

HowTo

Configuration VSA with SAP NetWeaver 2004(s) Java



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SAP Requirements

SAP Platforms

SAP NetWeaver 6.40 with Support Package 7 or higher; for ABAP Engine with SAP_BASIS 640 Support Package 11 or higher;
for J2EE Engine with Support Package 13 or
SAP NetWeaver 2004s (7.0)

OS System Requirements

Operating Systems Linux/Unix (32 bit/64 bit):

Red Hat Enterprise Linux 5 Server; Red Hat Enterprise Linux 4 Server; Novell SUSE Linux Enterprise Server 10 - 10.2; Novell SUSE Linux Enterprise Server 9; Debian GNU/Linux 4 (stable); Ubuntu Server Edition 8; Sun Solaris SPARC 9; Sun Solaris SPARC 10

Operating Systems Windows (only 32 bit):

Windows 2000 Server, SP4 empfohlen
Windows 2000 Advanced Server, SP4 empfohlen
Windows 2003 Server
Windows Server 2008 (nicht für Core-Setup)

Java specific Configuration with SAP NetWeaver 2004(s) and KMC

Configuration via the Visual Administrator

Please, proceed the following steps:

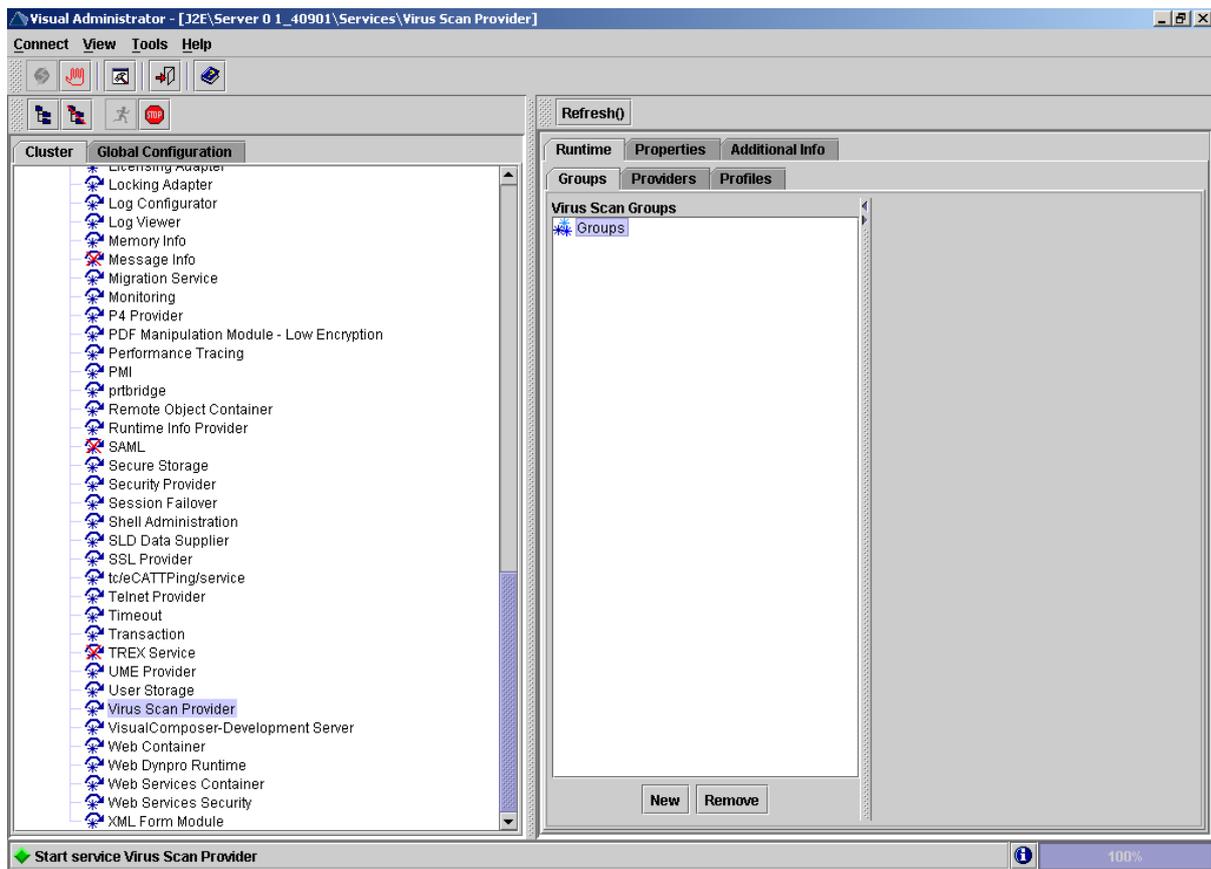
- Define the scanner group
- Define the Virus Scan Provider
- Define the Virus Scan Profile



Define the Scanner Group

A scanner group combines multiple virus scanners of the same type. You need the Groups in order to specify virus scan profiles later. SAP does not supply any scanner groups.

