: Configure SPM in each backend
  - 1. Create RFC Destination in SM59
  - 2. Schedule Periodic BG Job for Log Report
  - 3. Create Users
  - 4. Configure SPM Configuration Table
  - 5. Create Reason Codes
  - 6. Convert User IDs into Firefighter IDs
  - 7. Assign Firefighter IDs to Owners
  - 8. Assign Firefighter IDs to Firefighter
  - 9. Assign Firefighter IDs to Controler
  - 10. Test SPM in SAP Backend System
  - 11. Test Log Report in Backend System
- Step 2: Configure SPM Frontend Reporting in AC5.3
  - 12. Create SPM Administrator UME Role
  - 13. Create JCO in NW for SLD Integration
  - 14. Create System Connector in SPM Java Frontend
  - 15. Test SPM Frontend Reporting
- Step 3: Configure SoD Reporting
  - 16. Change system connector settings in RAR
  - 17. Start SAP Adapter in RAR
  - 18. Create TCP/IP RFC Destination
  - 19. Configure Risk Terminator
  - 20. Add Connector ID to SPM Configuration
- © SAP 2007 / Page 4 Test SoD Reporting in the SPM Frontend



## 1 - Create RFC Destination in SM59



- Create an RFC destination (ABAP Connection)
- > You don't need to enter any data into the Logon & Security tab

RFC	Desti	nation	FF_	RFC	

Remote Logon C	onnection Test 🛛 Unicode Test 🦻		
RFC Destination	FF_RFC	]	
Connection Type	3 ABAP Connection	Description	
Description			
Description 1	RFC Destination for FF		
Description 2			
Description 3			
Administration	🖊 Technical Settings 🚽 🖉 Logon & Security 🏻	MDMP & Unicode 🚺 Specia	al Options
Target System Sett	ings		
Load Balancing S	tatus		
Load Balancing	_OYes		
Target Host		System Number	
Save to Database	as		
Save as	O Hostname O IP Address		
	/		
Gateway Options	· 		R
Gateway Host		Delete	
Gateway service			

## 2 – Schedule Periodic BG Job for Log Report



Schedule in transaction SM36 a job to run the ABAP report /VIRSA/ZVFATBAK hourly. This report generates the SPM log report.

Start condition       Step       Job details       Predecessor job       Successor job       Successor job         General data       Job name       /VIRSA/ZVFATBAK       Job class       Soccessor       Status       Released         Status       Released       Exec. Target       Spool list recipient         Job start       Job frequency       Hourly         Start date       13.04.2007       16:46:51	Change Job /VIRSA/ZVFATBAK									
General data         Job name       /VIRSA/ZVFATBAK         Job class       C         Status       Released         Exec. Target       Spool list recipient         Job start       Job frequency         Image: Date       Time         Start date       13.04.2007         Image: Date       Image: Date         Image: Date <td>🔊 Start condition</td> <td>Step</td> <td>🕄 Job</td> <td>details</td> <td></td> <td>Pred</td> <td>ecessor job</td> <td>₿</td> <td>Successor job 🏅</td>	🔊 Start condition	Step	🕄 Job	details		Pred	ecessor job	₿	Successor job 🏅	
Job name //VIRSA/ZVFATBAK Job class C Status Released Exec. Target Spool list recipient Job start Job frequency Hourly Start date 13.04.2007 16:46:51	General data									
Job class       Co         Status       Released         Exec. Target       Spool list recipient         Job start       Job frequency         Date       Time         Start date       13.04.2007         Image: Contract of the start date       Image: Contract of the start of the start date	Job name	/VIRSA/ZV	FATBAK							
Status       Released         Exec. Target       Spool list recipient         Job start       Job frequency         Date       Time         Start date       13.04.2007       16:46:51         Image: Start date       Image: Start date       Image: Start date	Job class	C 🕒								
Exec. Target     Spool list recipient       Job start     Job frequency       Date     Time       Start date     13.04.2007       16:46:51     Image: Comparison of the start date	Status	Released								
Job start           Date         Time           Start date         13.04.2007         16:46:51	Exec. Target						Spool list	recip	ient	
Date         Time         Hourly           Start date         13.04.2007         16:46:51	Job start						Job frequenc	у /		
Start date         13.04.2007         16:46:51		Date		Time			Hourly			
	Start date	13.04.	2007	16:46:	51					

#### Job steps

0000000001 -Steps successfully defined

#### 3 – Create Users



- Create the following users:
  - > SPM Administrator → Role: /VIRSA/Z\_VFAT\_ADMINISTRATOR
    - Configuration of Firefighter
    - > Assign Owners and Controllers to Firefighter IDs
    - Maintain Security Tables, which requires the knowledge of the passwords of the FireFighterIDs
    - > Access to the *Tool Box* containing a number of reports.
  - > Owner → /VIRSA/Z\_VFAT\_ID\_OWNER
    - > Assign *FireFighterIDs* to *Firefighters*
    - > Assign *Controllers* to *FirefighterIDs* they own
  - Controler → /VIRSA/Z\_VFAT\_ID\_OWNER (but with objects GRCFF\_0001 & S TABU DIS restricted display only!)
    - > Check the log report entries the FireFighterIDs they were assigned to.
    - > Optionally receive email notifications when a FireFighterID is used.
  - Firefighter ID → Superuser roles (SAP\_ALL or "<Module>\_ALL" or other critical roles)
    - > Emergency / Superuser ID activated via SPM
  - ≻ Firefighter → /VIRSA/Z\_VFAT\_FIREFIGHTER
    - > Regular end user with access to a Firefighter ID in SPM.

