F-SECURE E-MAIL AND SERVER SECURITY

Deploying the Product on a Cluster



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1.1 INSTALLATION OVERVIEW

Follow these steps to deploy and use the product on a cluster.

- Install F-Secure Policy Manager on a dedicated server. If you already have F-Secure Policy Manager installed in the network, you can use it to administer the product. For more information, see F-Secure Policy Manager Administrator's Guide.
- Install Microsoft SQL Server 2000, 2005 or 2008 on a dedicated server. Microsoft SQL Server must be installed with the mixed authentication mode (Windows Authentication and SQL Server Authentication).
 After the installation, make sure that Named Pipes and TCP/IP protocols are enabled in SQL Server network configuration.

Create the quarantine storage where the product will place quarantined e-mail messages and attachments.

- In the active-passive cluster environment, continue to Quarantine Storage in Active-Passive Cluster.
- In the active-active cluster environment, continue to <u>Quarantine Storage in Active-Active Cluster</u>.
- In the Single Copy Cluster (SCC) environment, continue to <u>Creating the Quarantine Storage for a Single Copy</u> <u>Cluster Environment</u>.
- In the Continuous Cluster Replication (CCR) environment, continue to <u>Creating the Quarantine</u> <u>Storage for a Continuous Cluster Replication</u> <u>Environment</u>.
- In the Database Availability Group (DAG) environment continue to <u>Creating the Quarantine Storage for a</u> <u>Database Availability Group Environment</u>.
- Install the product locally on one node at the time in the centralized administration mode, starting from the active node. Make sure the product is fully up and running before starting the installation on the passive node.

Note: Do not move cluster resources to the passive node before you install all passive nodes first.

- In the environment with Quarantine ascluster resource, see more information on <u>Installing on Clusters with</u> <u>Quarantine as Cluster Resource</u>.
- In the environment with Quarantine ondedicated computer, see more information on <u>Installing on</u> <u>Clusters with Quarantine on a Dedicated Computer</u>.
- Create a policy domain for the cluster in F-Secure Policy Manager and import cluster nodes there. See <u>Administering the Cluster Installation with F-Secure</u> <u>Policy Manager</u>.
- Log on each node and configure the Web Console to accept connections from authorized hosts.

1.2 CREATING QUARANTINE STORAGE

Follow instructions in this section to create the Quarantine Storage in the cluster environment.

1.2.1 QUARANTINE STORAGE IN ACTIVE-PASSIVE CLUSTER

For active-passive cluster, the Quarantine Storage can be created on a dedicated computer or as a cluster resource. For more information on how to install the Quarantine Storage on a dedicated computer, see <u>Quarantine Storage in Active-Active Cluster</u>.

To install Quarantine as a cluster resource, follow these instructions:

- 1. Log on to the active node of the cluster with the domain administrator account.
- 2. Create a directory for the quarantine storage on the physical disk shared by the cluster nodes. You can create it on the same disk with Microsoft Exchange Server storage and log files. For example, create Quarantine directory on disk **D**:.
- 3. Go to Windows Start menu > All Programs > Administrative Tools and select Cluster Administrator.
- 4. Under Groups, right-click Exchange Virtual Server and select New > Resource.

New Resource	Na <u>m</u> e: Description: Resource <u>type:</u> <u>G</u> roup:	e Quarantine Storage F-Secure Quarantine Storage File Share EVS rce in a separate Resource Monitor
		Back Next> Cancel

Enter the following information:

- Name: F-Secure Quarantine Storage
- Resource Type: File Share
- Group: make sure that your ExchangeVirtual Server is selected.
- Click Next.

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5. Possible Owners dialog opens.

Possible Owners F-Secure Quarantine Stor Possible owners are nodes in the cl Specify the possible owners for this	uster on which this resource can be brought online.
A⊻ailable nodes:	Possible <u>o</u> wners:
Name	Add -> <- Eemove
	< <u>B</u> ack <u>N</u> ext > Cancel

- 6. Verify that all nodes that are running Exchange Server are listed under **Possible owners** and click **Next**.
- 7. Dependencies dialog opens.

