

How-to Guide SAP NetWeaver '04

How To... gure the s Scan for KM

Version 1.00 – September 2006

Applicable Releases: SAP NetWeaver '04 SPS 9



[©]Copyright 2006 SAP AG. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP AG. The information contained herein may be changed without prior notice.

Some software products marketed by SAP AG and its distributors contain proprietary software components of other software vendors.

Microsoft, Windows, Outlook, and PowerPoint are registered trademarks of Microsoft Corporation.

IBM, DB2, DB2 Universal Database, OS/2, Parallel Sysplex, MVS/ESA, AIX, S/390, AS/400, OS/390, OS/400, iSeries, pSeries, xSeries, zSeries, z/OS, AFP, Intelligent Miner, WebSphere, Netfinity, Tivoli, and Informix are trademarks or registered trademarks of IBM Corporation in the United States and/or other countries.

Oracle is a registered trademark of Oracle Corporation.

UNIX, X/Open, OSF/1, and Motif are registered trademarks of the Open Group.

Citrix, ICA, Program Neighborhood, MetaFrame, WinFrame, VideoFrame, and MultiWin are trademarks or registered trademarks of Citrix Systems, Inc.

HTML, XML, XHTML and W3C are trademarks or registered trademarks of W3C^{*}, World Wide Web Consortium, Massachusetts Institute of Technology.

Java is a registered trademark of Sun Microsystems, Inc.

JavaScript is a registered trademark of Sun Microsystems, Inc., used under license for technology invented and implemented by Netscape.

MaxDB is a trademark of MySQL AB, Sweden.

SAP, R/3, mySAP, mySAP.com, xApps, xApp, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and in several other countries all over the world. All other product and service names mentioned are the trademarks of their respective companies. Data contained in this document serves informational purposes only. National product specifications may vary.

These materials are subject to change without notice. These materials are provided by SAP AG and its affiliated companies ("SAP Group") for informational purposes only, without representation or warranty of any kind, and SAP Group shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP Group products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

These materials are provided "as is" without a warranty of any kind, either express or implied, including but not limited to, the implied warranties of merchantability, fitness for a particular purpose, or non-infringement. SAP shall not be liable for damages of any kind including without limitation direct, special, indirect, or consequential damages that may result from the use of these materials.

SAP does not warrant the accuracy or completeness of the information, text, graphics, links or other items contained within these materials. SAP has no control over the information that you may access through the use of hot links contained in these materials and does not endorse your use of third party web pages nor provide any warranty whatsoever relating to third party web pages.

SAP NetWeaver "How-to" Guides are intended to simplify the product implementation. While specific product features and procedures typically are explained in a practical business context, it is not implied that those features and procedures are the only approach in solving a specific business problem using SAP NetWeaver. Should you wish to receive additional information, clarification or support, please refer to SAP Consulting. Any software coding and/or code lines / strings ("Code") included in this documentation are only examples and are not intended to be used in a productive system environment. The Code is only intended better explain and visualize the syntax and phrasing rules of certain coding. SAP does not warrant the correctness and completeness of the Code given herein, and SAP shall not be liable for errors or damages caused by the usage of the Code, except if such damages were caused by SAP intentionally or grossly negligent.

1 Scenario

You use the Knowledge Management capabilities of SAP NetWeaver to work with documents. You might already use virus scan technology at your company for security reasons. Nowthat users can access Knowledge Management from outside your company network through the portal, you also want to integrate virus scan technology in Knowledge Management.

2 Introduction

Due to the increasing number of malware you are looking for means to protect your systems against viruses, worms, and so on. Typically, company-wide use of virus scanners at file system level is standard. Now, companies are also interested in extending protection to Knowledge Management.

SAP does not provide a specific solution for virus scanning, but delivers an API that partners can use to integrate their virus scan solution in SAP NetWeaver.

As of SAP NetWeaver '04 SPS 9, you can integrate an external virus scanner in Knowledge Management for checking documents when they are accessed. This check also ensures that no infected documents are distributed in Knowledge Management.

3 Architectural Overview

The adjacent figure shows the main components of the virus scan integration concept. In this figure, the different colors differentiate the components relating to the programming language and the provider. The virus scan interface (VSI) provides an interface for ABAP and JAVA. Depending on the programming language, the VSI library communicates with the virus scan server or the virus scan provider. The virus scan adapter (VSA), which is implemented by partners, communicates with the VSI library. This means that the partner only needs to provide a single VSA implementation for both ABAP and JAVA.