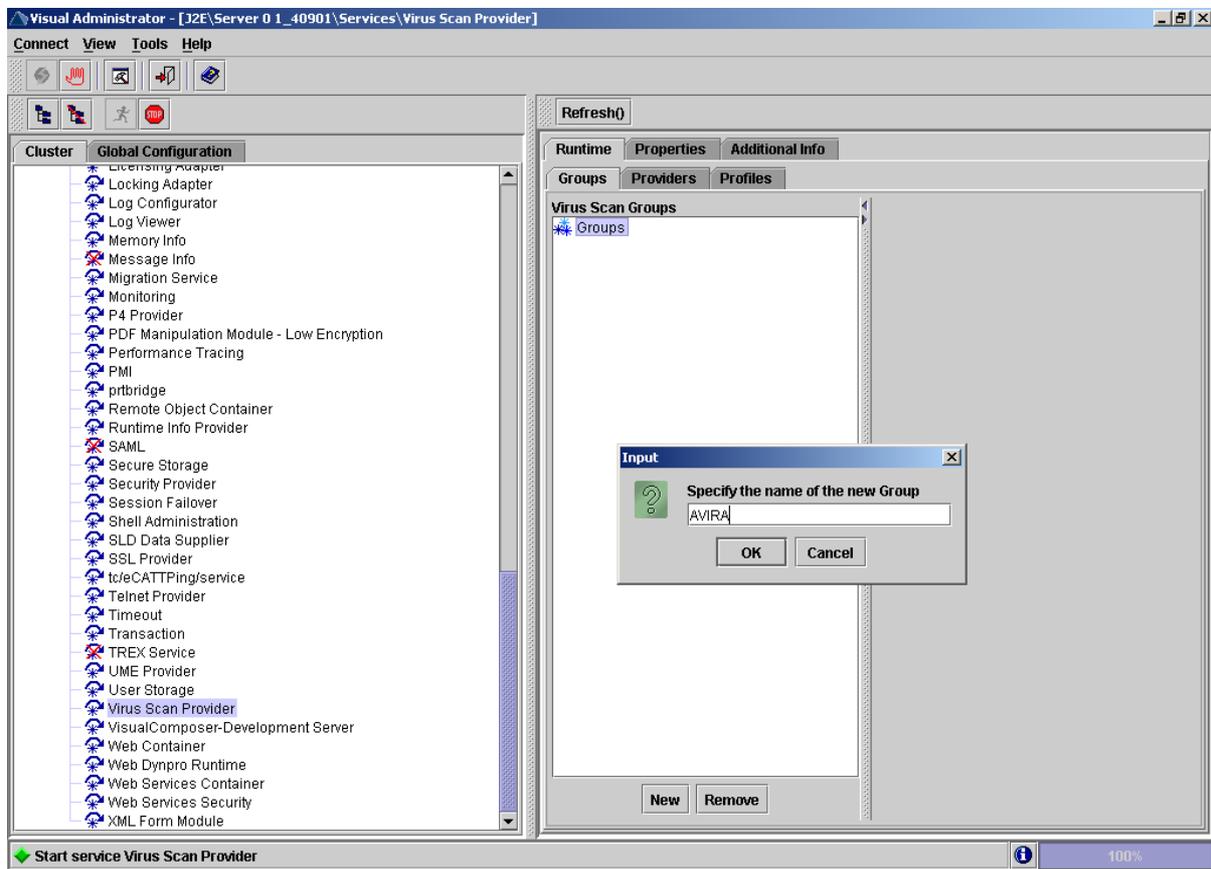
In the Visual Administrator, choose the cluster Virus Scan Provider.



If the service is not started, click the *Start* button (or right-click on Virus Scan Providers and select *Start*)



Create a scanner group by pressing the *New* button on the tab *Groups*.