In Available resources, select the Exchange Server Network Name and the disk with the quarantine storage directory and click Add to add them to Resource dependencies. Click Next.

Dependencies are resources v Specify the dependencies for I			nline by the cluster service	e first.
Available resources:		F	Resource <u>d</u> ependencies:	
Resource	R 🔺		Resource	Resou
EVS System Attend Exchange HTTP Vi Exchange IMAP4 S Exchange Informati Exchange Message		<u>A</u> dd -> <- <u>R</u> emove	Disk D: EVS Network Name	Physic Netwo

8. File Share Parameters dialog opens.

File Share Param	eters
F-Sec	ure Quarantine Storage
<u>S</u> hare name:	FSAVMSEQS\$
<u>P</u> ath:	D:\Quarantine
Comment:	F-Secure Quarantine Storage
User Limit © <u>M</u> aximum © Allo <u>w</u> Pe <u>r</u> missio	users
	< <u>B</u> ack [Finish] Cancel

- Type FSAVMSEQS\$ as **Share name**. (Note:the dollar (\$) character at the end of the share name makes the share hiddenwhen you view network resources of the cluster with Windows Explorer.)
- Enter the directory name you createdon step 2 as Path (for example, D:\Quarantine).
- In the **Comment** box, type **F-Secure Quarantine Storage**.
- Make sure that **User limit** is set to **Maximum allowed**.

Click Permissions

9. Permissions dialog opens.

Permissions for FSAVMSEQS\$ (F-	Secure Quaran	tine Storag 🗴		
Security				
<u>G</u> roup or user names:				
Administrator (TESTVD0M2\Administrator) Exchange Domain Servers (TESTVD0M2\Exchange Doma SYSTEM				
	A <u>d</u> d	<u>R</u> emove		
Permissions for Administrator	Allow	Deny		
Full Control Change	N N			
Read				
C OK	Cancel	Apply		

Add Administrator, Exchange Domain Servers and SYSTEM to the Group or user names. Remove Everyone account. Grant Change and Read permissions for Exchange Domain Servers and SYSTEM, and Full Control, Change and Read permissions for Administrator account. Click OK.

10. In File Share Parameters dialog, click Advanced.

Advanced File Share Properties	<u>?</u> ×
• Normal share	
C Dfs root	
Share subdirectories	
Hide subdirectory shares	
OK Car	ncel

Make sure that Normal share is selected in Advanced File ShareProperties. Click OK.

- 11. In File Share Parameters dialog, click **Finish** to create **F-Secure Quarantine Storage** resource.
- 12. Right-click the F-Secure Quarantine Storage resource and click Bring Online.

1.2.2 QUARANTINE STORAGE IN ACTIVE-ACTIVE CLUSTER

For an active-active clusterinstallation, the quarantine storage must be set on a dedicated computer. This computer should be the member of the same domain as your Exchange Servers.

- 1. Log on to the server where you plan to create the quarantine storage (for example, APPSERVER) with a domain administrator account.
- 2. Create a directory (for example, C:\Quarantine) for the quarantine storage on the local hard disk.
- 3. Right-click the directory in the Windows Explorer and select Sharing and Security.
- 4. The Sharing tab opens.

Type FSAVMSEQS\$ as Share name and make sure that User limit is set to Maximum Allowed. Click Permissions

Quarantine Properties ? 🗙
General Sharing Security Customize
You can share this folder with other users on your network. To enable sharing for this folder, click Share this folder.
C Do not share this folder
<u>Share this folder</u>
Share name: FSAVMSEQS\$
Comment:
User limit:
C Allow this number of users:
To set permissions for users who access this <u>Permissions</u>
To configure settings for offline access, click <u>Caching</u>
OK Cancel Apply

5. Permissions dialog opens.

Add Administrator, Exchange Domain Servers and SYSTEM to the Group or user names. Remove Everyone account.

Permissions for FSAVMSEQS\$		×		
Share Permissions				
Share Permissions Group or user names: Administrator (Administrator@e10w08r2c.local) State Servers (E10W08R2C\Exchange Servers) System				
<u>P</u> ermissions for Administrator Full Control Change Read	Add Allow Ø Ø	Bemove Deny		
Learn about access control and permissions				
OK	Cancel	Apply		

Grant Change and Read permissions for Exchange Domain Servers and SYSTEM, and Full Control, Change and Read permissions for Administrator account. Click OK.