Basically, you can install the virus scan engine and SAP NetWeaver on a single-server system. The adjacent figure shows the components and the communication path in this scenario. The advantage of this configuration is the faster communication compared to remote function calls (RFC), due to the usage of native communication based on shared libraries. However, the load originating from the virus scan engine can significantly affect the performance of SAP





NetWeaver because the same hardware resources are used.

It is also possible to separate the virus scan engine and the SAP NetWeaver installation to avoid impacting performance due to shared hardware resources. The disadvantages are slower communication and higher network traffic volume because all scanned documents need to be transferred from SAP NetWeaver to the virus scan engine.

For a better understanding of the configuration explained in detail later on, you must know what the terms virus scan group and virus scan provider mean.

A *virus scan group* combines one or more virus scan engines, which are represented by virus scan providers. These are all to be used in the same way to check documents. If more engines are used, the check requests are sent to one engine after an other to distribute the load between the engines (round robin method).

A *virus scan provider* represents the interface to the virus scan engine in the flavors virus scan adapter and virus scan server. A virus scan adapter is used for VSI library-based communication as explained above, whereas a virus scan server is used when the virus scan engine and SAP NetWeaver are installed on separate server systems.

Based on an example, the following sections describe the steps for the configuration on the Java application server and in Knowledge Management. In addition, several screenshots illustrate the main use cases. At the end of this guide, there are links to more information.

4 Prerequisites

Before starting the configuration, you must prepare an adequate portal landscape. We strongly recommend starting the configuration on a test landscape and not on a production landscape to avoid downtime of the production system. In addition, you must check in SAP Note 782963 which external virus scan solutions are currently supported and install them correctly.

The following section describes the configuration of an example implementation of the virus scan adapter. This example implementation does not offer a scan function because it in fact does not use a virus scan engine as a real virus scan adapter would do. However, the configuration does not differ from a virus scan adapter from a partner and could therefore be used even if no virus scan engine is yet available.

The example implementation is attached to SAP Note 786179, which is aimed at partners who want to integrate their virus scan solution in SAP NetWeaver. The example implementation uses a simple use case to explain the coding.

5 The Step By Step Solution

The following description focuses on the configuration of a JAVA application server and of KMC. For the usage of the virus scan interface in ABAP applications, it refers to the standard documentation on the SAP Help Portal at <u>http://help.sap.com</u>.

We can separate the entire configuration of the virus scan integration into two parts. The first part consists of configuration steps on the JAVA application server. Based on this configuration, the second part focuses on configuration steps on the KMC configuration UI.

The next section starts with the configuration steps on the JAVA application server.

5.1 Configuration of the JAVA Application Server

1. Configure a virus scan group

Start the Visual Administrator for your JAVA application server and open the virus scan provider

» 🖲 🗷 🛷			
• • * 0			
ester Global Configuration	Bun	time Properties Addition	nal Info
· Key Storage	A	une Drasidare Drafilae	
- 📯 Licensing Adapter		ops rideacts rideacs	
 Locking Adapter 	Viru	s Scan Groups	Settings Parameters
- 🐏 Log Configurator		Broups	
- 😭 LogViewer		P SAP	
- 📯 Memory Info			
— 🔆 Message Info			
- 🍄 Monitoring			
- 📯 P4 Provider			
- 🃯 Performance Tracing			
- 📯 PMI			
- 📯 prtbridge			
Remote Object Container			
- Runtime Info Provider			Text 1
- 🛠 SAML			Deraux
- 🖓 Secure Storage			Name La ca
Security Provider			Manue 2045
Session Failover			
Shell Administration			Description
- 🖓 SLD Data Supplier			
SSL Provider			
toleCATTPing/service			SET
- Provider			
Timeout			
- 📯 Transaction			
TREX Service			
- OME Provider			
🖓 User Storage			
Virus Scan Provider			
Web Container			
Web Dynpro Runtime			
Web Services Container		New Remove	
Web Controls Comment			

service. Navigate to *Runtime* \rightarrow *Groups* and choose *New*. Enter *SAP* in the *Name* field and any text in the *Description* (optional).

The screenshot shows the Visual Administrator and the corresponding group definition.