## 4 – Configure SPM Configuration Table



#### Logon as SPM Administrator and start transaction /VIRSA/VFAT

#### Superuser Privilege Management

🛐 🔄 🎾 Owners 🖤 Firefighters 🦅 Controllers 🦅 Security 🖤 Reason Code 🦻 Configuration 🖤 Critical Tcodes 😱

#### > In SPM Configuration Table make the following entries Change View "Configuration": Overview

🎾 New Entries 咱 🛃 🐼 🛃 🖪 Configuration FF Config. Parameter FF Config Parameter Value 🔨 🛅 YES Retrieve Change Log YES Firefighter Owner Additional Authorization TES YES Firefighter Controller Additional Authorization 🛅 NO Send Log Report Execution Notification Immediately Send Log Report Execution Notification 🛅 NO 🛅 NO Send Firefighter Login Notification Immediately Send FirefightId Login Notification 🗈 NO Remote Function Call

> Owner Additional Auth. Setting: Ensures that owners can only manage Firefighter IDs they own.

> Controler Additional Auth. Setting: Ensures that controlers can only access log reports of Firefighter IDs they were assigned to.

> Change notification settings, if you want to use email notifications





Logon as SPM Administrator and click in transaction /VIRSA/VFAT on the "Reason Code" button

Superuser Privilege Management							
🛐 🔄 🎾 Owners 🦅 Firefighters 🖤 Controllers 🖤 Security	🌮 Reason Code	🌮 Configuration 🦻 Critical Tcodes 류	З				

> Then create reason codes which Firefighters will have to select from upon activation of Firefighter IDs that were granted to them.

Change View "Reason Codes": Overview

ĺ	🦻 New Entries 🗈 🔜 🔊 🛃 🖪									
į										
	Reason Codes									
		Reason Codes	Description	Active		]				
	$\square$	HELP DESK TICKET	HELP DESK TICKET	Active 🛛		]				
		MONTH END CLOSE	MONTH END CLOSE	Active 🛛	•	]				
		OPEN CLIENT	OPEN CLIENT	Active 🛛		1				
		SYSTEM OUTAGE	SYSTEM OUTAGE	Active 🛛		l				
						I				

#### 6 – Convert User IDs into Firefighter IDs: Maintain the Security Table and Apply SAP Note

Logon as SPM Administrator and click in transaction /VIRSA/VFAT on the "Security" button

Superuser Privilege Management						
🛐 🗟 🎾 Owners 🦻 Firefighters 🦻 Controllers	🌮 Security	🛿 🖉 Reason Code 🦅 Configuration 🦅 Critical Tcodes 🛱	;			

> Then enter the user IDs and their passwords you want to convert into Firefighter IDs. The password will be hashed immediatly. Only Administrators have access to the security table.

New Entries: Overview of Added E	New Entries: Overview of Added Entries				
Security	Security				
Firefight Id Password	Comments		Firefight Id	Password	Corr
AC_ADMIN difficult_password	new Firefighter ID		AC_ADMIN	<iqh#s1_%-,plx0msx7ae%?{qi.hazwqg.wk%:^y< td=""><td>NEW</td></iqh#s1_%-,plx0msx7ae%?{qi.hazwqg.wk%:^y<>	NEW
					1

> If you implement SAP note 992200, then Firefighter IDs can't logon anymore with their password, but can be accessed only via activation in /VIRSA/ZVFAT

## 7 – Assign Firefighter IDs to Owners



Logon as SPM Administrator and click in transaction /VIRSA/VFAT on the "Owners" button

Superuser Privilege Management							
🛐 🖻 💅 Owners	🦻 Firefighters 💖 Controllers 🦻 Security 🦻 Reason Code 🦻 Configuration 🦻 Critical Tcodes 류						

> Then assign to each Firefighter ID one or multiple (new in AC5.3) Owners

0	Change View "Owners": Overview							
6	🦻 New Entries 🗈 🔂 🖪 🖪							
	Owners							
	Firefight ID	Firefight ID Owner	Description	Comments				
	AC_FF_ID	G_FF_OWNER						
	FF_CHECKS	FWILSON						
	FF_FINANCE	CPERKINS						
	FF_VENDORS	FWILSON						

## 8 – Assign Firefighter IDs to Firefighter



Logon as Owner (or Administrator) and click in transaction /VIRSA/VFAT on the "Firefighter" button