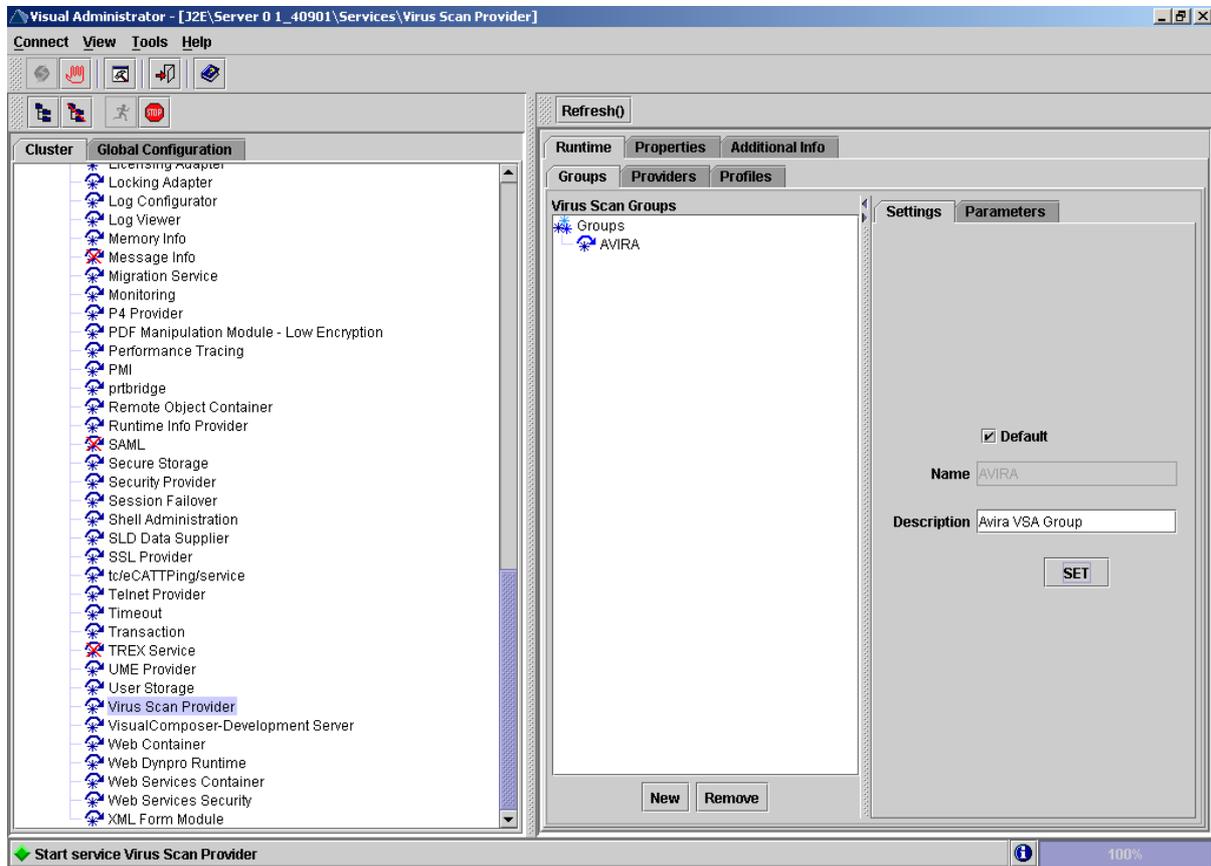


Specify the name of the new group (AVIRA) in the dialog box and confirm your entry with OK.

The group names are case sensitive. You have to use the same names later in the KMC.



Select the node for the newly created group.



- Activate the *Default* option on the *Settings* tab to set the group as default.

- Enter a description of the group in the *Description* field.

- To save you entries, press *Set*.

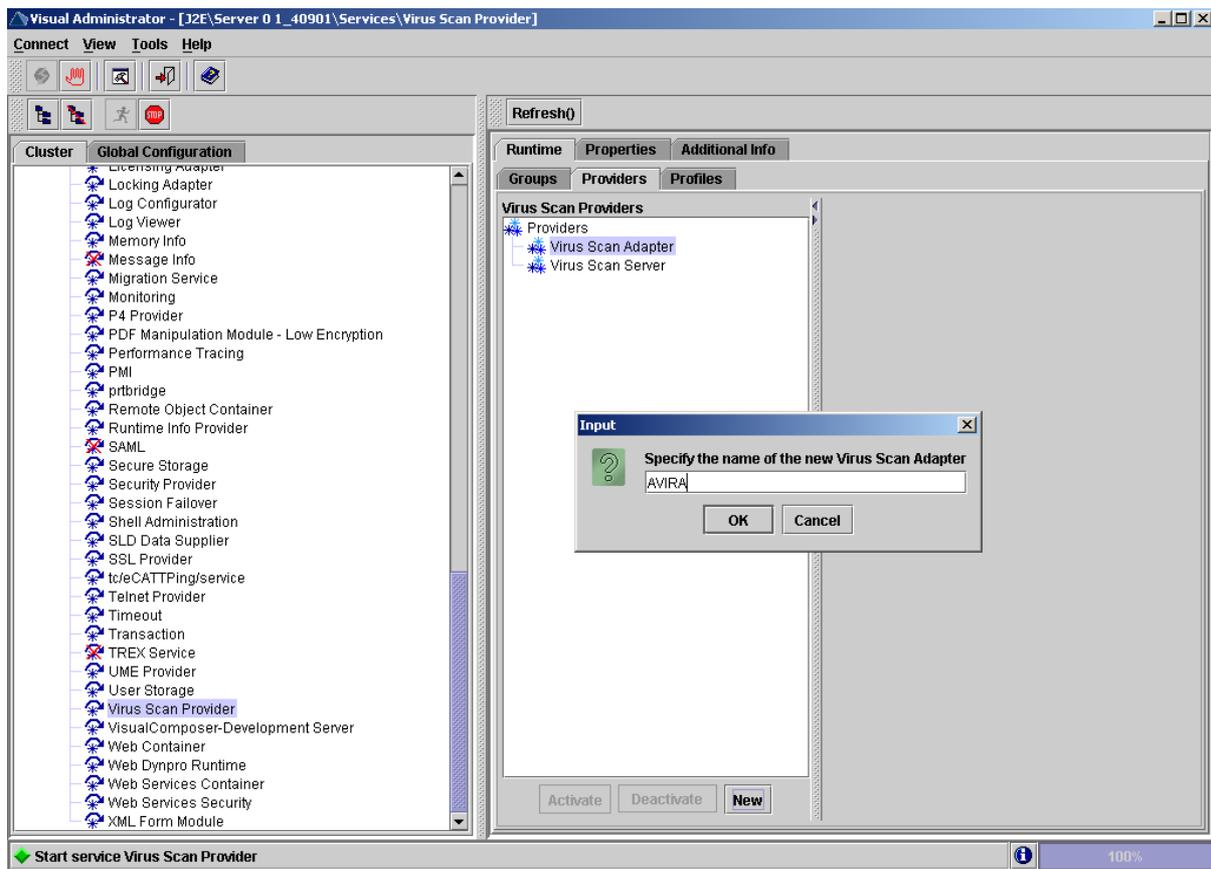
You do not have to make any configuration on the *Parameters* tab at this point.



Define a Virus Scan Provider

- Choose the cluster *Virus Scan Provider* in the Visual Administrator.

On the *Provider* tab page, select the Virus Scan Adapter node and press the *New* button, to create a new virus scan adapter.