2. Configure a virus scan adapter

Navigate to the *Runtime* \rightarrow *Providers* tab and select the *Virus Scan Adapter* entry. Choose *New* to create a new entry. Enter a meaningful name. In this example, we have chosen *SAP*. Keep in mind that the the name is case-sensitive and that the systems add the prefix *VSA*_ to your chosen name.

For example, if you enter SAP, the system creates *VSA_SAP*. Later on, in the Knowledge Management configuration, you will need to refer to this name.

In addition, you must define the Group and VSA_LIB

parameters. In this example, choose the previous group, SAP, as the group and enter the file system path to the example implementation of a virus scan adapter. Section 4 explains more details and where to get the implementation.

The screenshot shows the screen after entering all necessary parameters.

Connect View Tools Help			
0			
12 12 x 😐			
Cluster Globul Configuration	Runtime Properties Additional Info		
VINDI Registry	Groups Providers Profiles		
Key Storage	Wron Scon Drasters	diam'n ta ta	
Containg Adapter	A Dreadarr	F Settings Trace Parameters	
Contrig Adapter	R A Many Gran Marder		
Continuer (O WRA RAP		
Memory info	A Vinis Bran Bener		
A Marrate Ma			
Q Montreine			
P4 Provider		🗆 Defau	*
Performance Tracing			
PMI		Name VEA_BAP	
O other			
Remote Object Container		Description	
Runtime into Provider			
2 SAM.			
Contraction Storage		Group SAP	-
- 📯 Security Provider			
- 📯 Session Fallover		Instance line out 2000	
- 📯 Shell Administration		mounter une ent jortes	
😪 BLD Data Bupplier			
- Provider		Instance pool size 10	
ClaCATTPing/service			
- Provider		VSA LIB CIERTON	ith neces
Timeout			
Transaction			
TREX Service			SET
CHIE FILMON			
Controllinge			
Cardena Carden			
With Depart Pupting	l		
Web Sentrar Contriner	Activate Deactivate New		
 The control constitution 			

3. Test the configuration

You have now completed all configuration settings in the Java application server. SAP provides a servlet that you can use to test the configuration.

Open a Web browser and enter

http://<server>:<port>/vscantest to start
the servlet.

Virus Scan Provider - Microsoft Internet Explorer provided by SAP IT	
Elle Edit Yew Favorites Icols Help	
address 🗃 http://localhost:50200/vscantest/index.html	💌 🛃 😡
SAP NetWeaver"	
SAP Web Application Server	
Test site of 'Virus Scan Provider' J2EE service:	
This site is the main entry for various test servlets. The term in the brackets means the transaction code o in SAP Web Application Server ABAP.	of the corresponding ABAP application
Virus Scan Provider objects (VSCAM) Test servicet (VSCAMEST)	
SAP Notes:	
There are the SAP Notes:	
 A general antivirus overview is in note <u>786179</u>. It has also an attachment <u>VSA-SDK_ZIP</u>, which cont Adapter (vssap). Virus Scan Provider related changes are in note <u>B48189</u>. 	tains a test "Virus Scan
Done	Local intranet

The screenshot above appears. Among the information it contains are links to more SAP Notes. The first link, *Virus Scan Provider objects (VSCAN)* provides an overview of the configuration.

The second link, *Test servlet (VSCANTEST)*, provides a form that you can use to specify the configuration test in more detail.



For example, select the *EICAR-Anti-Virus TestFile* as the *Object to be Checked*. Furthermore, select a group as the *Scanner Group*, in this example, SAP. Choosen *Execute* to start the test.

http://localhost:50200/vscantest/servlet/VsiTestScan - Microsoft Internet Explorer p lib Edit Univ. Example: Tools Help	rovided by SAP IT					
ene eux mew regnores iouto eep Address @ http://localhost:50200/vscantest/servlet/VsiTestScan						
'Virus Scan Provider' Scan-API Result	Test					
Exception: The virus "EICAR-TEST-STRING" was found	in zBaseProfile!					
back						
(c) SAP AG, 2005						

An exception appears, indicating that the test has found a valid virus signature. Keep in mind that the EICAR viurs signature is not an harmful virus. For more information about this test virus, see the appendix of this guide.

5.2 Configuration of Knowledge Management

The second part of the configuration is done in the configuration framework of Knowledge Management using the configuration UI.

Note: Activate the advanced mode on the configuration UI, otherwise the virus scan-related entries are not displayed.

