## Veritas Enterprise Vault™ Reporting

12.1



### Veritas Enterprise Vault: Reporting

Last updated: 2017-07-28.

#### Legal Notice

Copyright © 2017 Veritas Technologies LLC. All rights reserved.

Veritas, the Veritas Logo, Enterprise Vault, Compliance Accelerator, and Discovery Accelerator are trademarks or registered trademarks of Veritas Technologies LLC or its affiliates in the U.S. and other countries. Other names may be trademarks of their respective owners.

This product may contain third party software for which Veritas is required to provide attribution to the third party ("Third Party Programs"). Some of the Third Party Programs are available under open source or free software licenses. The License Agreement accompanying the Software does not alter any rights or obligations you may have under those open source or free software licenses. Refer to the third party legal notices document accompanying this Veritas product or available at:

#### https://www.veritas.com/about/legal/license-agreements

The product described in this document is distributed under licenses restricting its use, copying, distribution, and decompilation/reverse engineering. No part of this document may be reproduced in any form by any means without prior written authorization of Veritas Technologies LLC and its licensors, if any.

THE DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID. VERITAS TECHNOLOGIES LLC SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE FURNISHING, PERFORMANCE, OR USE OF THIS DOCUMENTATION. THE INFORMATION CONTAINED IN THIS DOCUMENTATION IS SUBJECT TO CHANGE WITHOUT NOTICE.

The Licensed Software and Documentation are deemed to be commercial computer software as defined in FAR 12.212 and subject to restricted rights as defined in FAR Section 52.227-19 "Commercial Computer Software - Restricted Rights" and DFARS 227.7202, et seq. "Commercial Computer Software and Commercial Computer Software Documentation," as applicable, and any successor regulations, whether delivered by Veritas as on-premises or hosted services. Any use, modification, reproduction release, performance, display or disclosure of the Licensed Software and Documentation by the U.S. Government shall be solely in accordance with the terms of this Agreement.

Veritas Technologies LLC 500 E Middlefield Road Mountain View, CA 94043

http://www.veritas.com

#### **Technical Support**

Technical Support maintains support centers globally. All support services will be delivered in accordance with your support agreement and the then-current enterprise technical support policies. For information about our support offerings and how to contact Technical Support, visit our website:

#### https://www.veritas.com/support

You can manage your Veritas account information at the following URL:

#### https://my.veritas.com

If you have questions regarding an existing support agreement, please email the support agreement administration team for your region as follows:

Worldwide (except Japan)	CustomerCare@veritas.com
Japan	CustomerCare_Japan@veritas.com

Before you contact Technical Support, run the Veritas Quick Assist (VQA) tool to make sure that you have satisfied the system requirements that are listed in your product documentation. You can download VQA from the following article on the Veritas Support website:

http://www.veritas.com/docs/000095758

#### Documentation

Make sure that you have the current version of the documentation. Each document displays the date of the last update on page 2. The latest documentation is available on the Veritas website:

http://www.veritas.com/docs/000001907

#### Documentation feedback

Your feedback is important to us. Suggest improvements or report errors or omissions to the documentation. Include the document title, document version, chapter title, and section title of the text on which you are reporting. Send feedback to:

#### evdocs@veritas.com

You can also see documentation information or ask a question on the Veritas community site:

http://www.veritas.com/community

## Contents

Chapter 1	About this guide	
	Introducing this guide Where to get more information about Enterprise Vault Enterprise Vault training modules	
Chapter 2	Introducing Enterprise Vault Reporting	12
	About Enterprise Vault Reporting About Enterprise Vault Reporting's reports How Enterprise Vault Reporting works How FSA Reporting works About the FSA Reporting proxy servers for non-Windows file servers	12 12 14 15 18 22
	About the FSA Reporting databases	23
Chapter 3	Overview of implementing Enterprise Vault Reporting Implementing Enterprise Vault Reporting	26 26
Chapter 4	Installing Enterprise Vault Reporting	29
	<ul> <li>Where and when to install Enterprise Vault Reporting</li> <li>Prerequisites for Enterprise Vault Reporting</li> <li>Enterprise Vault reports that require monitoring or auditing to be enabled</li> <li>Preparing for the installation of Enterprise Vault Reporting</li> <li>Installing the Enterprise Vault Reporting component</li> </ul>	29 29 30 31 31
Chapter 5	Configuring Enterprise Vault Reporting	33
	About configuring Enterprise Vault Reporting Configuring Enterprise Vault Reporting Checking that the configuration of Enterprise Vault Reporting was	33 34 35
	300003310I	