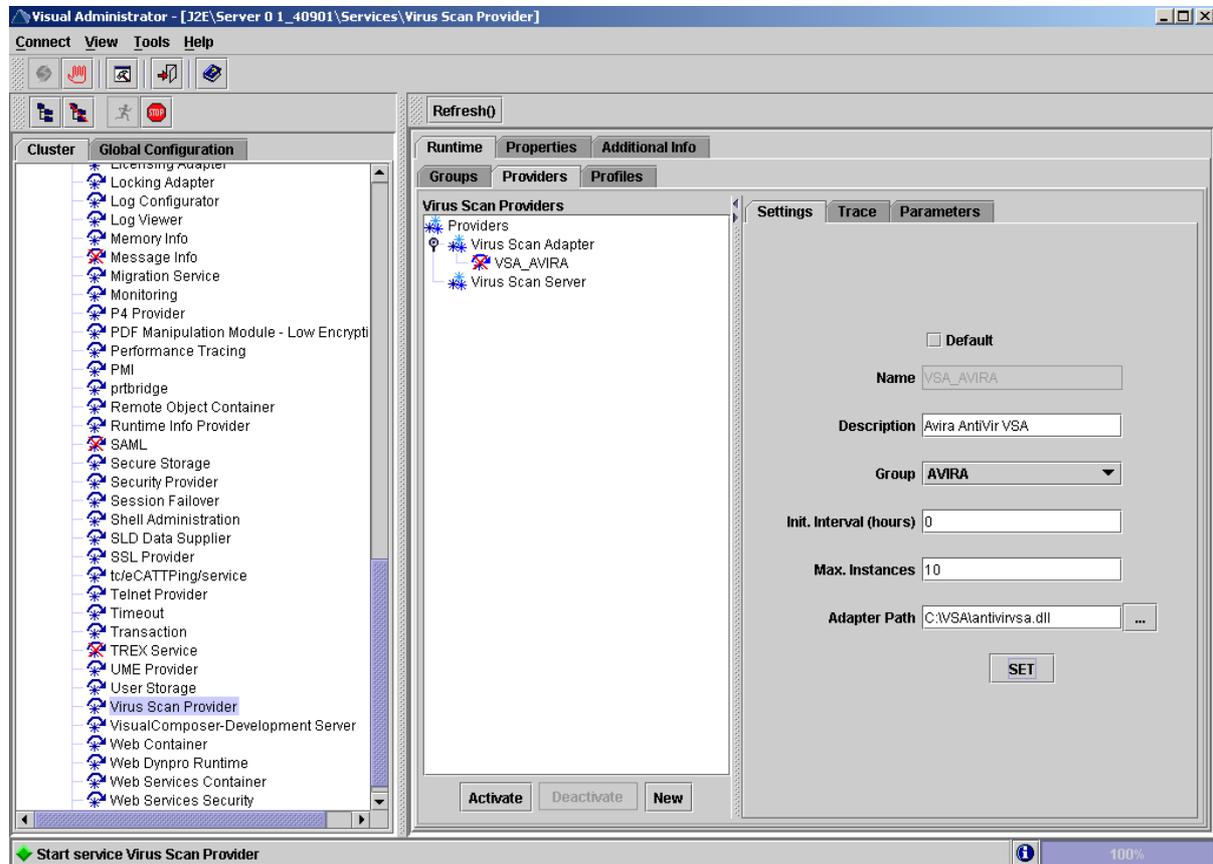


Specify the name of the new provider (AVIRA) in the dialog box and confirm your entry with OK. The entered name is automatically saved with the prefix “VSA_”.

The names are case sensitive. You have to use the same names later in the KMC.



Select the node for the newly created provider.



On the Settings tab, activate the Default option, to set the provider as default.

Default: This adapter is selected if no other VSA is specified.

Name: Name of the virus scan adapter. The name entered is automatically saved with the prefix “VSA_”.

Description: Description of the current adapter.

Group: The drop down list shows the available groups to which you can assign the current adapter.

Init. Interval: The time interval (in hours) for the NetWeaver to end VSA and restart it.

Values:

0 restart only when the Virus Scan Service ends/starts, or when the Virus Scan Provider is deactivated/activated.

1 for test environments. Advantage: the configuration is read hourly, without having to end the servlet engine.



Max Instances: The maximum scan instances allowed to the VSA by NetWeaver.
Default: 10.

In order to save you entries in the *Settings* tab, select *Set*.

You do not have to make any configuration on the *Parameters* and *Trace* tab at this point.

In order to activate the Virus Scan Provider, mark it and choose *Activate*. It will be marked as active.

The screenshot shows the Visual Administrator window for the 'Virus Scan Provider'. The left pane lists various services, with 'Virus Scan Provider' selected. The right pane shows the configuration for the 'Virus Scan Adapter' (VSA_AVIRA). The 'Settings' tab is active, showing the following configuration:

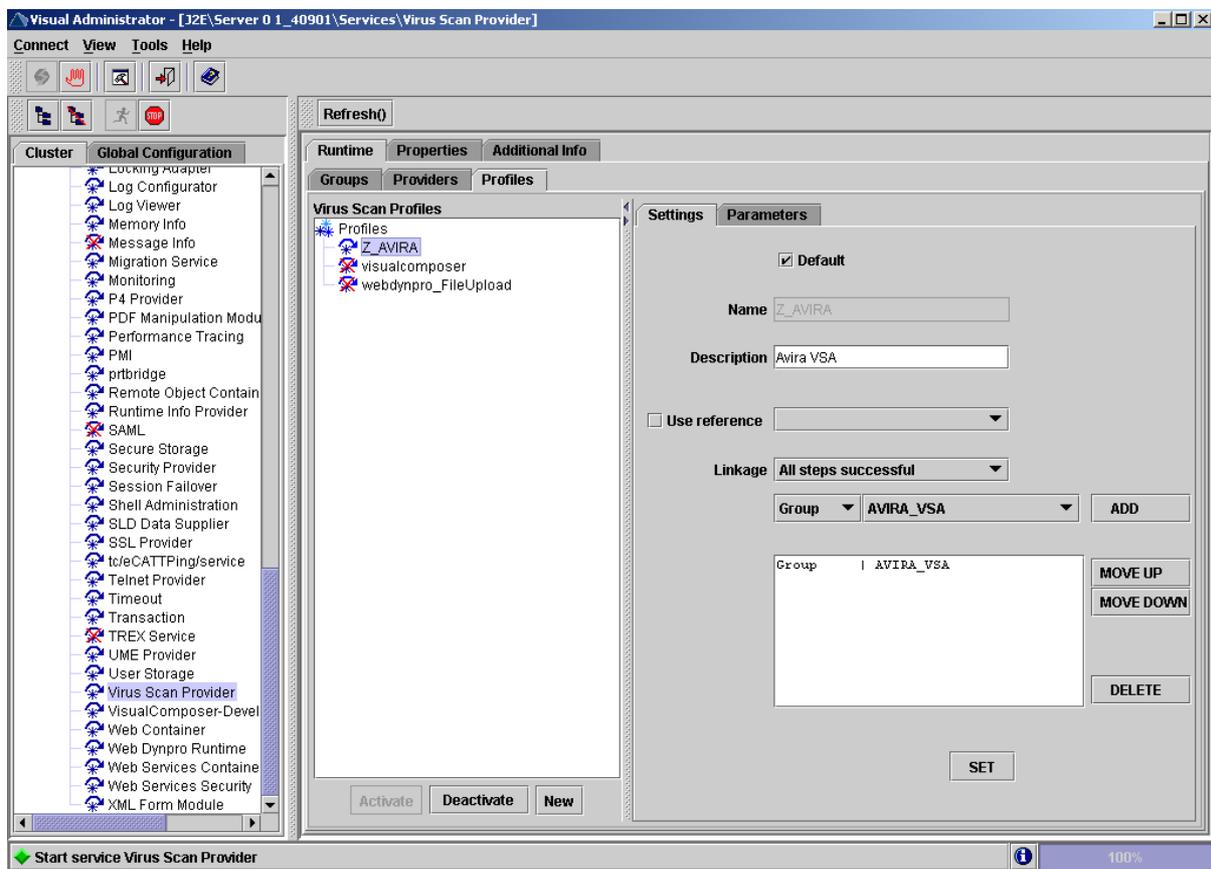
- Default
- Name: VSA_AVIRA
- Description: (empty)
- Group: AVIRA_VSA
- Init. Interval (hours): 0
- Max. Instances: 10
- Adapter Path: C:\WSA\antivirvsa.dll

At the bottom of the settings panel, there is a 'SET' button. Below the settings panel, there are buttons for 'Activate', 'Deactivate', 'New', and 'Remove'. The status bar at the bottom indicates 'Start service Virus Scan Provider' and '100%' zoom.



Define a Virus Scan Profile

- In the Visual Administrator choose the cluster *Virus Scan Provider*.
- On the *Profiles* tab create a new virus scan profile by choosing the *New* button.
- Type the name for the new profile (AVIRA) and confirm that with OK. The entered name is automatically saved with the prefix "Z_".
- Mark the node of the new profile.



Activate the *Default* option on the *Settings* tab, to set the profile as default and eventually adjust the values described in the table below.

Default: When activated, the profile will be automatically selected.

Name: Name of the new profile.

Description: Description of the new profile.

Use reference: Leave this inactive. When activated, the other input fields would be hidden.



As a virus scan profile can use another virus scan profile as a reference profile, it is possible to operate multiple applications using the same virus scan profile. To create a link to an existing reference profile, proceed as follows:

- Activate the option *Use reference*.
- Select a reference profile from the drop down list.
74 Avira AntiVir Virus Scan Adapter Avira GmbH
- To transfer the selection for the fields *Group* and *Profile*, choose *Add*.
- Configure the list with the buttons MOVE UP, MOVE DOWN and DELETE.
When checking for viruses, the list is processed from top to bottom with the linkage from the *Linkage* field.
- To save the profile, press *Set*.

To activate the profile, select it and choose *Activate*.