6. In the directory properties dialog, go to the **Security** tab.

Remove all existing groups and users and add Administrator, Exchange Domain Servers and SYSTEM to the Group or user names. Grant all except Full Control permissions for Exchange Domain Servers and SYSTEM. Grant all permissions for Administrator. Click OK.

7. To verify that the quarantine storage is accessible, log on as the domain administrator to any node in the cluster and try to open *Server>\FSAVMSEQS\$*\ with Windows Explorer, where *Server>* is the name of the server where you created the quarantine storage share.

1.2.3 CREATING THE QUARANTINE STORAGE FOR A SINGLE COPY CLUSTER ENVIRONMENT

For singlecopy cluster, the Quarantine Storage can be created on a dedicated computer oras a cluster resource. For more information on how to install the Quarantine Storage on a dedicated computer, see <u>Creating the Quarantine Storage for a</u> <u>Continuous Cluster Replication Environment</u>.

To install Quarantine as a cluster resource, follow the instructions for either Windows 2003 Based Cluster, or Windows 2008 based cluster.

WINDOWS 2003 BASED CLUSTER

- 1. Log on to the active node of the cluster with the domain administrator account.
- 2. Create a directory for the quarantine storage on the physical disk shared by the cluster nodes.

You can create it on the same disk where the Exchange Server storage and logsare located. For example, create Quarantine directory on disk D:.

- 3. Go to Start menu > All Programs> Administrative Tools > Cluster Administrator.
- 4. Right-click the Exchange VirtualServer under the Groups and select New > Resource.
- 5. The New Resource wizard opens.

_	F-Secur	e Quarantine Storage
	Na <u>m</u> e:	F-Secure Quarantine Storage
	Description:	
	Resource type:	File Share
	<u>G</u> roup:	EVS
*	\square <u>B</u> un this resou	urce in a separate Resource Monitor
	To continue, click	: Next.
	<	Back Next> Cancel

- a. Type F-Secure Quarantine Storage as the name of the new resource.
- b. In the **Resource Type** list, select **File Share**.
- c. In the **Group** list, make sure that your Exchange Virtual Server is selected.

Click **Next** to continue.

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6. Make sure that all nodes that are running Exchange Server are listed in the **Possible owners** list.

Specify the possible owners for this	uster on which this resource can be brought online. resource.
A <u>v</u> ailable nodes:	Add -> Add -> Add -> Add -> Add -> Approve
	< <u>B</u> ack <u>N</u> ext > Cancel

Click **Next** to continue.

7. Select the Exchange Server Network Name and the Physical Disk under **Available resources** and click **Add** to move them to the **Resource dependencies** list.

Dependencies F-Secure Quarantine Stor Dependencies are resources which	n must be brought c	nline by the cluster service	e first.
Specify the dependencies for this re Available resources:		Resource <u>d</u> ependencies:	
Resource R EVS IP Address IF EVS System Attend M Exchange HTTP Vi M Exchange IMAP4 S M Exchange Informati M Exchange Message M Exchange MS Sear M	<u>A</u> dd -> <- <u>R</u> emove	Resource	Resou Physic Netwo
	< <u>B</u> ack	(<u>N</u> ext>)	Cancel

Click Next to continue.

- 8. Use the following settings as the File Share parameters.
 - a. Type **FSAVMSEQS\$** as the share name and **F-Secure Quarantine Storage** as comment.

Note: The dollar (\$) character at the end of the share name makes the share hidden when you view the network resources of the cluster with Windows Explorer.

b. Make sure that User Limit is set to Maximum allowed.

File Share Parameters	
F-Secure Quarantine Storage	
Share name: FSAVMSEQS\$	
Path: D:\Quarantine	
Comment: F-Secure Quarantine Storage	
User Limit Maximum allowed Allow	
Permissions Advanced Caching	
< <u>B</u> ack Finish	Cancel

Click **Permissions** to change permissions.