1. Configuration of a virus scan group

With the current release of Knowledge Management, you still have to configure virus scan groups and providers. This may change in future releases because the configuration is already available in the JAVA application server.

Navigate to System Administration \rightarrow System Configuration \rightarrow Knowledge Management \rightarrow Content Management \rightarrow Global Services \rightarrow Virus Scanner Profiles \rightarrow Virus Scanner Groups. Choose New to create a new virus scan group. In this example, just reuse the existing configuration, SAPTestGroup. Change the List of Providers to VSA_SAP parameter to reflect the case- sensitivity because the name is in uppercase letters io the JAVA application server.

Welcome Portal Administrator	cod Search	
Home Content Administration User Admin	System Administrat	on TestRole Collaboration Content Management
Transport Monitoring Permissions Sy	etern Configuration Portal Dis	aky Support Giolai Portar Liomouea Guery Engine Hawgaton
Content Management		
Detailed Havigation	Content Management	
System Landscape System Landscape Overview	Actions, History, Mode	Help_
Reystore Administration IM Configuration	Topic Area:	ScanGroups Any configuration change requires that you restart the service engine.
Service Configuration	Configuration Configuration	E Group Name 💠 List Of Providers ≑
	40istal Senices	McAteeGroup VSA_NAI
Content Management	Wear States	SAPServerGroup VSCAN_P73519
Collaboration	Vitan	SAPTestGroup VSA_SAP
Finder, Administration Find Insurant Why bird & Marktinger	4 <u>Scanner</u> Oraupz	Z Z Z Z Page 1/1
Web Dynpro Console	Topics	New Duploate Edit View Delete
	ScanGroups (3)	antistan D. FARTan D. FARTandon an
Related Links -		and a second second
Repositories		View "SAPTestGroup"
CM Repository Reports		List Of Providers * VSA_SAP
Portal Favorites		Est Close
Rendering Internation ProjectRoom - News - User Mapping		

The screenshot above shows the example group definition.

- The next step is to configure a virus scan profile. Navigate to System Administration \rightarrow System Configuration \rightarrow Knowledge Management \rightarrow Content Management \rightarrow Global Services \rightarrow Virus Scanner Profiles. Choose New to create a new entry. In this example, reuse the existing configuration, SAPTest. Open this configuration in edit mode and verify the following:
 - The configurable is active
 - The default checkbox is selected, as long as no other configurable is the default
 - No reference profile is selected
 - The previously-configured virus scan group,

2. Configuration of a virus scan profile

SAPTestGroup, is selected

Content Management - SAP Enterprise Port	al 6.0 - Microsoft Internet E	xplorer provided by SA	VP IT				_10
File Edit View Favorites Tools Help							
⇔Back • ⇒ • 🙆 🛃 🖓 Searc	h 💽 Favorites 🗐 Media	3 10-30	-				
Address 🔕 http://p73523:50000/irj/portal							- 6
inks 🗃 Collaboration Solutions Portal 🗃 QM Sy	sterns 🍓 Instant NetWeaver	Installation 🍓 Engleerin	ngService Pool 🏼 💩 5	AP MARS 🛛 SAP Printmes 🖉 RIG-5	erver 🎒 SA	P - Software Ma	nager
Velcome Administrator	2h ant Management Content Ada	inistration User Admini	stration System A	dministration	<u>Helo</u> I Pe	rsonaliza <u>Lo</u>	mati S A
Transport Monitoring Permissions System	Configuration PostarDespia	A Sobbert Closer Los	tel Distributed Quer	A pyllog		1. Helen	Carlo Carros
Concern Management						I mounty a	DATE FORWARD
Detailed Nasigation	You are here:	ScanProfiles Any con	vigoration change req	uires that you restart the service engine.			
UM Configuration	Content Management	🗟 Profile Name 🕏	Description 🔅	Package Name 🕀	Is Active 🗘	Is Default 🗦	Is Reference
System Landscape	Without Services	MoAres	McArlee test profile	con sapportais won service antivirus	4		
Service Configuration	Piofiles	SAPTest	SAP test profile	con sapportais won service antivirus	4	1	
C⊐ Knowledge Management	Folders						
Content Management	Virus Scenner Groups	New Depicate	Edit Diane Dalat				
Collaboration	Classes						
Protei Aurieration	Scaneromes (2)	Edit "SAPTest"					
Universal Worklat	ScapGroups (2)	🙆 Object remains l	edied until you olid: O	K or Cancel			
Workflow	ALL LIVE LIVE	Description	SAP test profile				
 Universal Worklist Administration 		Package Name *	on seportals works	ervice antivirus			
 Yahool Model Account Administration 		Is Active	2				
Portal Licensing		Is Default	2				
 was byrpro console 		Is Reference	1				
Related Links		Logical OR (Yes ONO @NO	lset			
Repositories Component Monitor		Reference Profile	Not set				
	Pendina Looks (1)	OK Cancel					
	•						l

The screenshot above illustrates the configuration. For more information about the configuration parameters, consult the online help at http://help.sap.com.

