

SAP Governance, Risk & Compliance

Access Control 5.3 Pre-Installation Slide Deck



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- We belong to the global GRC RIG team 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

- We recommend the following installation methodology
 1. Install SAP Netweaver AS JAVA 7.0 SP12+
 2. Run Pre-Installation Presentation (this presentation)
 3. Deploy Access Control Software (including latest Support Packages)
 4. Run Post-Installation Presentations (also available as Flash Movie)
 - 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

Overview Pre-Installation Activities



1. Check Available Documentation
2. Check Software Download
3. Check NW WebAS Java Version, SP Level and JVM Parameters
4. Check Configuration of System Landscape Directory (SLD)
5. Check Connection from Access Control Server to SLD
6. Check Internet Graphic Server (IGS)
7. Get Familiar with JSPM (Java Support Packet Manager)
8. Which user data source is your UME connected to?
9. Decide on RAR User Master Source
10. Decide on CUP User Data & User Details Data Source
11. Check SP Levels of your SAP Backend Systems
12. Prepare for Backend RTA Installation
13. Plan your System Landscape
14. Complete Customer System Landscape Presentation

1 – Check Available Documentation (1/3)

→ Guides, HowTos & Best Practices



- <https://service.sap.com/instguides> → SAP Solution Extensions → SAP Solutions for GRC → SAP GRC Access Control → SAP GRC Access Control 5.3:
 - Masterguide
 - Installation Guide
 - Upgrade Guide
 - Configuration Guide
 - Operation Guide
 - Security Guide
- [Online Documentation](#) (replaced fromer release User's Guide)
- <http://service.sap.com/releasenotes> → SAP Solutions → SAP GRC Products → SAP GRC Access Control
 - Overview of new features in AC 5.3
- <https://service.sap.com/rkt> → SAP Solutions for GRC → SAP Access Control 5.3
 - Free-of-charge (Ramp-Up customers only) online delta training!
- www.sdn.sap.com/irj/sdn/bpx-grc
 - GRC Best Practice Information
 - GRC How-To Guides (Most of them still on AC 5.2 release level)
- Super User Privilege Management → SoD Reporting: SAP notes 1055976 & 1060673

1 – Check Available Documentation (2/3)

→ The ASAP Approach



ASAP Methodology

- A phased, process oriented methodology
- Designed to streamline implementation projects and to minimize risk
- Rich tool kit of methodology and accelerators

ASAP Roadmaps

- Cover most important aspects and phases of SAP solution implementation
- Can be filtered to reflect specific project type and solution scope
- Provides:
 - A structured list of activities
 - Recommended tools, services and methodologies
 - Developed in the field accelerators such as how-to guides, templates, examples, standards, product information and best practices

ASAP Roadmaps in Implementation Projects

- Project Scoping, Planning and Scheduling for the entire implementation project
- Documentation and accelerators for many SAP solutions not just GRC → ASAP Roadmap can be utilized for implementation of two or more SAP solutions at the same time
- All available documents and accelerators in one location
- Relevant information easy to find through search functions and filters.

1 – Check Available Documentation (3/3)

→ How to get ASAP Roadmaps



- The Roadmaps are delivered in
 - **the SAP Solution Manager** or can be found on
 - **SAP Service Marketplace**.
- For **GRC Solutions** the ASAP Implementation Roadmap is available through the **GRC RIG** until the next release of the ASAP Implementation Roadmap (end of Q3 2008).

2 – Check Software Download (1/2)



- The SAP GRC Access Control Software can be downloaded from SAP Service Market Place (SMP): <https://service.sap.com/swdc>
- Navigate Installation and Upgrades → Entry by Application Group → SAP Solutions for GRC → SAP GRC Access Control → SAP GRC ACCESS CONTROL → SAP GRC ACCESS CONTROL 5.3 → <OS> → <DB>
- The ZIP file contains all software components: Java SCA files and Real Time Agents (RTA) for all available Backend release levels
- In the folder Adapter you'll the Greenlight Adapters for JDE, Oracle and Peoplesoft
- Refer to screen shot on next slide!

2 – Check Software Download (2/2)



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You are here: [MS SQL SERVER](#) [Feedback](#)

Installations and Upgrades

[Installations and Upgrades](#) → [SAP Solutions for Governance, Risk and Compliance](#) → [SAP GRC Access Control](#) → [SAP GRC ACCESS CONTROL](#) → [SAP GRC ACCESS CONTROL 5.3](#)

SAP GRC ACCESS CONTROL 5.3

- **Installation and Upgrade**
 - [AIX](#)
 - [HP-UX](#)
 - [LINUX](#)
 - [OS/400](#)
 - [SOLARIS](#)
 - [WINDOWS](#)
 - [DB2 UDB](#)
 - [INFORMIX](#)
 - [MS SQL SERVER](#)
 - [ORACLE](#)
 - [SAP DB](#)
- [Windows Server](#)
- [z/OS](#)

- **Adapters**
- [AC ADAPTOR FOR JDE 530](#)
- [AC ADAPTOR FOR ORACLE 530](#)
- [AC ADAPTOR FOR PEOPLESOFT 530](#)

Info Page | **Downloads**

SAP GRC ACCESS CONTROL 5.3 -> MS SQL SERVER -> WINDOWS

You can download one or more files by activating the check box on the left and clicking the button "Add to Download Basket". Please [click here for more detailed information](#). Click on to request Side Effects report.