- 9. Change permissions as follows:
 - a. Add Administrator, Exchange Domain Servers and SYSTEM to the Group or user names list.
 - b. Remove the **Everyone** account.
 - c. Grant Change and Read permissions for Exchange Domain Servers and SYSTEM.
 - d. Grant Full Control, Change and Read permissions for the Administrator account.

Permissions for FSAVMSEQS\$ (F	-Secure Quara	ntine Storag 🕨	
Security			
Group or user names:			
🖸 🙍 Administrator (TESTVDOM2	VAdministrator)		
🕵 Exchange Domain Servers (TESTVD0M2\Exchange Doma			
SYSTEM			
	A <u>d</u> d	<u>R</u> emove	
Permissions for Administrator	Allow	Deny	
Full Control			
Change			
Read			
OK	Cancel		

Click OK to continue.

10. Click Advanced to open Advanced File Share Properties.



Make sure that **Normal share** isselected.

Click OK to continue.

11. Click Finish to create the F-Secure Quarantine Storage resource.



12. Right-click the F-Secure Quarantine Storage resource and select Bring Online.

WINDOWS 2008 BASED CLUSTER

- 1. Log on to the active node of the cluster with the domain administrator account.
- 2. Create a directory for the quarantine storage on the physical disk shared by the cluster nodes.

You can create it on the same disk where the Exchange Server storage and logs are located.

3. After the quarantine directory is created, it has to be shared. When you share the quarantine directory, it becomes visible in the Failover ClusterManager. To share the directory, right-click the quarantine folder and select Share.

le Sharing	
3 File Sharing	
Choose people on your network to share with	
Type the name of the person you want to share w or share with everyone.	vith and then click Add, or click the arrow to find people
	<u>▲</u> dd
Name	Permission Level
La Administrator	Owner 🔷
Administrators	Contributor 🔻
🙈 Exchange Servers	Contributor 🔻
SYSTEM	Contributor 🔻
Tell me about different ways to share in Windows	<u>.</u>
	2.0.0

Add **Administrators**, **Exchange Servers** and **SYSTEM** with **Contributor** permission levels. Press **Share** to close the window and enable the share.

4. Check that everything is configured correctly. The Failover Cluster Manager view should look like this:

Summary of LHCLUMB Summary of LHCLUMB HCLUMB Indexts: Status: Status: Status: Status: Indexts: Indexts: </th <th>Failover Cluster Manager</th> <th>LHCLUMB</th> <th>Actions</th>	Failover Cluster Manager	LHCLUMB	Actions
I HCLUMB Nodes I HCLUM I HCLUM I HCLUM I HCLUM I HCLUM I HCLUM I HCLUM I HCLUM I HCLUM I HCLUM I HCLUM I HCLUM I HCLUM I HCLUM I HCLUM I HCLUM I HCLUM I HCLUM I HCLUM <	LHCLUSTER.mse2007		LHCLUMB
Private Private Image: Status <	HCLUMB Nodes LHCLU1 LHCLU2 Castorage	Status: Online Alerts: <none></none>	Take this service or
Name Server Name Name Status Name Server Name Name Name Name Name Server Name Name Para Data Shared Folders:	📱 Private	Current Owner: LHCLU2	📆 Manage shares and
Shared Folders:	[13] Cluster Events	Server Name Image: LHCLUMB Image: LHCLUMB Image: File Server Image: File Serv	Add storage Add a resource Show Dependency R. View Delete Rename Refresh
Share Name Folder Path Type # Client Conn., Description			🛛 Help
Share Name Folder Path Type # Client Conn Description Quarantine			Quarantine
📃 🖳 Quarantine Mt\Quarantine Windows 0 🗙 Stop Sharing		📕 Quarantine M:\Quarantine Windows 0	🗙 Stop Sharing
Refresh			Refresh
Properties			Properties

5. During the product installation, select the quarantine share you just created when the installation asks for the quarantine path. Use the UNC path in form of *CLUSTERNAME\QUARANTINE*. (In the example above, *LHCLUMB\Quarantine*.)

1.2.4 CREATING THE QUARANTINE STORAGE FOR A CONTINUOUS CLUSTER REPLICATION ENVIRONMENT

For a Continuous Cluster Replication (CCR) cluster installation, the quarantine storage must be set on a dedicated computer. This computer has to be a member in the same domain with Exchange Servers.