Finally, you have to configure the virus scan service for Knowledge Management. This configuration is probably the most important one because this is the location where you define the basic behavior of the virus check in Knowledge Management. The screenshot below shows the configuration screen.

Content Management - SAP Enter	prise Parb	al 6.0 - Microsoft Internet Diplorer	provided by SAP IT										
File Edit View Povorites Tools	Help												
$4 \operatorname{rbok} * \to * (3)$	Queec	h 🗊 tevertes 🛞 Neda 🎯	B-@ 0 -										
Address (A) Mercille 77527 52000 Julies	tal.												10
Inter Coldenation Coldina Data	(in) case of	terrer and the state of the sta		day Paul A		(ii) eac	Paratanan (0015 5-0		ran rahama		_	
ana anciana anti-antis rata	1 (m 10)	Care Classes were the second	ar gjudendar	naros ej		0.00	PHILIPS -	OLAN-SE.	~ 0		ranaya.	_	_
Wekome Administrator										HERE I FEE	societze 1	Logott	SA.
Collaboration 1	Searc	h		Cannanan				/ ~~				_	_
Colaboration Business Explorer H	one Cont	ert Nanagement Content Administratio	n User Administreb	an System/	Administ	retion							
Transport Nonitoring Permissiono	System	Configuration Forth/Display Sup	port Olobal Portal	Distrikuted Ope									
Content Management											History	Back For	
111	-												
Detailed Novigation	_	You are here:	Scans Byte-Stree	ins or Files for '	viruses U	sing the S	AP VSI-LIKE	NY					
 Keystore Administration 		Carbon Management	Virus Scan Serv	ice Creating an	d deleting	ordigen	dice objects	requires that	t ywa nesta	of the sendel en	pine.		
 UN Configuration 		40 lobal Services	0	Path for		Check	Clean	Postive	File	Meximum File	Menory	Menory	
System Landscape		Folders	CD rente	Files	ACEVE	Aype	VISION	List	Court	Size (MD)	Count	Lind (RB)	100
Service Configuration		Graveler Parameters	antivitus			1	1		10	1000	10	100	
Christelle Harapetert		Network Patha	REFE										
 Colstoration 		Property Metadata	Cal Mari										
Index Administration		Property Structures											
 Portel Application 		Ediation Managers	Edit "antiwirus"										
 Universal/Worklad 		Resource Fillers Resource List Elbers	& Objections	int loded until	yaa didel	Dici an Can	cel .						
 Washflow 		Resource Types	Dath for Terror	rary Files									
Onlyginger View Mot Automotivation		Scheduler Seguences	Active to										
 Vanco Vode Account Administra Dadal Lisensites 	son	Scheikler Tests	Dieck Wate is										
Web Dynamo Console		System Landscape Definitions	Gean Wruses	* 12									
		UperPhoto	Postive List										
Related Links	-	Visus Scenner Profiles	File Count *	10									
Reposêcries		Classes	Maximum File S	ze (MD) * 100									
Component Monitor		Autoin Photo Service (1)	Memory Count	10									
		Aut Los Service (1)	Menory Link ()	(8) 100									
		Cache Service (1)	Repostories	R	Marre								
		Overlaut Service (1)			collabore	atoo and							
		Context Exchange Service (1)			1000000	38501.355	10000						
		Crawler Service (1)			125		_						
		File System Mount Service (1)			222.013								
		Form-Based Publishing Service (1)			200.00	m	_						
		Global Attachment Service (1)			SULT OF	etz							
					550		_						
		OviObjectsFactor/Service.(1)			12280	200							
		Infect Service (1)			52								
		Mailing Service (1)		×	E E E	E Page	12/5 Sho	w all object	5				
		MME Handler Service (1)	Visus Scen Pro	90 o 📷	165 -								
		Notificator Service (1)	DK Canod										
		Object Type Handler Service (1)	Concor										
											_		

First of all, you must make sure that the service is active. Check that the checkbox for the *Active* parameter is selected.