Superuser Privilege Management								
🛐 🛃 🎾 Owners	🦻 Firefighters	🤣 Controllers 🦅 Security 🦅 Reason Code 🦅 Configuration 💯 Critical Tcodes 😱						

#### > Then assign Firefighter IDs to Firefighters (end users with access to SPN)

Cha	Change View "Firefighters": Overview									
🦅 N	🦻 New Entries 👔 🚍 🐼 🕃 🖪									
Firefi	Firefighters									
Firefi	ight ID	Firefighter	Valid From	Valid To	Comments					
AC_F	F_ID	☐_FF	01.05.2008	01.01.2099						
FF_C	HECKS	FRITSCHE	20.02.2005	31.12.9999						
FF_C	HECKS	MWONG	31.12.2005	31.12.9999						
FF_F	INANCE	BJONES	31.12.2005	31.12.9999						
FF_V	ENDORS	FRITSCHE	20.02.2005	31.12.9999						
FF_V	ENDORS	JTRAN	31.12.2005	31.12.9999						
FF_V	ENDORS	MWONG	31.12.2005	31.12.9999						

## 9 – Assign Firefighter IDs to Controllers



Logon as Owner (or Administrator) and click in transaction /VIRSA/VFAT on the "Controllers" button

Superuser Privilege Management								
🛐 🚅 💅 Owners 💅 Firefighters	🖗 Controllers	🌮 Security	🌮 Reason Code	🌮 Configuration	💖 Critical Tcodes 류			

> Then assign Firefighter IDs to Controllers. This allows Owners to delegate the monitoring or auditing of Firefighter activities to Controllers.

	Change Viev	v "Controllers":	Overview	
	🌮 New Entries	• 🖬 🗠 🖪 🖪		
Г	Controllers			
	Controllers			
	Firefight ID	FF ID Controller	Usage Flag Information	Comments
Γ	AC_FF_ID	AC_FF_CONTR	Workflow 🖺	
	FF_FINANCE	CPERKINS	Email 🔳	
	FF_FINANCE	FWILSON	Email 🔳	l
	FF_FI_CLOSE	CPERKINS	Email 🔳	
	FF_VENDORS	FWILSON	Email 🔳	
			1	

### 10 – Test SPM in SAP Backend System (1/2)



#### Logon as Firefighter and start transaction /VIRSA/VFAT

#### Superuser Privilege Management

Winer 🖓 Owner	rs 79 Firefighters 79 (	Controllers 7 Security 7 Reas	on Code   🏏 Configuration   🦅 Critical Tcodes   🕸
Firefighter ID	Firefighter ID Owner	Status Description	FF ID Used By Message to Log on usi
AC_FF_ID	AC_FF_OWNER		Message Log on

> As long as the status is green the Firefighter ID is not in use and you can logon with it.

#### 10 – Test SPM in SAP Backend System (2/2)



Provide reason code and list actions (free text) you want to perform for later reference. Note that the status has turned red. This means that the Firefighter ID is not available for no one else as of this point in time.

Firefighter ID	Firefighter ID Owner Status Description	FF ID Used By Me	essage to Log on using FFID			
AC_FF_ID	AC_FF_OWNER	AC_FF	lessage Log on			
	🔄 Superuser Privilege Management					
	Please enter the reason for using this access		SAP			
	Reason Codes SYSTEM OUTAGE	<b>E</b> 1				
	check system setting	gs	Start SAP E	ay Access		
	Please enter the actions that you anticipate to p	erform				
	Please enter the actions that you anticipate to p	su01		Firefight	er ID logged	on!

#### 11 - Test Log Report in Backend System



Logon as Controler (or Administrator) and click in transaction /VIRSA/VFAT on the "Log Report" icon. Make sure that the bg job in (2) has run in the meantime!

#### Superuser Privilege Management

🛐 🔄 🎾 Owners 💖 Firefighters 💖 Controllers 🢖 Security 💖 Reason Code 💖 Configuration 💖 Critical Tcodes 😱

After you made your selection the log report appears. It should list all relevant details as displayed below: Firefighter, Firefighter ID, logon time stamp, transaction or report name and details of change documents, if created by SAP system.

Log Report										
									🖙 Log Report	∠
Download 🗟 🚖									Please enter the rea	ison for using this access
FFID Owner	Firefighter 1	ID Firefighter	Session	n Date	Session	Time	Reason	Code	Reason Code	HELP DESK TICKET
Date Teodo Tino	lime S	Gerver Name	Ina	ansact	10n	Repor	t Name	Re		New in AC5 3: Reason
ICOde IIme	Change Vocume	ent	Taple	F1	ela lext	Ula	value			Code Departingl
	AC EE ID	00 EE	02.05.1	0000	10.05.10		OVOTEN	OUTAGE		Code Reporting!
	AC_FF_ID	AC_FF	02.00.2	0000	10.20.12		CVCTDM			
GET AC EE OWNER	AC_FF_ID	AC_FF	02.05.2	2008	15:42:05		MONT	END CLOSE		
GED AC FE OWNER	AC FE ID	AC FE	02.05.2	2000	14:33:24		HELPD	ESK TICKET		
□ AC FE OWNER	AC FE ID	AC FF	06 05 2	2008	15:22:27	•	HELPD	ESK TICKET		
□ 06.05.2008	15:22:42 c	dcxtdc00 DCX 50				RFC			Please enter the act	ions that you anticipate to perform.
□ 06.05.2008	15:22:47 0	dcxtdc00 DCX 50	SUG	91		RFC		Us		
15:23:55	BC01000006219	930000008322	ADR2			New	record	Created.		SU01 - add a role
15:23:55	BC01000006219	930000008322	ADRP	La	nguage Key	,				
15:23:55	BC01000006219	930000008322	ADRP	Fi	rst name	Fra	nk			
15:23:55	BC01000006219	930000008322	ADRU			New	record	Created.		
15:23:55	D029517									
										<u>د</u>