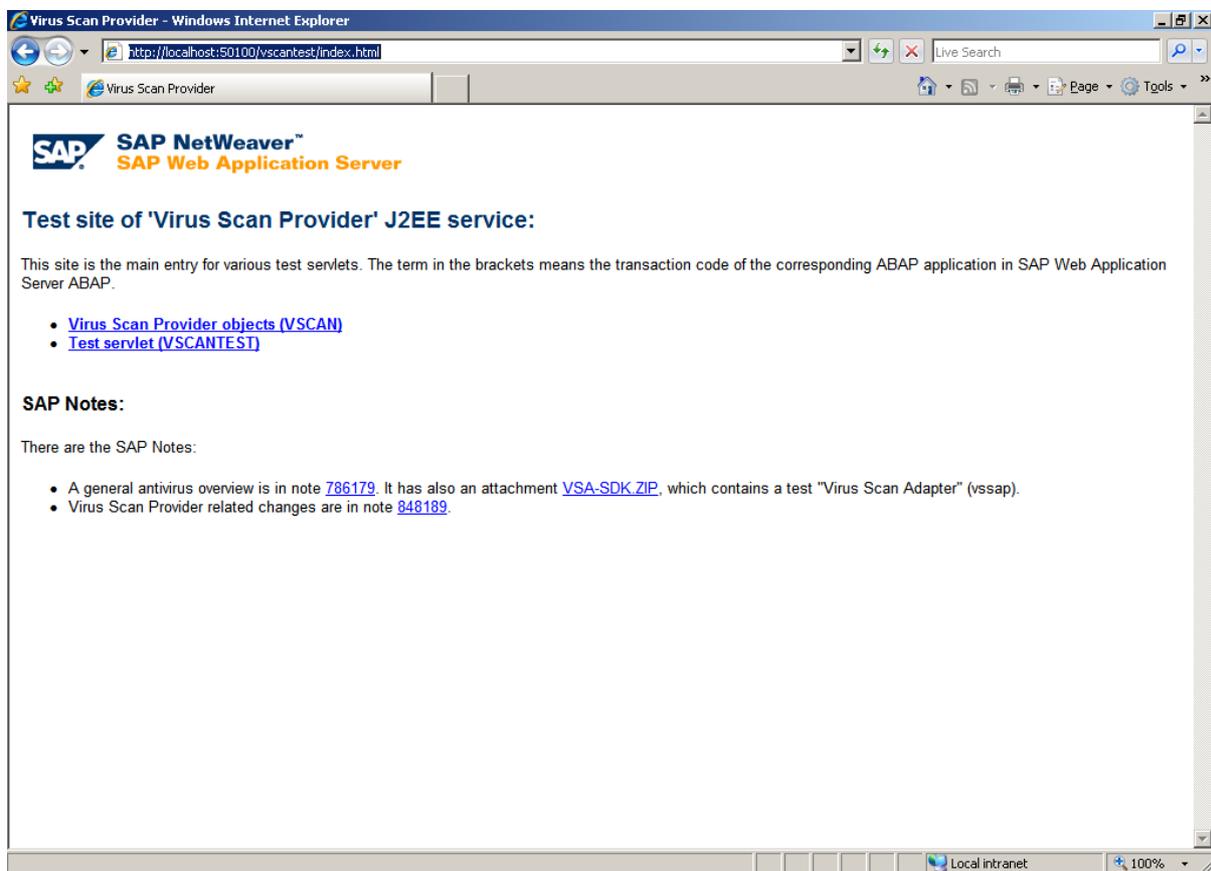


Check the Configuration

- You can use the test applet provided by SAP NetWeaver, to check the functionality of the Virus Scan Service.

- Open an Internet browser and type the following address:

`http://[Server IPAdresse]:[Instanz-Port]/vscantest`



Click the link to *Test servlet*.



'Virus Scan Provider' Scan-API Test

Object to Be Checked

Test data
EICAR Anti-Virus TestFile

File on the Application Server

Scanner Selection

Virus Scan Profile
(default)

Scanner Group
(default)

Virus Scan Provider
(default)

General Settings

Action: Check Only

Execute the action

[back](#)

[\(c\) SAP AG, 2005](#)

- Select the EICAR Anti-Virus Test File under Object to Be Checked.
- Select the (default) profile under Scanner Selection.
- Leave selected the option Check Only under General Settings.
- Press the button Execute the action.
- The test should report the detection of the EICAR test file.



http://localhost:50100/vscantest/servlet/VsiTestScan - Windows Internet Explorer

http://localhost:50100/vscantest/servlet/VsiTestScan

Live Search

http://localhost:50100/vscantest/servlet/VsiTestScan

'Virus Scan Provider' Scan-API Test Result

Exception: The virus "Eicar-Test-Signature" was found in C:\WINDOWS\TEMP\jvsilib2!

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[\(c\) SAP AG, 2005](#)

Done

Local intranet 100%



Integration with the Enterprise Portal and the Knowledge Management Center

- Open an Internet browser and connect to the SAP NetWeaver Portal as administrator.
- Go to the menu System Administrator/ System Configuration.
- On the left panel, select under Detailed Navigation the item Knowledge Management/ Content Management.

The screenshot displays the SAP NetWeaver Portal interface. The browser window title is 'Content Management - SAP NetWeaver Portal - Windows Internet Explorer'. The address bar shows 'http://localhost:50100/irj/portal'. The page features a blue header with navigation tabs: 'Java Developer', 'Guided Procedures', 'Content Administration', 'User Administration', and 'System Administration'. Below the header is a search bar and a 'Welcome Administrator' message. The main content area is titled 'Content Management' and includes a 'Detailed Navigation' sidebar on the left. The sidebar lists various system areas, with 'Content Management' selected under 'Knowledge Management'. The main content area provides an overview of Content Management configuration, including subareas like 'Form-Based Publishing', 'Global Services', 'Protocols', 'Repository Filters', 'Repository Managers', 'Repository Services', 'User Interface', and 'Utilities', each with a brief description of its function.



- On the right panel, go to the Mode menu and select Advanced.
- Under *Topic Area*, select *Global Services*, then scroll down and select *Virus Scanner Profiles*.