- 1. Log on to the server where you plan to create the quarantine storage (for example, APPSERVER) with the domain administrator account.
- 2. Open Windows Explorer and create a directory (for example, C:\Quarantine) for the quarantine storage on the physical disk.
- 3. Right-click the directory and select **Sharing and Security**.
- 4. Go to the **Sharing** tab.

Quarantine Properties 🛛 🙁 🗙
General Sharing Security Customize
You can share this folder with other users on your network. To enable sharing for this folder, click Share this folder.
O Do not share this folder
<u>S</u> hare this folder
Share name: FSAVMSEQS\$
Comment:
User limit: 💽 <u>M</u> aximum allowed
C Allow this number of users:
To set permissions for users who access this <u>Permissions</u>
To configure settings for offline access, click <u>Caching</u>
OK Cancel Apply

a. Type FSAVMSEQS\$ as the share name and F-Secure Quarantine Storage as comment.

Note: The dollar (\$) character at the end of the share name makes the share hidden when you view the network resources of the cluster with Windows Explorer.

b. Make sure that User Limit is set to Maximum allowed.

Click **Permissions** to set permissions.

- 5. Change permissions as follows:
 - a. Remove all existing groups and users.
 - b. Add Administrator, Exchange Domain Servers and SYSTEM to the Group or user names list.
 - c. Grant Change and Read permissions for Exchange Domain Servers and SYSTEM.
 - d. Grant Full Control, Change and Read permissions for the Administrator account.

Permissions for FSAVMSEQS	\$	×
Share Permissions		
Group or user names: Administrator (Administrator) Exchange Servers (E10w/06 SYSTEM		rvers)
Permissions for Administrator Full Control Change Read	Add Allow V V	Bemove
Learn about access control and p	ermissions	
OK	Cancel	Apply

Click **OK** to continue.

- 6. Go to the Security tab.
 - a. Remove all existing groups and users.
 - b. Add Administrator, Exchange Domain Servers and SYSTEM to the Group or user names list.
 - c. Grant all except Full Controlpermissions for Exchange Domain Servers and SYSTEM.
 - d. Grant all permissions for the Administrator account.

Security Dbject name: C:\Quarantine Group or user names: Administrator(@e10w08r2c.local)	
Group or user names:	
Administrator (Administrator@e10w08r2c.local)	
Exchange Servers (E10W08R2C\Exchange Servers)	
SYSTEM	
,	
Add <u>R</u> emove	
Permissions for Administrator Allow Deny	
Full control 🗹 🗖 🔺	
Modify 🗹 🗖	
Read & execute	
List folder contents	
Read 🗹 🗖 🖵	
Learn about access control and permissions	
OK Cancel Apply	1

Click **OK** to finish.

To make sure that the quarantine storage is accessible, follow these instructions:

- 1. Log on as the domain administrator to any node of the cluster.
- 2. Try to open *Server*>*FSAVMSEQS*\$\ with Windows Explorer, where *Server*> is the name of the server where you just created the quarantine storage share.

1.2.5 CREATING THE QUARANTINE STORAGE FOR A DATABASE AVAILABILITY GROUP ENVIRONMENT

For the Database Availability Group (DAG) installation, the quarantine storage must be set on a dedicated computer. This computer has to be a member in the same domain with Exchange Servers.

- 1. Log on to the server where you will create the quarantine storage (for example, APPSERVER) with the domain administrator account.
- 2. Open Windows Explorer and create a directory (for example, C:\Quarantine) for the quarantine storage.
- 3. Right-click the directory and select **Properties** from the menu.
- 4. Go to the **Sharing** tab.

📜 Quarantine Properties	×
General Sharing Security Previous Versions Customize	
Network File and Folder Sharing Quarantine Not Shared <u>N</u> etwork Path: Not Shared <u>Share</u>	
Advanced Sharing Set custom permissions, create multiple shares, and set other advanced sharing options.	
OK Cancel Apply	

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- 5. Click Advanced Sharing to share the directory.
- 6. Select **Share this folder**.