### 12 – Create SPM Administrator UME Role (1/2)



> Step 2 starts now: Configure SPM Frontend Reporting in AC5.3

> In UME of AC5.3 application server create a UME Role for SPM administrators and assign all UME Actions of Service / Application "FF" that were shipped by SAP

and managenerical (might)   Consisting Consistin	elcome Adn	in Access Controls	Check			Help Log	I Off SAP
Select All Deselect All	Dele eueeee	effent Consistency	Check				
Search Criteria Role V All Data Sources Carlos Carl	earch	siully created					
Search Criteria Role VII Data Sources Go Select All Deselect All Create Role Delete Export Type Name	earch						
Select All Deselect All Create Role Delete Export           Type         Name         Description         Data Source           PF_ADMIN         Admin Role for AC63 FireFighter         UME Database           Main         Row Tof 1         Description         Description           Row Tof 1         Description         Description         Description           Etails of Role FF_ADMIN         Admin Role for AC63 FireFighter         UME Database           Etails of Role FF_ADMIN         Etails of Role FF_ADMIN         Etails of Role FF_ADMIN           Storify         Conformation         Assigned Users         Assigned Actions         User Mapping for System Access         Conformation           Main         PF         ReasonActivityReport         Conformation         PF         ReasonActivityReport           WIME         FF         PF         TranUsageReport         PF           WIME         FF         ViewConfigurationTab         PF           Wim< Inf 11	Search Crite	eria Role 👻 All Data Sources 👻	Go				
Select All Deselect All Deselect All Deservice Admin Role for ACS3 FireFighter       Data Source         Image: Select All Deselect All Control of the select and the	Select All	eselect All Create Pole Delete Evpo	rt				
Type Name <ul> <li>Description</li> <li>Data Source</li> <li>Admin Role for AC53 FireFighter</li> <li>UME Database</li> </ul> FF ADMIN Admin Role for AC53 FireFighter UME Database Etails of Role FF_ADMIN Control of 1 Ceneral Information Assigned Actions Assigned Actions UME FF ViewReportSTab ViewReportSTab UME FF ViewReportSTab </th <th>Select All L</th> <th>eselect All [Create Role] Delete Expo</th> <th><u>IL</u></th> <th></th> <th></th> <th></th> <th></th>	Select All L	eselect All [Create Role] Delete Expo	<u>IL</u>				
Image: Application     Image: Application <td>Ту</td> <td>pe Name</td> <td>÷</td> <td>Description</td> <td>₩</td> <td>Data Source</td> <td>± ⊽</td>	Ту	pe Name	÷	Description	₩	Data Source	± ⊽
Actions     Type     Service / Application     VME        FF   ViewReportsTab   Wite   FF   ViewReportsTab   Wite   FF   ViewConfigurationTab   ViewConfigurationTab   ViewConfigurationTab   ViewConfigurationTab   ViewLoft11	8	FF_ADMIN		Admin Role for AC53 FireFighter		UME Database	
Image: Service / Application     Type     Service / Application     Image: Service / Applicati							
Image: Service / Application     Type   * Service / Application   * Name   * UME   * FF   * UME   * FF   * TraNsageReport   * UME   * FF   * UME   * UME   * FF   * OntChangeRoleLogReport							
etails of Role FF_ADMIN     todify     General Information   Assigned Groups   Assigned Actions     User Mapping for System Access     Assigned Actions     UME   FF   Name   UME   FF   UME   FF   ViewReportsTab   UME   FF   ViewConfigurationTab   UME   FF   ConfChangeRoleLogReport							
etails of Role FF_ADMIN  Modify  General Information Assigned Groups Assigned Users Assigned Actions User Mapping for System Access Assigned Actions  Type   Service / Application  FF  UME  FF  KeasonActivityReport  FF  UME  FF  ViewReportSTab  UME  FF  ViewReportSTab  UME  FF  ViewConfigurationTab  G  ViewConfigurationTab  Assigned Yee  Assigned Ye	Z A Ro	w 1 of 1 💌 🗷 🖀					
etails of Role FF_ADMIN Vodify General Information Assigned Groups Assigned Users Assigned Actions User Mapping for System Access Assigned Actions Type   Service / Application   Name							
Modify     General Information     Assigned Groups     Assigned Actions     Assigned Actions     Type     * Service / Application     * Name     * UME   * UME   * UME   * UME   * UME   * UME   * FF   * UME   * UME   * FF   * UME   * UME   * FF   * UME   * UME   * FF   * ConfChangeRoleLogReport	etails of Ro	IE FF ADMIN					
General Information       Assigned Groups       Assigned Users       Assigned Actions       User Mapping for System Access         Assigned Actions       Image: Constraint of the system Access       Image: Constraint of the system Access       Image: Constraint of the system Access         Type	Modify						
General Information       Assigned Groups       Assigned Users       Assigned Actions       Image: Service / Application	woully						
Assigned Actions          Type	General l	nformation Assigned Groups Assigned U	Jsers Assigned Action	S User Mapping for System Access			
Type	Assigned	Actions					
Type <ul> <li>Service / Application</li> <li>Name</li> <li>Name</li> <li>IME</li> <li>FF</li> <li>ReasonActivityReport</li> <li>TranUsageReport</li> <li>UME</li> <li>FF</li> <li>UME</li> <li>FF</li> <li>ViewReportsTab</li> <li>ViewConfigurationTab</li> <li>UME</li> <li>FF</li> <li>ConfChangeRoleLogReport</li> </ul>							
Me     FF     ReasonActivityReport       M     UME     FF     TranUsageReport       M     UME     FF     ViewReportsTab       M     UME     FF     ViewConfigurationTab       M     UME     FF     ConfChangeRoleLogReport	Т	vpe	🗧 Service / Appli	cation 🗢	Name		⇔
UME     FF     TranUsageReprt       UME     FF     ViewReportsTab       UME     FF     ViewConfigurationTab       UME     FF     ConfChangeRoleLogReport	1 m	ME	FF		ReasonActivityReport		
W     UME     FF     ViewReportsTab       W     UME     FF     ViewConfigurationTab       W     UME     FF     ConfChangeRoleLogReport	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ME	FF		TranUsageReport		
Image: Market	1 U	ME	FF		ViewReportsTab		
Image: Second and the second and t	100 D	ME	FF		ViewConfigurationTab		
	2000 - U	ME	FF		ConfChangeRolel ogF	Report	
	망치지	ow 1 of 11 ▼ ≚ ≚					