[Add to Download Basket](#) | [Maintain Download Basket](#) | [Select All](#) | [Deselect All](#)

The following objects are available for download:

	File Type	Download Object	Title	Info File	File Size [kb]	Last Changed
<input type="checkbox"/>		51033276	SAP GRC Access Control 5.3	Info	408742	26.03.2008

© SAP Trusted sites

3 – SAP NW AS Java: Check SP Level, Java Version and JVM Performance Parameters (1/2)



- For AC5.3 a SAP NW AS 7.0 SP12 or higher is required
- If you are using MS SQL Server, please check SAP note 1158625 and apply the patch.
- Here is where you find the Patch for SAP J2EE EngineCore 7.00:

<https://service.sap.com/swdc> → Support Packages and Patches → SAP NetWeaver → SAP NETWEAVER → SAP NETWEAVER 7.0 → Entry by Component → Application Server Java → SAP J2EE Engine Core. Patch 2 includes Patch 1.

□	i	SCA	SAPJEECOR15P_2-10003466.SCA	Patch for SAP J2EE ENGINE CORE 7.00 SP15	2	Info	38926	23.04.2008
---	---	-----	---	--	---	----------------------	-------	------------

- JRE 1.4.2_15 or higher
- JVM Memory / Performance Parameters
 - 723909 - Java VM settings for J2EE 6.40/7.0
 - 1044173 - Recommended NetWeaver Setting for Access Control 5.x
 - 1121978 - Recommended settings to improve performance risk analysis

3 - SAP NW AS Java: Check SP Level, Java Version and JVM Performance Parameters (2/2)



SAP J2EE Engine Start Page - Microsoft Internet Explorer
 Address: http://localhost:50000/index.html

http://<server>:<port>

SAP NetWeaver™
 SAP Web Application Server

SAP Library
 SAP Library contains the complete document...

System Information →

System information provides administrators with a view of the system's state. It shows all of the system's instance and component important parameters (such as ports) that may vary between different versions of the components installed.

User Management
 The user management administration console provides the ability to need to manage users, groups, roles, and user permissions (UME). Users without administrator permissions cannot access the system.

SAP NetWeaver Administrator
 A tool for administration and monitoring, offers a graphical view of the NetWeaver system landscape. The SAP NetWeaver Administrator scenario where it is capable of operating an entire SAP NetWeaver Java systems as the application platform of SAP NetWeaver.

IDM System Info - Microsoft Internet Explorer
 Address: http://localhost:50000/sap/monitoring/SystemInfo

System IDM

Find other systems in SLD...

Message Server	Enqueue Server	Database
Host: iwdfvm2450	Host: iwdfvm2450	Name: IDM
Port: 3901	Port: 3201	Host: IWDFFWM2450
		Type: Microsoft SQL Server (Microsoft SQL Server Yukon - 9.00.2047)

Software Components			all components...	Licenses	
Name	Version	Applied		Installation Number	SAP-INTERN
sap.com/SAP-JEECOR	7.00 SP13 (1000.7.00.13.4.20071105140441)	20071218192122		System Number	00000000310679471
sap.com/SAP-JEE	7.00 SP13 (1000.7.00.13.2.20071105140333)	20071218190904		Software Product	Days Until Expiry
				J2EE-Engine_MSS	113

Download system configuration

Instance JC00 All processes running

Host: iwdfvm2450 OS: Windows 2003 (x86) 5.2

dispatcher Running

VM	system properties...	Cluster
PID: 4752		Node ID: 1796900
Name: Java HotSpot(TM) Server VM		Kernel Version: 7.00 PatchLevel 30127.450
Vendor: Sun Microsystems Inc.		HTTP Port: 50000
		HTTPS Port: 50001
		P4 Port: 50004
		Telnet Port: 50008

server0 Running

VM	system properties...	Cluster	Debug
PID: 4760		Node ID: 1796950	Debug Port: 50021
Name: Java HotSpot(TM) Server VM		Kernel Version: 7.00 PatchLevel 30127.450	Debug Mode: false
Vendor: Sun Microsystems Inc.			Load Balance Restricted: false

server1 Running

VM	
PID: 4768	
SDM Port: 50018	

Done Local intranet

4 – Check SLD Configuration (1/2)



- Ensure that the SLD is configured and running:
 - Go to: *http://<sld-server>:5<instancenumber>00/sld/index.html*
 - Remember that the SLD may be installed on a different server!