Advanced Sharing
☑ <u>S</u> hare this folder
Settings
S <u>h</u> are name:
FSAVMSEQS\$
Add Remove
Limit the number of simultaneous users to: 16777
Comments:
F-Secure Quarantine Storage
Permissions Caching
OK Cancel Apply

Type FSAVMSEQS\$ as the share name and **F-Secure Quarantine Storage** as a comment.

Note: The dollar (\$) character at the end of the share name hides the share when you view the network resources of the cluster with Windows Explorer.

- e. Make sure that User Limit is set to Maximum that is allowed (16777216).
- 7. Click **Permissions** to set permissions for the share.
- 8. Change permissions as follows:
 - a. Remove all existing groups and users.
 - b. Add Administrator, Exchange Servers and SYSTEM to the Group or user names list.
 - c. Grant Change and Read permissions for Exchange Servers and SYSTEM.
 - d. Grant Full Control, Change and Read permissions for the Administrator account.

Permissions for FSAVMSEQS\$		<u> </u>
Share Permissions		
<u>G</u> roup or user names:		
Administrator (TESTVDDM2 Exchange Domain Servers (SYSTEM		xhange Dom
	A <u>d</u> d	<u>R</u> emove
Permissions for Administrator	Allow	Deny
Full Control Change Read	202	
ОК	Cancel	Apply

9. Click OK to continue.

10. Go to the **Security** tab and click **Edit**.

- e. Remove all existing groups and users.
- f. Add Administrator, Exchange Servers and SYSTEM to the Group or user names list.
- g. Grant all except **Full Control** permissions for Exchange Servers and SYSTEM.
- h. Grant all permissions for the Administrator account.

Quarantine Properties		? ×
General Sharing Security Cust	omize	
<u>G</u> roup or user names:		
🕵 Administrator (TESTVDOM2)	Administrator)	
Exchange Domain Servers (TESTVDOM2\Ex	change Dom
SYSTEM		
	A <u>d</u> d	<u>R</u> emove
Permissions for Administrator	Allow	Deny
Full Control	\square	
Modify Bead & Execute	N N	
List Folder Contents		
Read		
Write		
Special Permissions		
For special permissions or for adva click Advanced.	anced settings,	Advanced
OK	Cancel	Apply

11. Click OK to continue.

After you have configured the quarantine storage, make sure that it is accessible. Follow these instructions:

- 1. Log on as the domain administrator to any node of the cluster.
- 2. Open \\<Server>\FSAVMSEQS\$\ with Windows Explorer, where <Server> is the name of the server where you created the quarantine storage share.

1.3 INSTALLING THE PRODUCT

Follow the instructions in this section to install the product on the active-passive and active-active clusters, CCR, SCC and DAG installations.

1.3.1 INSTALLING ON CLUSTERS WITH QUARANTINE AS CLUSTER RESOURCE

This section describes how to install the product on clusters where Quarantine isconfigured as cluster resource in Exchange Virtual Server.

- 1. Log on to the active node of the cluster using a domain administrator account.
- 2. Run F-Secure E-mail and Server Security setup wizard.
 - a. Install the product in the centralized management mode.
 - b. Specify the IP address of F-Secure Policy Manager Server and **admin.pub** that you created during the F-Secure Policy Manager installation.

For more information, see the "Installing the product locally" section of the Deployment Guide.

3. The setup wizard asks for the location of the quarantine directory.

F-Secure E-mail and Se	rver Security	x
	Please specify the path to the directory where quarantined e-mail messages and attachments will be placed. If you are installing the product to a cluster node, make sure that the quarantine directory is located on the shared disk.	
	Quarantine Directory: \\E10DC\quarantine\$ Browse	1
5		
F-Secure.		
	< Back Next > Cance	

Specify the UNC path to the Quarantine Storage share that you created before the installation as the Quarantine Directory. For example, \\<*EVSName*>*FSAVMSEQS\$*, where <*EVSName*> is the network name of your Exchange Virtual Server.

Click **Next** to continue.

4. The setup program asks to specify the SQL Server to use for the quarantine database.



Select the server running Microsoft SQL Server and click Next to continue.