## 12 - Create SPM Administrator UME Role (2/2)



> Only UME users with roles that contain "FF" UME Actions will find an active link to Superuser Privilege Management in the Launchpad!



# 13 - Create JCO in NW for SLD Integration → Destination Name = RAR Connector ID

> Go http://<server>:<port>  $\rightarrow$  Web Dynpro  $\rightarrow$  Content Administrator

SAP NetWeaver" Web Dynpro Content Adm	assigned SLD Check SLD Connection		H					
· · · · · · · · · · · · · · · · · · ·	JCo Destination Details							
Browse Search	Define Source All	Create						Close
Refresh Enable all	Name ≑	Status ≑		17. 	1			
✓ Deployed Content	VIRSAHR_01_METADATA	<b>X</b>	Create					Remove
▶ sap.com	VIRSAHR_01_MODEL		Create	Preview	Edit	Test	Ping	Remove

Click on Create JCo Destination and use as Destination Name the Connector ID you're using in RAR (Field "System") for the same SAP backend system. Also set correct JCo Pool parameters

ate JCo Destination Maintain JCo Destinations	art assigned SLD Check SLD Connection	
Browse Search	Create new JCo Destination	
tefresh Enable all ▶ Deployed Content ▶ sap.com ▶ System Defined Content	Ceneral Data J2EE Cluster Connection Type Ap Define the name and the maximal pool size of the JCO connection. Optionally you can create the new JCo destination as a copy of a e	4.1 4.2 5 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
	Please make sure that the new JCo destination name is no	t an extension of an existing one (like "Test" and "Test1")
	Please make sure that the new JCo destination name is no Destination Name	t an extension of an existing one (like "Test" and "Test1") JCo Pool Configuration
	Please make sure that the new JCo destination name is no Destination Name Name: AR1 Client: 001 Copy ft from an existing JCo destination	At an extension of an existing one (like "Test" and "Test1")  JCo Pool Configuration  Maximal Pool Size : 50  Maximum Connections: 100  Connection Timeout (msec.): 100000

# 13 - Create JCO in NW for SLD Integration → Connection Type = Application Data

> Confirm the next screen with Next, then select Application Data and click Next

SAP NetWeaver" Web Dynpro Content Admin	nistrator						
Create JCo Destination   Maintain JCo Destinations   Start a	ssigned SLD Check SLD Connection						
Browse     Search	Create new JCo Destination	3 Connection Type o destination should be is default. In some case g-03"	4.1 Appl. Server Connection assigned. as it might be useful to define	4.2 Msg. Server Connection the JCo destination for anoth	5 Security er J2EE cluster.	6 Summary	