The screenshot shows the SAP NetWeaver System Landscape Directory (SLD) interface. The main menu includes [Home](#), [Administration](#), [Log Off](#), [Help](#), and [About](#). The main content area is divided into three sections: **Landscape**, **Software Catalog**, and **Development**. The **Landscape** section contains links for [Technical Systems](#) (View and Define Systems and Servers), [Landscapes](#) (View and Configure Groups of Systems), and [Business Systems](#) (View and Configure Business Systems for Use in Exchange). The **Software Catalog** section contains links for [Products](#) (View Products in SAP Software Catalog) and [Software Components](#). The **Development** section contains links for [Name F](#) and [Manag](#).

An orange box highlights the [Administration](#) link in the main menu, with an arrow pointing to the next slide. Another orange box highlights the [Technical Systems](#) link in the Landscape section, with an arrow pointing to the next slide.

The next slide shows the **View and Define Systems and Servers** page. The **Technical Systems** section is active, showing a dropdown menu for **Technical System Type** set to **Web AS ABAP**. Below the dropdown are buttons for [New Technical System...](#), [Remove](#), [Export](#), and [Refresh](#). A table below shows the list of technical systems:

Name	Host	Versio
AR1 on grc-rig-03	grc-rig-03	700

An orange box highlights the [Administration](#) link in the main menu, with an arrow pointing to the text **Next slide**. Another orange box highlights the [New Technical System...](#) button, with an arrow pointing to the text **Backend Systems must be listed here →**.

4 – Check SLD Configuration (2/2)



➤ SLD Running?

The screenshot shows the SAP NetWeaver System Landscape Directory Administration interface in a Microsoft Internet Explorer browser. The browser's address bar shows the URL: `http://grc-rig-03.pal.sap.corp:50100/sld/admin/index.jsp?namespace=sld/active`. The page title is "Administration - Microsoft Internet Explorer provided by SAP IT".

The main content area is titled "SAP NetWeaver™ System Landscape Directory" and includes navigation links for "Home", "Administration", and "Help". Below this, a blue banner reads "Configure the server, import and export data, and view the logs.".

Under the "Server" section, there is a "Stop Server" button and a "Status: Running" indicator, which is highlighted with a red rectangular box. Other links under "Server" include "Log", "Details", "Profile", "Data Suppliers", and "System Message".

The "Content" section contains links for "Import, Export and Backup", "Content Maintenance", "Class Browser", "Change Log", "Namespaces", and "Automatically Updated Data".

At the bottom of the page, the footer displays "Namespace: sld/active", "AJ1", and "Object Server: grc-rig-03".

5 - Check Connection from Access Control Server to SLD (1/2)



Address: `http://<server>:<port>`

SAP NetWeaver™
SAP Web Application Server

SAP Library
SAP Library contains the complete documentation for SAP Web Application Server.

System Information
System information provides administrators with an overview of the system configuration and its state. It shows all of the system's instances and processes, their current state and important parameters (such as ports) that may be required for support cases, as well as the versions of the components installed.

User Management
The user management administration console provides administrators with the functions they need to manage users, groups, roles, and user-related data in the User Management Engine (UME). Users without administrator permissions can use it to change their user profile.

SAP NetWeaver Administrator
A tool for administration and monitoring, offering a central entry point to the whole SAP NetWeaver system landscape. The SAP NetWeaver Administrator can be used in a central scenario where it is capable of operating an entire system landscape containing ABAP and Java systems as the application platform of SAP NetWeaver.

Web Services Navigator
Web Services Navigator is a tool that gives you a short overview of a specific Web service based on its WSDL, and enables you to test your Web service by creating and sending a client request to the real end point.

UDDI Client
The UDDI client provides query and publishing functions for different Web service entities (Models, business services) to any UDDI compliant registry.

Web Dynpro
Web Dynpro is a User Interface technology available within the SAP NetWeaver Developer Studio. Various Web Dynpro measurement and application are deployed.

Web Dynpro Welcome - Microsoft Internet Explorer provided by SAP IT
Address: `http://grc-rig-03.pal.sap.corp:50100/webdynpro/welcome/Welcome.jsp`

SAP NetWeaver™
Web Dynpro - Welcome!

Web Dynpro Tool Applications

Content Administrator → **Next Slide!**

This tool can be used for administration of the Web Dynpro contents you have deployed to the J2EE Engine. If you are using the adaptive RFC model, the tool for application development is used to maintain the JCo destinations and can be seen as an enhancement to the Visual Administrator tool.