The screenshot shows a web browser window titled 'Content Management - SAP NetWeaver Portal - Mozilla Firefox'. The address bar shows 'http://localhost:50100/irj/portal'. The page features a navigation bar with tabs for 'Java Developer', 'Guided Procedures', 'Content Administration', 'User Administration', and 'System Administration'. Below this is a search bar and a 'Welcome Administrator' message. The main content area is titled 'Content Management' and includes a 'Detailed Navigation' sidebar on the left. The sidebar lists various system components, with 'Content Management' expanded to show 'Index Administration', 'Collaboration', and 'Universal Worklist & Workflow'. The main content area displays the 'Virus Scanner Profiles' configuration page, which includes a 'Topic Area' with a breadcrumb trail: 'Content Management > Global Services > Virus Scanner Profiles'. The page also shows 'Related Areas' and 'Topics' sections.



Click on the link to Virus Scanner Groups.

The screenshot shows a web browser window titled "Content Management - SAP NetWeaver Portal - Mozilla Firefox". The address bar shows "http://localhost:50100/irj/portal". The page has a navigation menu with tabs for "Java Developer", "Guided Procedures", "Content Administration", "User Administration", and "System Administration". The "System Administration" tab is active, and the "System Configuration" sub-tab is selected. The main content area is titled "Content Management" and displays the "Virus Scanner Groups" configuration page. The page includes a "Topic Area" with a breadcrumb trail: "Configuration" > "Content Management" > "Global Services" > "Virus Scanner" > "Profiles" > "Virus Scanner Groups". The "ScanGroups" section contains a table with two entries:

<input type="checkbox"/>	Group Name	List Of Providers
<input type="checkbox"/>	McAfeeGroup	vsa_nai
<input type="checkbox"/>	SAPTestGroup	vsa_sap

Below the table are buttons for "New", "Duplicate", "Edit", "View", and "Delete". The page also includes "Related Links" (Repositories, Component Monitor, System Administration Reports) and "Portal Favorites" (There are no items to display).



Press **New** to create a new Scan Group.

- In the field Group Name write AVIRA and in the List of Providers write VSA_AVIRA.

The values are case sensitive. You have to use the same names as in the Visual Administrator.



Confirm with Ok.

Content Management - SAP NetWeaver Portal - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://localhost:50100/irj/portal

Welcome Administrator

Search Advanced Search

Java Developer Guided Procedures Content Administration User Administration System Administration

Transport Monitoring Permissions System Configuration Portal Display Support Federated Portal Navigation

Content Management History Back Forward

Detailed Navigation

- System Landscape
- System Landscape Overview
- Keystore Administration
- LME Configuration
- Service Configuration
- Knowledge Management
 - Content Management
 - Index Administration
- Collaboration
- Universal Worklist & Workflow
- Web Dynpro Console

Related Links

- Repositories
- Component Monitor
- System Administration Reports

Portal Favorites

There are no items to display

Content Management

Actions History Mode Help

Topic Area:

Configuration

Content Management

Global Services

Virus Scanner

Profiles

Virus

Scanner

Groups

Topics

ScanGroups (3)

"AVIRA" has been saved. It will be activated when you restart the servlet engine.

ScanGroups Any configuration change requires that you restart the servlet engine.

Group Name	List Of Providers
<input type="checkbox"/> AVIRA	VSA_AVIRA
<input type="checkbox"/> McAfeeGroup	vsa_nai

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New Duplicate Edit View Delete

Done



Select *Virus Scanner Profiles* in the *Topic Area*.

Content Management - SAP NetWeaver Portal - Mozilla Firefox

http://localhost:50100/irj/portal

Welcome Administrator, [Help](#) | [Log Off](#)

Search [Advanced Search](#)

Java Developer | **Guided Procedures** | Content Administration | User Administration | **System Administration**

Transport | Monitoring | Permissions | **System Configuration** | Portal Display | Support | Federated Portal | Navigation

Content Management [History](#) [Back](#) [Forward](#)

Detailed Navigation

- System Landscape
- System Landscape Overview
- Keystore Administration
- UME Configuration
- Service Configuration
- Knowledge Management
 - Content Management**
 - Index Administration
 - Collaboration
 - Universal Worklist & Workflow
 - Web Dynpro Console

Related Links

- Repositories
- Component Monitor
- System Administration Reports

Portal Favorites

There are no items to display

Content Management [History](#) [Mode](#) [Help](#)

Topic Area:

[Configuration](#)

- [Content Management](#)
 - [Global Services](#)
 - [Virus Scanner Profiles](#)

Topics

[ScanProfiles \(2\)](#)

Related Areas

[Virus Scanner Groups](#)

See Also:

[ScanGroups \(3\)](#)

ScanProfiles Any configuration change requires that you restart the servlet engine.

<input type="checkbox"/>	Profile Name	Is Active	Is Default	Is Reference	Logical OR	Reference Profile	Scanner G
<input type="checkbox"/>	McAfee	✓			Not set		McAfeeCr
<input type="checkbox"/>	SAPTest	✓	✓		Not set		SAPTestG

[New](#) [Duplicate](#) [Edit](#) [View](#) [Delete](#)

Done



Activate the checkbox in front of *SAPTest* and click *Edit*.

Profile Name	Is Active	Is Default	Is Reference	Logical OR	Reference Profile	Scanner
<input type="checkbox"/> McAfee	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not set		McAfee
<input type="checkbox"/> SAPTest	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not set		SAPTe

Edit "SAPTest"

Object remains locked until you click OK or Cancel

Is Active:

Is Default:

Is Reference:

Logical OR: Yes No Not set

Reference Profile: Not set

Scanner Group: SAPTestGroup

Description: SAP test profile

Package Name: com.sapportals.wcm.service.antivirus

OK Cancel

- Deselect the checkbox for the option *Is Default* and press *OK*.