Create JCo Destination Maintain JCo Destinations	Start assigned SLD Check SLD Connection	
Browse Search   Refresh Enable all  Deployed Content	Create new JCo Destination	4.1 4.2 5 6 ver Connection Security Summary
<ul> <li>▶ sap.com</li> <li>▶ System Defined Content</li> </ul>	Data Type         Define the type of data you want to read using the JCo destination.         C Dictionary Meta Data         Application Data	Destination Type         Define whether or not you want a load-balanced access.         Note: This is only possible for destinations used to read application data.         (• Load-balanced Connection (recommended)         C Single Server Connection (should be used only for debugging)

# 13 - Create JCO in NW for SLD Integration → Connection Type = Application Data



Choose Message Server and Logon Group

SAP Router Strings can be configured here as well. This may be required in outsourcing scenarios where AC Java Frontend and SAP Backends belong to different networks.

SAP NetWeaver" Web Dynpro Content Admi	nistrator
Create JCo Destination Maintain JCo Destinations	assigned SLD Check SLD Connection
Browse Search	Create new JCo Destination

### 13 - Create JCO in NW for SLD Integration → Security Settings



Provide userID and password of RFC user you have already created for RAR in the backend.

SNC encryption (transport layer) can be activated here, too. This may be required for high security environments where all communication between AC Java Frontend and SAP Backend has to be encrypted (for example for CUP password transmission). For more details refer to SAP Netweaver Documentation.

SAP NetWeaver <sup>*</sup> Web Dynpro Content Admin	nistrator			
Create JCo Destination Maintain JCo Destinations Start a	ssigned SLD Check SLD Connection			
Browse Search	Create new JCo Destination	Appl. Server Connection      (optionally) the parameters needed for a se  and (optionally) the parameters needed	4.2 Msg. Server Connection cure network communication (3	5 6 Security Summary SNC).
	User Authentication	Secure Ne	twork Connection (SNC)	
	Used Method: User / Password Name: webuser Password: •••••• Crytirm Password: •••••• Language: English	SNC Mode: SNC Partne SNC Secur SNC Name: SNC Librar	r Name:	

### 13 - Create JCO in NW for SLD Integration → Finish & Test



> Click on *Finish*. It is always a good idea to test the connection!

ate JCo Destination Maintain JCo Destinations	Start assigned SLD Check SLD Connection							
Browse Search	Create new JCo Destination							
terresh Enable all ✓ Deployed Content → sap.com → System Defined Content	1     2     3       General Data     J2EE Cluster     Connection 1       You defined the following JCO connection:     General       General     Security     Connection	4.1 Type Appl. Server Connection	4.2 n Msg. Server Con	nection Security	6 Summar	<b>y</b>		
	General Data	JC	to Pool Configuration	1				
	Name: AR1	Ма	aximum Pool Size:		50			
	Client: 001	Ма	ximum Connections:		100			
	J2EE Cluster Name: JA1 on grc-rig-03	Co	nnection Timeout (msec	c.):	10,000			
		Ma	aximum Waiting Time (m:	sec.):	30,000			
	Previous     Not     Finish     Cancel							
SAP NetWeaver Web Dynpro Contel	Previous     Finish     Cancel     Cancel     Cancel     Start assigned SLD     Check SLD Connection							
SAP NetWeaver Web Dynpro Conter ate JCo Destination								
SAP NetWeaver" Web Dynpro Conter ate JCo Destination Browse Search		▼ Create	H					Close
SAP NetWeaver <sup>*</sup> Web Dynpro Conter ate JCo Destination Maintain JCo Destination Browse Search Refresh Enable all		▼ Create Status ≑						Close
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SAP NetWeaver     Web Dynpro Contel      ate JCo Destination     Maintain JCo Destination      Browse Search      Refresh Enable all      Deployed Content      sap.com     System Defined Content		▼ Create Status ≑ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Create Create Create Create Create Create	Preview Preview Preview Preview Preview Preview Preview	Edit Edit Edit Edit Edit Edit		Ping Ping Ping Ping Ping Ping Ping	Close  Remove Re
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## 14 – Create System Connector in SPM Java Frontend



> Create a system connector in SPM  $\rightarrow$  Configuration  $\rightarrow$  Connectors  $\rightarrow$  Create and select SLD connector from list.

SAP	SAP GRC Access Control Superuser Privilege Management			SAP NetWeaver	
Reports Configuration		Welcome Frank Rambo <u>Help</u>	About Log Off		
▶↑	Create Connector				
Connectors	Connector ID: Description: Application Server: System Number: Client: User ID: Password: Create SLD Connector: Search SLD Connector AR1 VIRSAXSR3_01_MODEL Treate Connector				
0	oppertor ID:	AR1 001			
	escription:	AR1_001			
	nnliesten Server				
A	usten Number	00			
5)	ystem ruumper.	001			
Us	ser ID:	webuser			
Pa	assword:	•••••			
SL	LD Connector:	$\checkmark$			
	Create				
SAP 2007 / Page					