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5 – Check Connection Access Control Server to SLD (2/2)

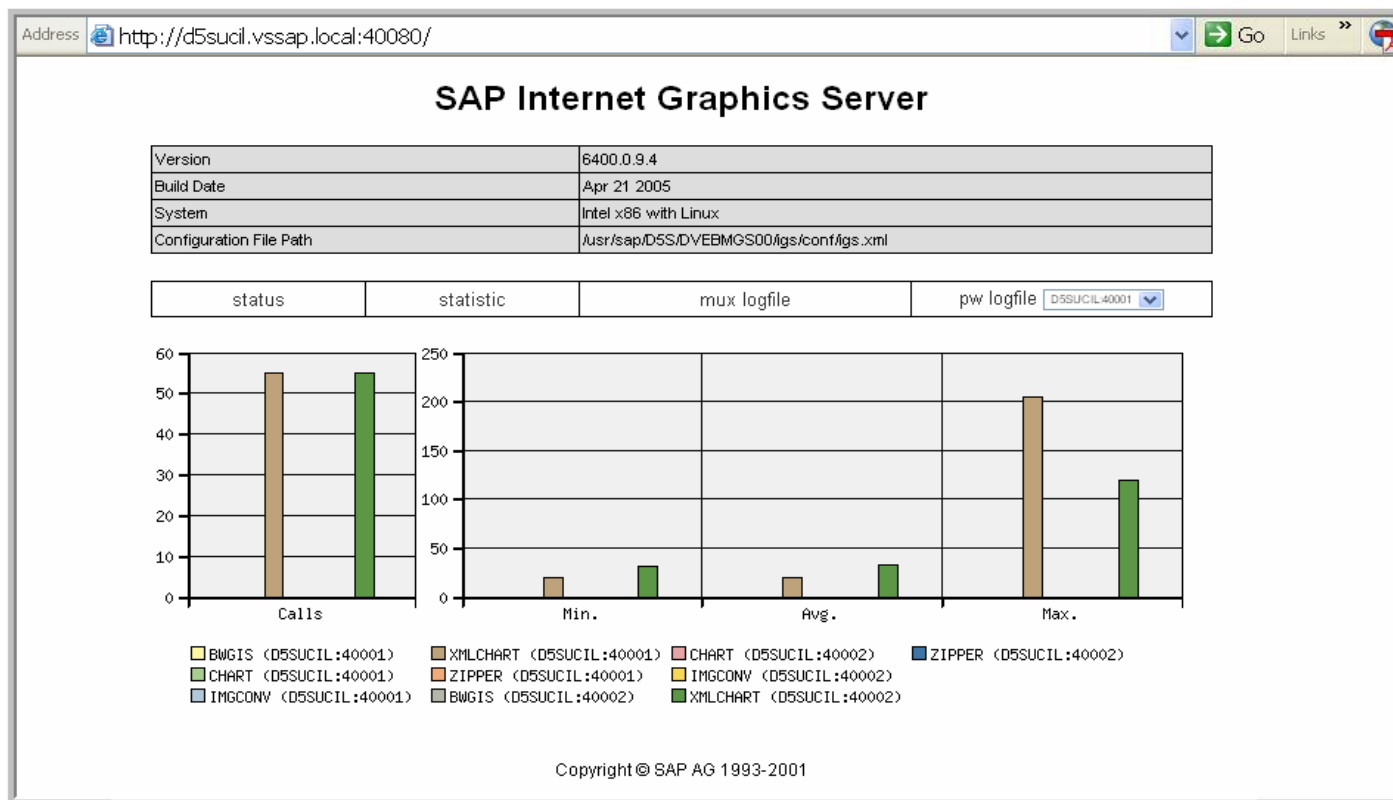


The screenshot shows the SAP NetWeaver Web Dynpro Content Administrator interface. The browser title is "Web Dynpro Content Administrator - Microsoft Internet Explorer". The address bar shows "http://localhost:50000/webdynpro/dispatcher/sap.com/tc~wd~tools/Explorer". The main navigation bar includes buttons for "Create JCo Destination", "Maintain JCo Destinations", "Start assigned SLD", and "Check SLD Connection". The "Check SLD Connection" button is highlighted with an orange box. Below the navigation bar is a "Welcome" dialog box with a "Close" button. On the left, there is a "Browse" pane with "Refresh" and "Enable all" buttons, and a tree view showing "Deployed Content" with sub-items "sap.com" and "System Defined Content". The main content area features a background image of a woman at a computer workstation. Overlaid on this is a "Check Connection to the System Landscape Factory (SLD)" dialog box. This dialog box contains the following fields: "Host Name" (iwdfslid), "Port" (50000), "User" (SLDDUSER), and "URL" (http://iwdfslid:50000/sld). At the bottom of the dialog are "Test Connection", "Start SLD", and "Close" buttons. The "Test Connection" button is highlighted with an orange box. Below the dialog box, there is a message: "The Web Dynpro Content Administrator will check the connection to the System Landscape Directory (SLD) used by your Web Dynpro applications. You can browse the complete content or search for specific objects. Furthermore you can configure the needed JCo destinations used by your Web Dynpro applications." At the bottom left of the interface, a status message reads: "Connection to System Landscape Directory (SLD) was successfully tested." This message is also highlighted with an orange box. A yellow callout box at the bottom right contains the text: "If not successful check Installation Guide Appendix B!".