In this example, a virus check should be done when documents are written in Knowledge Management. Therefore, you must select the *Check Write* checkbox.

The combination of the *Positive List* and *Repositories* parameters defines which repositories are taken into account during checking. If the *Positive List* parameter is selected, the virus check is done in all repositories defined in the *Repositories* parameter. If it is not set, the system excludes all repositories defined in the *Repositories* parameter from the virus checks. In this example. every repository is checked

3. Configuration of the virus scan service

except the documents repository.

Note: You could use any repository in this example. A specific CM repository in DB mode is recommended instead of the standard documents repository for test purposes to avoid confusing sideeffects with other use cases.

Finally, configure the reference to the virus scan profile. In this example, you choose the previous profile, *SAPTest*.

To activate the Knowledge Management configuration settings, you must restart the portal and the JAVA application server(s) that provides the portal functions.

5.3 Use Cases for Virus Scan Integration

This section describes the different use cases where virus scan integration in Knowledge Management is visible to the user. Basically, there are edit and read scenarios because they represent the main types of access to documents.

1. Access through browsers

When a user accesses an virus-infected file, if the virus scan service is configured to check on read access, the following error message appears: *Operation failed: Virus found – please contact your*

File Falls Have Facesthes Taul		internet Expl	orer provided by SAP IT	
Die Ent Tiem Fähoutes Tool	is Help			4
🌀 Back 🔹 🕥 🐇 🛃	🏠 🔎 Search 👷	Favorites 🚷	Media 🚱 🔗 🌺 🔯 • 🗖)
dress 🙋 http://localhost:50000/irj	/portal			🖌 🔁 Go 🛛 Links
Welcome testadmin testadmin				Hele Los off
Content Administration User A Portal Content Batch Property Rep	dministration System Adm lacement Unification Po	ninistration Cont rtal Content Transl	ent Management ation Web Dynpro KM Content Coll	aboration Content Workfi
KM Content				I History _ Dack Perward
Repositories				Ę
C root > documents				
▼ root	Hama A	Cine (B	MadiGad MadiGad Dr.	
▼ root ▶ -system	Hame 🕈	Size 🚔	Modified Modified By	
▼ root		Size 🚔 6	Modified Modified By 17704 10.03.54 AM	
 root rsystem attachment cm 	Hame \$	Size 🚔 6 6	Modified Modified By N7/04 10:03:54 AM N7/04 11:04:18 AM <u>cmadmin_service</u> N7/04 11:04:18 AM <u>cmadmin_service</u>	
<pre>v root -svstom attachment cm cmb</pre>	Hame \$ "	Size 🚔 6 6 6	Modified Modified By 1704 10.03 54 AM 1704 11.03 54 AM <u>cmadmin service</u> 17104 11.04:18 AM <u>cmadmin service</u> 1704 11.04:18 AM <u>cmadmin service</u>	
root P-system Addecommon addecommon collaboration collaboration	Name * Constant	Size 🚔 6 6 6 6 7 8	Modified Modified By 17/04 10:03:54 AM 17/04 11:04:18 AM <u>cmadmin service</u> 17/04 11:04:18 AM <u>cmadmin service</u> 17/04 11:04:18 AM <u>cmadmin service</u> 17/04 11:04:18 AM lestuser; testuser	
tool +=system +system +=system +system +syste	Ilame C Discussions v, Units v, News v, Dublic Documents Dublic Documents	Size 🚔 6 6 6 7, 6 6 6	Modified Modified By 17/04 10:03:54 AM 17/04 11:04:18 AM cmadmin_service 17/04 11:04:18 AM cmadmin_service 17/04 11:04:18 AM cmadmin_service 17/04 11:04:44 Michael Resture resturer 17/04 11:04:44 Michael Resture resturer	
toot t_soutem t_soutem t_soutem t_oms t_oms t_odistoration collisionation sessions t_documents	Ilame C Discussions v, Units v, U	Size 🚔 6 6 7, 6 68 Bytes 6	Modified Modified By #70410.0354.4M #70411.0418.4M cmadmin_service #70411.0418.4M cmadmin_service #70411.0418.4M cmadmin_service #70411.314.24 M lesturer_testurer #70411.2644.4M testurer_testurer #70411.0644.2552.29 M testurer_testurer	
root root	Hame > Cascaterice #, Cascateri#, Cascaterice #, Cascaterice #, Cascaterice #, Ca	Size 6 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Modified Modified By 7704 100254 AM 7704 110410 AM creation: aerotics 7704 110410 AM creation: aerotics 7704 110410 AM creation: aerotics 7704 113044 AM leathant, catalognin 7704 113044 AM leathant, testadomin 7704 112542 AM leathant, testadomin 77064 12542 AM leathant, testadomin	

system administrator

Note: If the virus scan service is configured for checks on write access, *no* alert would appear!