### 15 - Test SPM Frontend Reporting



#### > Test the access to the SPM reports generated in each of your backend systems

SAP	SAP GRC Access Co Superuser Privilege Manage	<b>ntrol</b> ement	We	lcome Frank Rambo	<u>Help</u> Abo	ut Log Off	SAP NatWeaver		
Reports Configuration									
<u>†4</u>	Log Report								
User Reports     Role Reports     Change Log	System : AR1_001 Reason Code : All Firefighter ID : All Firefighter ID Owner : All Firefighter : All Date : All Time : All Transaction : All			Click	here fo	or details	<mark>(chang</mark> e	e document	s)
	Firefighter ID: FFID Session Date: 6/17/08	Firefighter: 1040302 Session Time: 20:50:00	Firefig Reasor	nter ID Owner: FFOWNER Code: HELP DESK TICKET					
	Transaction	Report Name	Server	Date	Time				
	SMEN	SAPLSMTR_NAVIGATION	grc-rig-03_AR1_00	6/17/08	20:53:05				
	Firefighter ID: FFID Session Date: 6/17/08	Firefighter: 1040302 Session Time: 22:29:02	Firefig Reasor	ter ID Owner: FFOWNER					
	Transaction	Report Name	Server	Date	Time				
	SMEN	SAPLSMTR_NAVIGATION	grc-rig-03_AR1_00	6/17/08	22:29:46				
	PFCG	SAPLPRGN_TREE	grc-rig-03_AR1_00	6/17/08	22:33:07				
	SU01	RSM13000	grc-rig-03_AR1_00	6/17/08	22:34:32				
	SESSION_MANAGER	SAPLSMTR_NAVIGATION	grc-rig-03_AR1_00	12/10/07	13:38:21				
	MIRSAMFAT	MIRSA/ZVFAT	grc-rig-03_AR1_00	12/10/07	13:38:23				
	Firefighter ID: FFID1 Session Date: 7/9/08	Firefighter: AC_ADMIN Session Time: 03:29:40	Firefigl Reasor	nter ID Owner: D029517 Code: HELP DESK TICKET					
	Transaction	Report Name	Server	Date	Time				
	SU01	SAPMSUUO	grc-rig-03_AR1_00	7/9/08	03:29:57				
	Firefighter ID: FFID1 Session Date: 7/9/08	Firefighter: AC_ADMIN Session Time: 04:32:25	Firefigl Reasor	nter ID Owner: D029517 Code: MONTH END CLOSE					
	Transaction	Report Name	Server	Date	Time				
	SU01	SAPMSUUO	grc-rig-03_AR1_00	7/9/08	04:32:46				
	PFCG	SAPLPRGN_TREE	grc-rig-03_AR1_00	7/9/08	04:33:00				
	Firefighter ID: FFID1 Session Date: 7/9/08	Firefighter: AC_ADMIN Session Time: 05:30:15	Firefigl Reasor	ter ID Owner: D029517 Code: SYSTEM OUTAGE	←Clic	k here fo	r reasor	n code repo	rtina
	Transaction	Report Name	Server	Date	Time				
	SU01	SAPMSUUO	grc-rig-03_AR1_00	7/9/08	05:30:19				
	H No. of	Rows per Page: 10							

## 16 - Change system connector settings in RAR



Step 3 starts now: Configure SoD Reporting for SPM as explained in SAP notes 1055976 and 1060673.

> In RAR → Configuration → Connectors add / change for each backend connector settings as displayed below

In some instances usage of Risk Terminator comes up with an error unless a specific naming for *Report Name* & corresponding RFC destination (Task 17) is used as documented in SAP Note 1145048. The report name *BDEFHIJKLM* has been chosen arbitrarily and should be chosen differently for each backend system your are connecting to.

SAP Risk	GRC Access Control Analysis and Remediation Mitigation Alert Monitor Configuration	Welcome Frank Rambo	Help About Logoff
	Change Connector		C
Deradit Values     Performance Tuning     Additional Options     Mitigating Controls     Workflow     Miscellaneous     MiC User Mappings     MiC Risk Mappings     Connectors     Create     Search     Logical Systems     Cross Systems     Data Extraction     Master User Source     User Mapping	System: * System Name: * System Type: Connection Type: JCO Destination: * SAP Gateway: Report Name: Outbound Connection: Unicode System: Save	AR1 AR1 ECC6 SAP Adaptive RFC grc-rig-03_AR1_001 sapgw00 BDEFHIJKLM	