5. The setup program asks to specify the database name where quarantined items are stored.

	Please specify the name of t information about quarantine	he SQL database that will store d e-mails and attachments.
	Database name:	
	FSMSE_Quarantine	
	connect to the quarantine da	e and password that will be used t stabase. If the specified user I be created automatically during
	User name:	fqmuser
	Password:	
F-Secure.	Confirm password:	

Specify the name for the database and enter user name and password that will be used to access the database.

Click Next to continue.

- 6. Complete the installation on the active node.
- 7. Log on to the passive node of the cluster using a domain administrator account. Repeat steps 2-4.

8. After you specify the SQL Server to use, the setup wizard asks you to specify the quarantine database.



Select Use the existing database and click Next to continue.

9. Complete the installation on the passive node.

1.3.2 INSTALLING ON CLUSTERS WITH QUARANTINE ON A DEDICATED COMPUTER

This section describes how to install the product on clusters where Quarantine is installed on a dedicated computer.

- 1. Log on to the first node of the cluster using a domain administrator account.
- 2. Run F-Secure E-mail and Server Security setup wizard.
 - a. Install the product in the centralized management mode.
 - b. Specify the IP address of F-Secure Policy Manager Server and **admin.pub** that you created during the F-Secure Policy Manager installation.

For more information, see the "Installing the product locally" section of the Deployment Guide.

3. The setup wizard asks for the location of the quarantine directory.



Specify the UNC path to the Quarantine Storage share that you created before the installation as the Quarantine Directory. For example, *Server>\FSAVMSEQS\$*, where *Server>* is the name of the server where you created the quarantine storage share.

Click Next to continue.

4. The setup program asks to specify the SQL Server to use for the quarantine database.



Select the server running Microsoft SQL Server and click Next to continue.

5. The setup program asks to specify the database name where quarantined items are stored.

F-Secure E-mail and Ser	ver Security	×
	Please specify the name of the SQL database that will store information about quarantined e-mails and attachments.	
	Database name:	
	FSMSE_Quarantine	
	Please specify the user name and password that will be used to connect to the quarantine database. If the specified user account does not exist, it will be created automatically during installation.	
	User name: fqmuser	
	Password:	
F-Secure.	Confirm password:	
a <u></u>	< Back Next > Cancel	

Specify the name for the database and enter user name and password that will be used to access the database.

Click **Next** to continue.

- 6. Complete the installation on the first active node.
- 7. Log on to the second node of the cluster using a domain administrator account and repeat steps 2-4.

After you specify the SQL Server to use, the setup wizard asks you to specify the quarantine database.
 Select Use the existing database and click Next to continue.



9. Complete the installation on the second node.

1.4 ADMINISTERING THE CLUSTER INSTALLATION WITH F-SECURE POLICY MANAGER

To administer the product installed on a cluster, create a new subdomain under your organization or network domain. Import all cluster nodes to this subdomain.

To change product configuration on all cluster nodes, follow these instructions:

- 1. Select the cluster subdomain in the Policy Domains tree.
- 2. Change required settings.
- 3. Distribute the policy.
- 4. All nodes receive new settings next time they poll the F-Secure Policy Manager Server.

If you need to change settings on a particular node, follow these instructions:

- 1. Select the corresponding host in the Policy Domains.
- 2. Change required settings.
- 3. Distribute the policy.
- 4. All nodes will receive new settings the next time they poll F-Secure Policy Manager Server.

1.5 USING THE QUARANTINE IN THE CLUSTER INSTALLATION

You can manage quarantined items with the Web Console by connecting to any node of the cluster.

Note: You need to configure the Web Console to accept connections from authorized hosts. By default, the Web Console accepts connections from the local host only.

You can release, reprocess and download quarantined messages and attachments when at least one node of the cluster is currently online.

CONFIGURING MAILBOX ROLE SERVERS

However, as the clustered Exchange 2007 can have the mailbox role only and not all members of Exchange 2010 Database Availability Group may have Hub Transport Role, you need to configure the hub transport role and mailbox role servers so that quarantined messages can be delivered:

Hub Transport Role Server:

 Share the Pickup folder on the Exchange Hub Server. By default, the Pickup folder is located at %Program Files%\Microsoft\Exchange Server\TransportRoles\ Pickup.