6 – Check SAP Internet Graphics Server



- Verify if the Internet Graphics Server (IGS) is configured and running:
 - Go to: http://<host_name>:4<instance number>80
 - A graphic screen should display
 - If not successful check Installation Guide Appendix C. Use Fully Qualified Host Name!

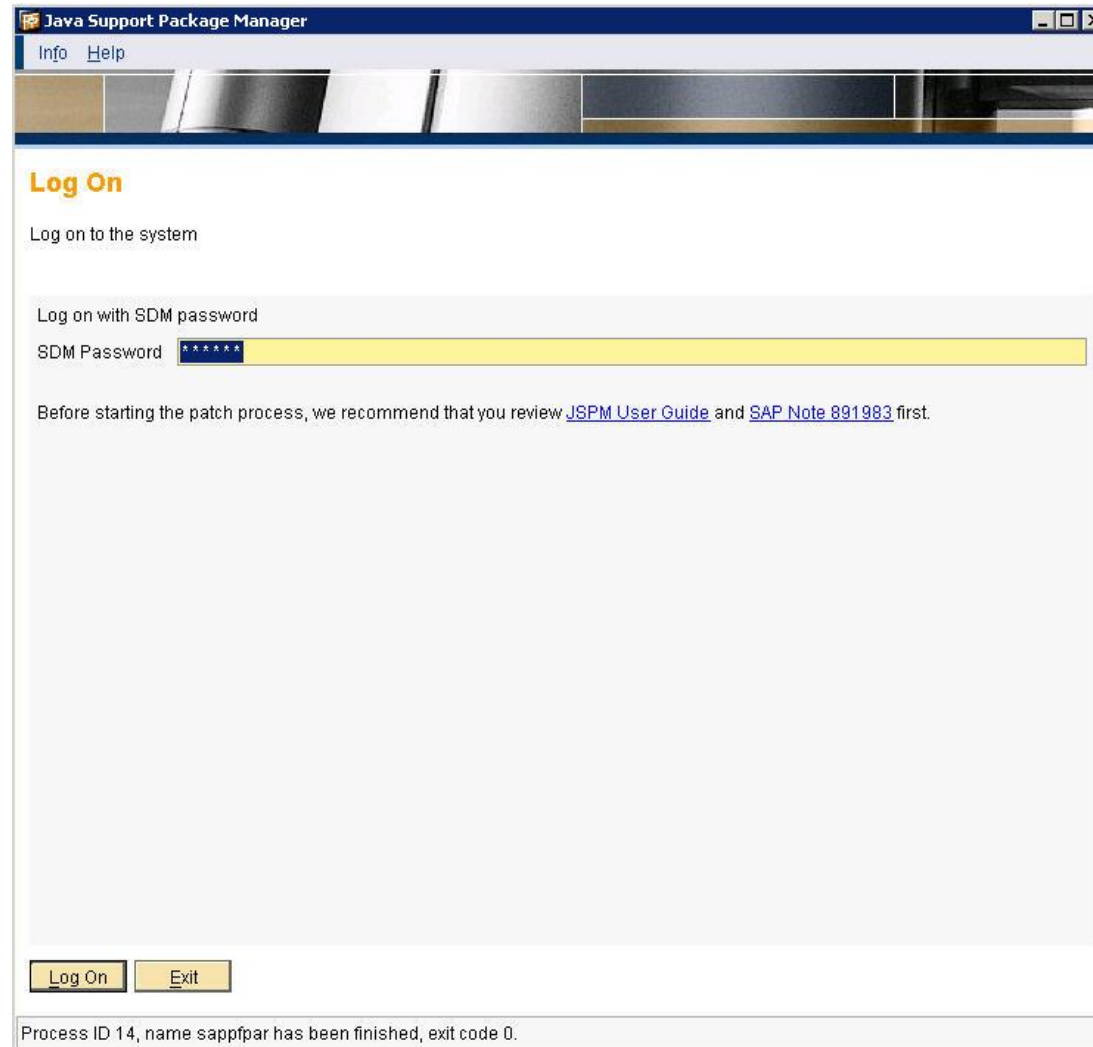


7 – Usage of JSPM for AC 5.3 Installation



- Copy the AC5.3 installation SCA files to /usr/sap/trans/EPS/in/
- The JSPM is a tool that works similar to SDM and has to be started from OS level of the server as user <SID>ADM from /usr/sap/<SID>/<CI>/j2ee/JSPM/go.bat
- AC 5.3 comes with the following sca files:
 - VIRCC00_0.SCA - Risk Analysis and Remediation
 - VIRAE00_0.SCA - Compliant User Provisioning
 - VIRRE00_0.SCA - Enterprise Role Manager
 - VIRFF00_0.SCA - Superuser Privilege Management
 - VIRACLP00_0.SCA - Launch Pad
 - VIREPRTA00_0.SCA - Enterprise Portal
- Deploy the first 4 SCA files first, then deploy the 5th SCA file.
- The last SCA file contains the RTA for the Netweaver Portal EP7.0 SP12+. Deploy it to all your Netweaver Portal 7.0 servers in scope of your implementation.
- For more Details check Appendix A and E in the installation Guide.

7 – JSPM: Provide SDM Password!



7 – JSPM: Select „New Software“



Java Support Package Manager

Info Help

Deployment Deployed Components Logs

1 2 3 4 5

Select Package Type Specify Queue Check Queue Deploy Queue Completed

Welcome > Select Package Type

Select a package type and an NWDI system role

To apply a support package stack, we recommend that you select the **"Support Package Stack"** indicator. Otherwise you may inconsistently update your system. For more information, see [SP Stack Guide](#) and [SAP Note 884537](#). For recommended Java VM settings, see [SAP Note 723909](#).

The Inbox directory is \\wdfvm2450\sapmnt\trans\EPS\in.

Select a package type to apply

- Support Package Stack
- Java Support Package Manager (JSPM)
- Single Support Packages (advanced use)
- New Software Components**
- Business and Enhancement Packages (advanced use)
- Install Additional Usage Type (advanced use)