The screenshot above shows the results.

When a user tries to upload an infected file, if the virus scan service is configured to check on write access, an alert would appear.

4. Restart the portal



As in the case of a read access, the following error message appears:

Operation failed: Virus found – please contact your system administrator

Note: If the virus scan service is configured to check on read access, *no* alert would appear!

Authors and editors often use WebDAV clients to access documents in Knowledge Management. If an author tries to write an infected file to a Knowledge Management repository, an error message appears depending on the WebDAV client.

and a second sec	-/			1	
File Edit View Favorites T	ools Help				
🔾 Back - 🕥 - 🧊 🍃	🔎 Search 🌔 Folders 🖌	8 8 2 × 4 4 4			
Address 🗿 http://localhost:50000	/irij/servlet/prt/portal/prtroot/i	om.sap.km.cm.docs/documents/		~	🔁 Go
	Name 🔶	Internet Address	Size Type		P
	🛄 .~system~	Warning	×	ler -	17
TANK INC.	Discussions			der .	1
documents on	Links		all of the calacted files	3er	1
localhost (2)	News			ser	-13
	Public Documents			ber	11
Select an item to view its	Calcorde	OK		ument	15
description.	New text	http://iocahost:50000/iri/serviet/prt/portal/	U Bytes File	Ginoric	18
	Srolex.aif	http://iocabost/50000/ini/serviet/ort/oortal/	8.71 KB GIE Ima	ne	14
	Copying 22. COM to http://localhost.50000/	ljoervletjortaljortootjoon sap.km.on.doosf			
objects	<				8

The screenshot above illustrates the behavior of Microsoft Internet Explorer.

Note: If the virus scan service is configured to check on read access, *no* alert would appear!

Reading a virus-infected file if the virus scan service is configured to check on read access would result in the http error 409 as shown in the screenshot below.

2. Access through WebDAV clients



Note: If the virus scan service is configured to check on write access, *no* alert would appear!

6 Appendix

Additionally, Knowledge Management offers a specific virus scan report that allows you to check documents in a repository independent of read or write accesses. For example, this report could be used when integrating a file system with documents that are potentially infected. In this most common scenario for the report, you would configure the scanner service to check on write access. Then, the service would check any new documents created through Knowledge Management.

Since the previously executed report ensures that there are no infected files in the repository, there would be no further need to check for viruses on read access. However, if documents are stored directly on the file system without using Knowledge Management, suspicious files might be also accessible through Knowledge Management without further checks. In this case, you would have to schedule additional runs of the report or, even better, restrict direct file system access.

For more information about this report, see the SAP help portal at <u>http://help.sap.com/saphelp_nw04/helpdata/en/b8/f5af401efd8f2ae10000000a15</u>5106/frameset.htm.

SAP also provides the WebDAV client, **Portal Drive**. For more information about this tool, see the SAP help portal at

<u>http://help.sap.com/saphelp_nw04/helpdata/en/42/c99b91341a6bade1000000a</u> <u>1553f6/frameset.htm</u>. In addition, SAP Note **911449**, as the central note for the Portal Drive, provides information about the download path, among other things.

The test virus signature previously mentioned is provided by the European Institute for Computer Antivirus Research (**EICAR**) on <u>http://www.eicar.org</u>. This test file does not hurt anything but the virus scanner recognizes it as a virus and therefore you can use it as an easy test for virus scanner configuration in general.

For more information about the virus scanner interface provided by SAP or the availability of certified virus scanners, see the following notes:

- Note 782963: Availability of virus scan server for NW-VSI
- Note **786179**: Data security products: Application in the antivirus area
- Note 666568: Using the EICAR anti-virus test file

7 Change Log

Date	Release	Description
09/2006	1.00	First release

http://www.sdn.sap.com/irj/sdn/howtoguides