Use the default name (Pickup) for the share so that it can be accessed at **\\HubServerName\Pickup**.

- Right-click the Pickup folder and select Properties
 Sharing and click Permissions. Assign Read and Change permissions to the Pickup folder for the Exchange Servers group or for the Mailbox Role Servers directly.
- 3. Go to the **Security** tab and assign all the permissions except **FullControl** and **Special** for the **Pickup Folder** for the Exchange Servers group or directly for the Mailbox Role Servers.

Mailbox Role Server

 Open the Windows Registry Editor and go to HKEY_ LOCAL_MACHINE\SYSTEM\CurrentControlSet\ Services\FSAVMSED\Parameters subkey.

If the Parameters subkey does not exist, create it.

2. Under the **Parameters** subkey, create **PickupFolderPath** string value that points to the Pickup Folder share of the hub server that has been created earlier (**HubServerName****Pickup**).

Note: The registry value has to be changed on all cluster nodes.

After these steps have been completed, the quarantine works properly on the Mailbox Role only servers as well.

Note: You do not have to reboot or restart the server, the product takes the new settings into use automatically.

Note: Even though the Exchange organization may contain more than one Hub Transport Role server, F-Secure Anti-Virus for Microsoft Exchange supports only one Pickup folder. After you have specified one Hub Transport Role Server with a Pickup folder, make sure that the folder is available or change Pickup folder path to another one if the current Hub Transport Role Server goes offline.

1.6 USING THE PRODUCT WITH HIGH AVAILABILITY ARCHITECTURE IN MICROSOFT EXCHANGE SERVER 2010

New high-availability solutions in Microsoft Exchange Server 2010 support online mailbox moves. As it takes some time for the product to enumerate mailbox changes on nodes, manual and scheduled scans might not scan the moved mailbox but the mailbox copy on the former node instead, if the scan is started right after the move. However, the real-time scan works without these limitations.

To scan Public Folders manually or with scheduled scanning, you have to specify an administrator's mailbox if the product settings. Manual and scheduled scans scan all Public Folders that the specified administrator account can access.

Once you start the manual scan of Public Folders on one node, the scan goes through all Public Folders the account can access, including those Public Folder Databases that are located on other nodes. To avoid collisions where one item would be edited by several on-demand scanners simultaneously, make sure that manual and scheduled Public Folders scans are started only on one node at a time.

The real-time Public Folder scan scans only Public Folders that are located together with the product on the same node.

If Public Folders in Microsoft Exchange 2010 are replicated, the attachment replacement text file is added only to the Public Folder Database replica that is located on the same node, but infections are detected and quarantined if needed from all replicas.

If an infected item was edited (an infection was disinfected or quarantined) during the manual or scheduled Public Folder scan, the edited item is marked as "read" for the administrator's mailbox which is specified in the product settings.

1.7 UNINSTALLATION

Follow these instructions to uninstall the product in the cluster environment.

- Uninstall the product from the active node with Add/Remove Programs in Windows 2003 or Programs and Features in Windows 2008 and 2008 R2. The uninstallation removes the cluster resource automatically.
- 2. After the uninstallation in the active node is finished, uninstall the product from passive nodes.
- 3. After the product has been uninstalled from every node, reboot computers one at the time.

1.8 TROUBLESHOOTING

If the product fails to quarantine a message or attachment or reports that the e-mail quarantine storage is not accessible, make sure that directory sharing and security permissions are set as follows: change, write and read operations are allowed for SYSTEM and Exchange Domain Servers, and full control is allowed for Administrator.

• To change the location of the e-mail quarantine storage from F-Secure Policy Manager Console, use the **Final** flag to override the setting set during product installation on the host.

SWITCH ON FREEDOM

F-Secure is an online security and privacy company from Finland. We offer millions of people around the globe the power to surf invisibly and store and share stuff, safe from online threats.

We are here to fight for digital freedom.

Join the movement and switch on freedom.

Founded in 1988, F-Secure is listed on NASDAQ OMX Helsinki Ltd.