Select whether the system is under NWDI control and the respective NWDI system role

NWDI Control

- No NWDI control**
- DEV
- CONS
- TEST
- PROD

Back Next Cancel

Select Package Type

7 – JSPM: Select SCA Files Deploy CC, AE, FF, RE First!



Java Support Package Manager

Info Help

Deployment Deployed Components Logs

1 Select Package Type 2 Specify Queue 3 Check Queue 4 Deploy Queue 5 Completed

New Software Components > Specify Queue

Select new software components to deploy

Select new software components to deploy

Vendor/Name	Target Release.SPLevel.PatchLevel	Details
sap.com/VIRACL	skip	Show Details
sap.com/VIRAE	530.700.0.0	Show Details
sap.com/VIRCC	530.700.0.0	Show Details
sap.com/VIREPRTA	skip	Show Details
sap.com/VIRFF	530.700.0.0	Show Details
sap.com/VIRRE	530.700.0.0	Show Details

Back Next Cancel

Continue Confirming next steps...

Scan of Inbox has finished.

- Which User Data Source is UME connected to?
 - Local Database?
 - ABAP Backend System, for example CUA?
 - Corporate LDAP?

- Which Source will be used as RAR User Master Source?
 - Only Backend System possible

- Which Sources will be used as CUP User Data& User Details Data Source?
 - UME?
 - SAP Backend System, for example CUA?
 - Non-SAP Backend (JDE, Oracle, Peoplesoft)
 - Corporate LDAP?
 - Microsoft Active Directory
 - Sun One
 - Novel e-Directory
 - IBM Tivoli

11-12 – Check SP Levels of your SAP Backend Systems / Prepare RTA Installation



- Check requires SP levels for software components SAP_BASIS, SAP_ABA and SAP_HR in the table below.
- For updates on these requirements and instructions on how to install / upgrade the RTAs in your SAP backend systems, refer to the notes given in the table below

	SAP_BASIS	SAP_ABA	SAP_HR	SAP Notes
VIRSANH 530_46C	SAPKB46C55	SAPKA46C55		1133161
VIRSAHR 530_46C	SAPKB46C55	SAPKA46C55	SAPKE46CC3	1133162
VIRSANH 530_620	SAPKB62063	SAPKA62063		1133163
VIRSAHR 530_620	SAPKB62063	SAPKA62063	SAPKE47066	1133164
VIRSANH 530_640	SAPKB64021	SAPKA64021		1133165
VIRSAHR 530_640	SAPKB64021	SAPKA64021	SAPKE50015	1133166
VIRSANH 530_700	SAPKB70013	SAPKA70013		1133167
VIRSAHR 530_700	SAPKB70013	SAPKA70013	SAPKE60013	1133168