- To create a new profile, click *New*.



Profile Name	Is Active	Is Default	Is Reference	Logical OR	Reference Profile	Scanner
McAfee	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not set		McAfee
SAPTest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not set		SAPTest

New "ScanProfiles"

Profile Name: * AVIRA
Is Active:
Is Default:
Is Reference:
Logical OR: Yes No Not set
Reference Profile: Not set
Scanner Group: AVIRA
Description: Avira Virus Scan Adapter for KM
Package Name: * com.sapportals.wcm.service.antivirus

In the field *Profile Name* write AVIRA.

- Select the checkboxes for the options *Is Active* and *Is Default*.

- The option *Is Reference* must remain inactive.

- For the option *Logical OR* activate the value *Not set*.

- *Reference Profile* must remain *Not set*.

- From the Scanner Group drop down list select AVIRA.

- The field *Description* is optional.

- Type in the *Package Name*: com.sapportals.wcm.service.antivirus

- Press OK to save the profile.

- To activate the Virus Scan Service, return to the *Topic Area*, select *Global Services* and click *Edit*.



SAP NetWeaver Portal - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://localhost:50100/irj/servlet/prt/portal/prtEventname/HtmlEvent/prtroot/pcd!3aportal_content!2fadi

Virus Scan Provider T... SAP NetWeaver Portal

Actions History Mode Help

Topic Area:
[Configuration](#)
[Content Management](#)
[Global Services](#)

Topics
[Application Property](#)
[Global Service \(1\)](#)
[Audit Log Service \(1\)](#)
[Availability Status Service \(1\)](#)
[Cache Service \(1\)](#)
[Content Exchange Service \(1\)](#)
[Crawler Service \(1\)](#)
[External Facing Extension Service \(1\)](#)
[GWObjectsFactoryService \(1\)](#)
[Index Management Service \(1\)](#)
[Mailing Service \(1\)](#)
[MIME Handler Service \(1\)](#)
[Notifier Service \(1\)](#)
[Object Type Handler Service \(1\)](#)
[Presence Service](#)
[Property Metadata Service \(1\)](#)
[Property Structure Service \(1\)](#)
[Publishing Pipeline Service \(1\)](#)
[Reporting Service \(1\)](#)
[Resource Type Registry Service \(1\)](#)

Virus Scan Service + Creating and deleting configuration objects requires that you restart the servlet engine.
Scans Byte-Streams or Files for Viruses Using the SAP VSI-Library

View "antivirus"

Active: +
Check Write:
Clean Viruses:
Positive List:
File Count: *
Maximum File Size (MB): *
Memory Count: *
Memory Limit (KB): *
Repositories:

Name
Not set

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Virus Scan Profile:
Path for Temporary Files:

Edit (+ denotes advanced options)

Done



Make the necessary settings (see table below) and press **OK**.

Virus Scan Service + Creating and deleting configuration objects requires that you restart the servlet engine.
Scans Byte-Streams or Files for Viruses Using the SAP VSI-Library

Edit "antivirus"

Object remains locked until you click OK or Cancel

Active: +
Check Write:
Clean Viruses:
Positive List:
File Count: *
Maximum File Size (MB): *
Memory Count: *
Memory Limit (KB): *

Repositories:

<input type="checkbox"/>	Name
<input type="checkbox"/>	attachment
<input type="checkbox"/>	Bluserhome
<input type="checkbox"/>	caf
<input type="checkbox"/>	collaboration
<input type="checkbox"/>	collaboration_sessions
<input type="checkbox"/>	crt
<input type="checkbox"/>	discussiongroups
<input type="checkbox"/>	documents

Page 1 / 6 [Show All Objects](#)

Virus Scan Profile:
Path for Temporary Files:

(+ denotes advanced options)

- Restart the servlet engine, to activate the settings.

Active: Select the checkbox to activate the Virus Scan Service in KMC.

Check Write: Specifies if the virus scan should occur only at download, or at upload, too.

Clean Viruses: When active, the antivirus tries to clean infected files.

Positive List: When active, the virus scanner checks ONLY the selected repositories.

File Count: Maximum number of files to be scanned simultaneously. (default: 10)

Maximum File Size (MB): Maximum size of the files to be scanned. Bigger files cannot be loaded in the Knowledge Management, for safety reasons. It depends on the File Count and Path for Temporary Files.

For example, if you set the maximum size to 1000 MB and the File Count is 10, the temp directory should be 10 GB.



Memory Count: Sets the number of memory blocks available to the scanner.
Default: 10.

Memory Limit (KB): Sets the maximum size of the memory space allowed for the files being scanned. Default: 1000.

Repositories: When **Positive List** is active, the virus scanner checks **ONLY** the selected repositories. Otherwise, the scanner checks all repositories, **EXCEPT** the selected ones.

Virus Scan Profile: Select the profile to be used (AVIRA).

Path for Temporary Files: Specifies the temporary folder for the files to be scanned (*C:\Windows\Temp*). If this option is left empty, the default value of the Java engine is used (*java.io.tmpdir*).

Environment Variables VSA_LIB and VSA_DEBUG

- ▶ Used environment variables (Windows)
- ▶ VSA_LIB:
 - ▶ Refers to the `antivirvsa.dll`
 - ▶ The variable is created automatically
- ▶ VSA_DEBUG
 - ▶ Refers to the path of the debug log file of the VSA