#### 17 – Start SAP Adapters for each SAP Backend

#### > Click on the grey diamond icon to start SAP Adapter

SAP Risk Ar	GRC Acc nalysis and Mitigation Ale	Remediation	rol	Welcome Fran	k Rambo	I	Help About Lo	ogoff	
<ul> <li>Risk Analysis</li> <li>Default Values</li> </ul>	SAP Adapt	ter Servers							
Performance Tuning	SAP Sy	/stem	Host Name		Gateway	1	Program ID		
Additional Options	AR1 EC	006	grc-rig-03		sapgw00	1	BDEFHIJKLM		
<ul> <li>Mitigating Controls</li> <li>Workflow</li> </ul>									
Miscellaneous		SAP Adapter	Servers						
MIC Risk Mappings		SAP System	n	Host Name		Gateway		Program ID	
Connectors		AR1 ECCS	"	are ria 03		senaw00		BDEEHUKI M	
Create				grc-ng-05		sapgwoo		BDEI HIOREM	
• Search									
Logical Systems									
Cross Systems									
Data Extraction	Common Streemen								
Master User Source	AAA								
User Mapping									
Unload Objects									
Rule Upload									
Backend Sync									
Background Job									
Organizational User Mapping		Row 1	of 1 💌 🗵 🖺						
Custom Tabs									
SAP Adapter ▶ Utilities									

## 18 – Create TCP/IP RFC Destination in each SAP Backend and Test Connection



> In SM59 create a RFC connection of type TCP/IP and enter as Program ID BDEFHIJKLM. Then perform a connection test.

RFC Destination AR1GRCCONN	
Connection Test Unicode Test 🏏	
RFC Destination AR1GRCCONN Connection Type T TCP/IF Connection Description	
Description	
Description 1 RFC Destination for Risk Terreinator & SPM SoD Reporting	
Description 2	
Description 3	
Administration Tachnical Settings Logon & Security MDMP & Usuada Specia	PEC - Connection Test
Administration reclinical detungs Logon & decumy wown & onit, the operation	
Activation Type /	
◯ Start on Application Server	
O Start on Explicit Host	Connection Test FF_RISK_TERM
	Connection Type TCP/IP Connection
Registered Server Program	Action Result
Program ID BDEFHIJKLM	Logon 118 msec
	Transfer of 0 KB 15 msec
Start Type of External Program	Transfer of 10 KB 16 msec
Default Gateway Value	Transfer of 20 KB 21 msec
O Bomate Execution	Transfer of 30 KB 18 msec
O Remote Chell	
O Secure Shell	
CPI-C Timeout	
O Default Gateway Value	
Specify Timeout     20     Defined Value in Seconds	
Gateway Options	
Gateway Host	
Delete	
Gateway service sandw00	
Gateway service sapgw00	

## 19 – Configure Risk Terminator in each SAP Backend



Start transaction /VIRSA/ZRTCNFG and enter the name of the RFC connection created in (17). Also select "CC5X" as CC release to be used

Risk Terminator Configuration	
Select the CC release to be used	CC5X 🗈
RFC destination for release CC5.X	AR1GRCCONN
PFCG Plug in(YES/NO)	No 🖹
PFCG User Assignment Plug-In(YES/NO)	No 🖹
SU01 Role Assignment Plug-In(YES/NO)	No 🖺
SU10 Multiple-user Role Assignment Plug-In(YES/NO)	No
Stop generation if violations exist	No
Comments are required in case of violations	
Send notification in case of violations	No 🖺
Default analysis level Object Level Analysis	
Save Cancel	

## 20 – Add Connector ID to SPM Configuration

#### Logon as SPM Administrator and start transaction /VIRSA/VFAT

#### Superuser Privilege Management

6	3	🌮 Owners	🌮 Firefighters	🎾 Controllers	🦅 Security	🎾 Reason Code	🎾 Configuration	🕎 Critical Tcodes 🔤
		-						

> In SPM Configuration Table make the following additional entry

6	2 2 8 8 8			
	Configuration			
	Parameter	Value	Comment 📑	
	SYSKEY Connector Id for Risk 🛅	AR1  Υ		
	<b>R</b>	*	<b>•</b>	

> Make sure that the Connector ID coincides with the field "System" defined as connector in RAR.

SAP SAP	GRC Acces Analysis and Ren	s Control nediation	Welcome Frank Rambo	Help About Logoff	SAP NetWeaver
Informer Rule Architect	Mitigation Alert Mo	nitor Configuration			
<ul> <li>Risk Analysis</li> <li>Default Values</li> </ul>	Connectors				C
<ul> <li>Performance Tuning</li> </ul>	System	System Name	System Type	Connection Type	
<ul> <li>Additional Options</li> </ul>	AR1	AR1 ECC6	SAP	JCO	
Mitigating Controls     Workflow     Miscellaneous     MIC User Mappings     MIC User Mappings     MIC Risk Mappings     Connectors     Create     Search		\$			

## 21 – Test SoD Reporting in the SPM Frontend



#### > Test SoD Reports in your SPM Frontend



> It should show up as displayed below once you made your selection

	SAP	SAP GRC Access Control Superuser Privilege Management		Welcome Admin Access Controls	<u>Help</u>	About	Logoff
	Reports Configuration	D-D) (shiften - Den ed				1	
	User Reports	Sol violations Report				1	
	Role Reports	System :DCX Firefighter ID Owner :All Firefighter :AC_FF Date :5/6/2008					
		Firefighter:AC_FF	<b>Risk:</b> P008001				
		Transaction		Date			
		FK01		5/6/08			
© S	2007 / 1 000 01	ME21		5/6/08			

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