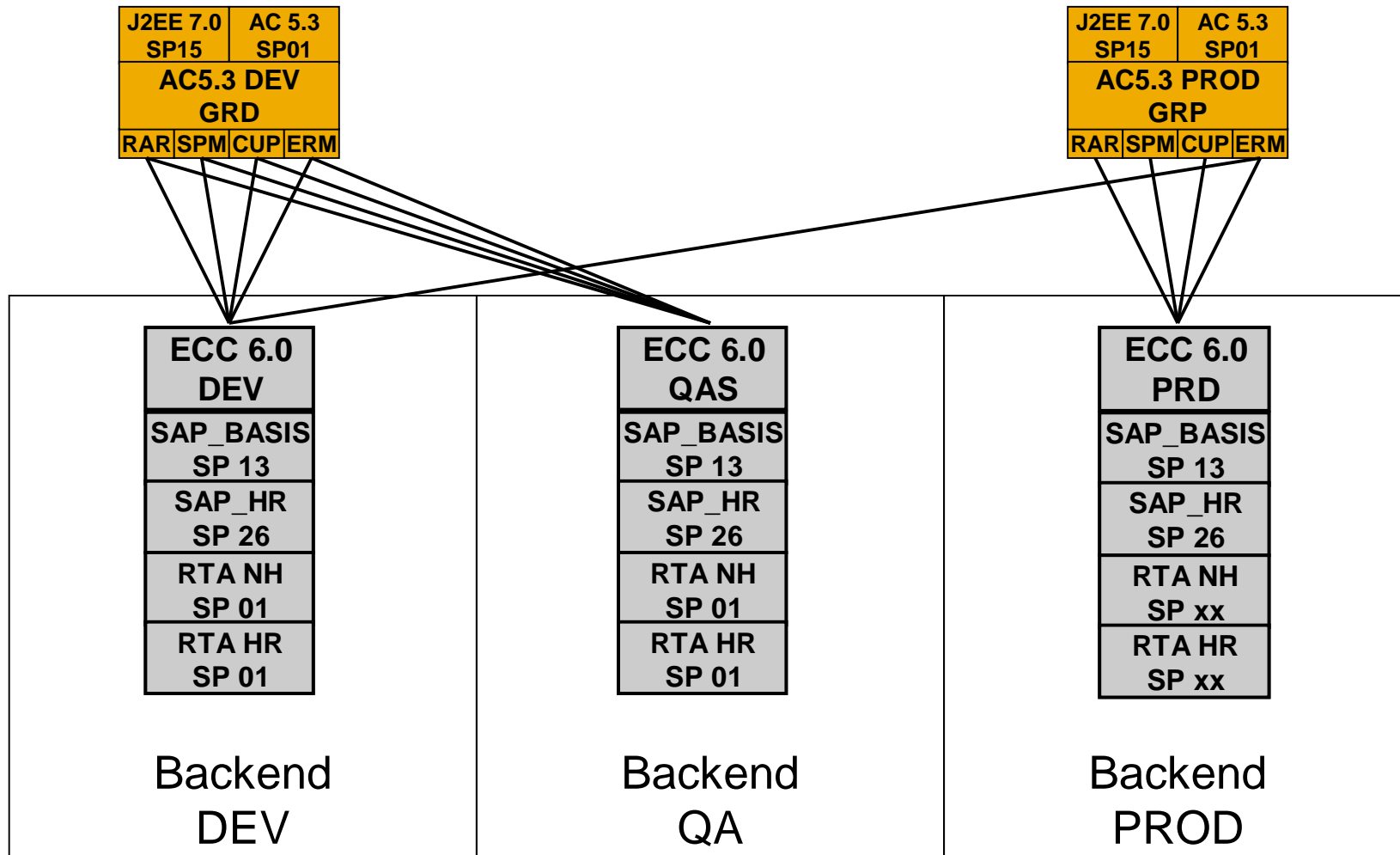
13 – Plan Your System Landscape & Complete Customer System Landscape Presentation



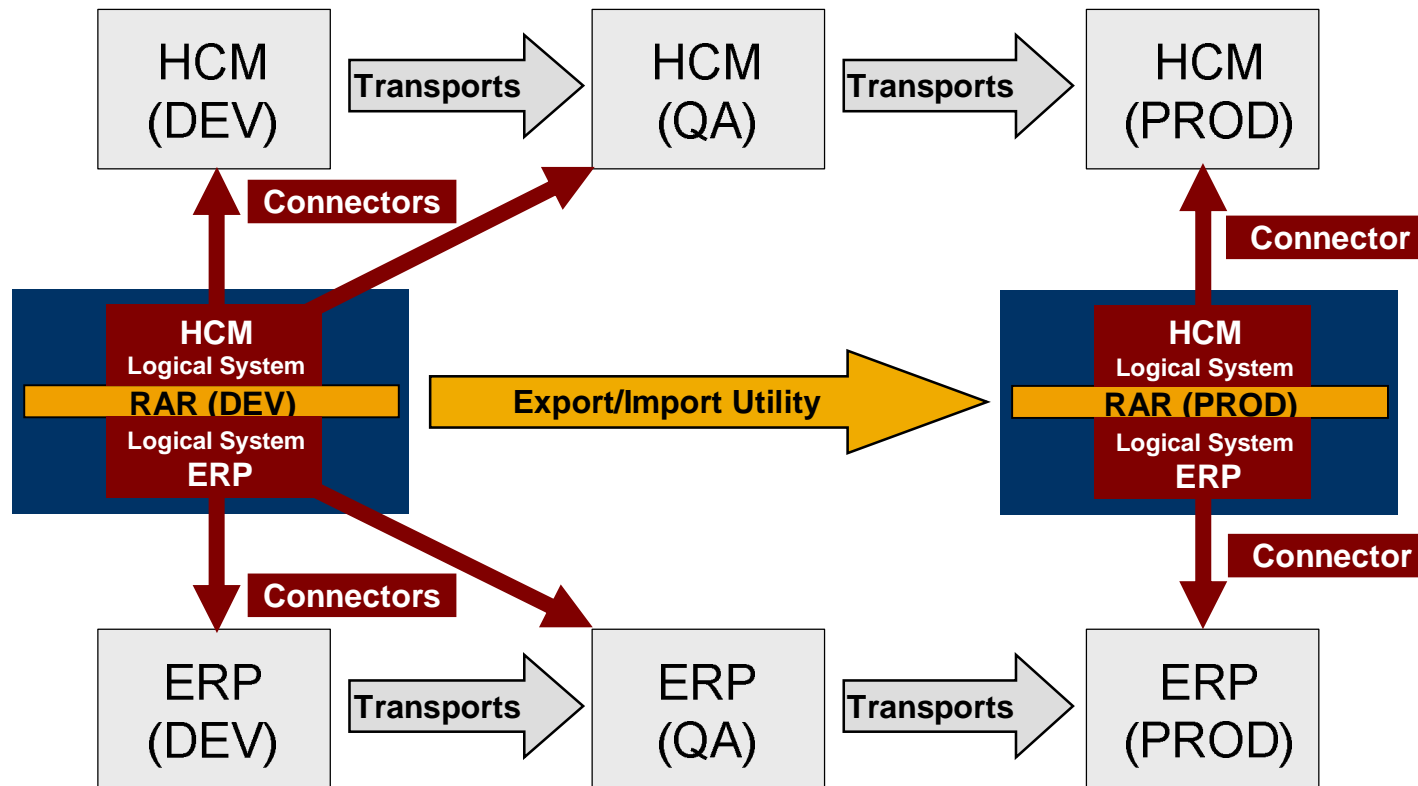
- Discuss with your basis team your system landscape for Access Control
- Do you plan for 2-tier or 3-tier Landscape for SAP GRC Access Control?
- How do you plan to connect your AC5.3 instances to your multi-tier backend landscape?
- Learn about the Logical System Feature
- Complete Customer System Landscape Presentation on next slide.

14 - Customer System Landscape

- Please Enter All SIDs, SP-Levels etc -



Integration of a Two-Tier GRC Access Control Landscape



Logical Systems:

- Grouping of physical systems sharing the same risk rules
- Two-tier Access Control Landscape can connect to N-tier back end

Appendix A: Always apply latest Support Packages for Access Control



- Always apply latest support packages for Access Control 5.3 during Ramp-Up
- There are two types of AC 5.3 Support Packages:
 - For the AC 5.3 application on NW AS Java 7.00 itself (cummulative)
 - For the NH and HR RTAs in the backend (incremental)
- Content of all RTA Support Packages (Backend) is listed in the following notes:
 - RAR: 1168120 – CUP: 1168508 – ERM: 1168183 – SPM: 1168121

↳ **Real Time Agent Installation** (VIRSANH and VIRSAHR comprise the RTA component.)

Note Number	Description
1138015	VIRSANH 530_46C Support Packages for 46C
1138109	VIRSAHR 530_46C Support Packages for 46C
1138016	VIRSANH 530_620 Support Packages for 620
1138020	VIRSAHR 530_620 Support Packages for 620
1138017	VIRSANH 530_640 Support Packages for 640 (ECC 500)
1138041	VIRSAHR 530_640 Support Packages for 640 (ECC 500)
1138018	VIRSANH 530_700 Support Packages for 700 (ECC 600)
1138042	VIRSAHR 530_700 Support Packages for 700 (ECC 600)



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