	Enabling the synchronization of Enterprise Vault RBA role membership	~ <b>-</b>
	Reconfiguring the data access settings for Enterprise Vault Reporting	. 35
		. 37
Chapter 6	Configuring FSA Reporting	38
	Configuring FSA Reporting Preparing for an FSA Reporting proxy server Preparing an EMC Celerra/VNX device to work with an FSA	38 40
	Reporting proxy server Adding a file server as an archiving target with FSA Reporting data	41
	collection enabled Enabling FSA Reporting data collection for an existing target file server	41
	Enabling or disabling FSA Reporting data collection for a file server	. 44
	target volume	46
	Setting the defaults for FSA Reporting data collection	47
	Setting the storage location for FSA Reporting's temporary files	47
	Verifying the placeholders on EMC Celerra/VNX devices	49
	Including NetApp filer snapshot folders in FSA Reporting scans Checking that the configuration of FSA Reporting was successful	50 51
Chapter 7	Accessing the reports	53
	About accessing Enterprise Vault Reporting's reports Administrator roles that provide access to Enterprise Vault Reporting's	53
	reports Administrator roles that provide access to Enterprise Vault	54
	Reporting's operation reports Administrator roles that provide access to FSA Reporting's reports	54
	Accessing Enterprise Vault Reporting's reports from SQL Server	. 56
	Reporting Services Report Manager About exporting Enterprise Vault Reporting reports from SQL	57
	Server Reporting Services Report Manager About scheduling Enterprise Vault Reporting reports in SQL Server	58
	Reporting Services Report Manager Accessing Enterprise Vault Reporting's reports from the Administration	59
	Console	. 59

Chapter 8	Managing FSA Reporting	62
	Managing FSA Reporting	62
	Viewing the status of FSA Reporting	64
	Running an unscheduled FSA Reporting scan on a file server	67
	Stopping FSA Reporting scans	68
	Disabling all FSA Reporting data collection	68
	Changing the default FSA Reporting data collection schedule	69
	Changing a file server's FSA Reporting database	69
	Maintaining the FSA Reporting databases	70
	Trimming the FSA Reporting database history tables	71
	Determining whether an FSA Reporting database is in purging	
	job maintenance mode	73
	Changing the schedule for an FSA Reporting database purging iob	74
	Running the FSA Reporting database purging job manually	74
	Changing the FSA Reporting proxy server for a non-Windows file server	
		75
	Modifying the FSA Reporting data collection parameters	76
	Obtaining data for a specific file type in the FSA Reporting reports	
		78
	Upgrading the FSA Agent	79
Chapter 9	Troubleshooting Enterprise Vault Reporting	82
	About troubleshooting Enterprise Vault Reporting	82
Appendix A	Report overviews	83
	The Enterprise Vault Reporting operation reports	83
	Archive Quota Usage report	05
	Archive Items Access report	88
	Archived Items Access Trends report	89
	Content Provider Ingest History report	92
	Content Providers Licensing and Usage Summary report	94
	Domino Mailbox Archiving Status report	96
	Domino Server Journal Mailbox Archiving Health report	97
	Domino Server Journal Mailbox Archiving Trends report	98
	Enterprise Vault Server 24-hour Health Status report	99
	Enterprise Vault Server Seven Day Health Status report	101
	Exchange Mailbox Archiving Status report	101
	Exchange Server Journal Mailbox Archiving Health report	102
	Exchange Server Journal Mailbox Archiving Trends report	104
	IMAP usage report	105

Items Archival Rate report	06
Move Archive report 1	07
Single Instance Storage Reduction by File Type report 1	09
Single Instance Storage Reduction per Vault Store Group report	
	11
Single Instance Storage Reduction Summary report 1	13
Vault Store Savesets report 1	14
Vault Store Usage by Archive report 1	15
Vault Store Usage by Billing Account report 1	17
Vault Store Usage Summary report 1	18
The FSA Reporting data analysis reports 1	20
Archive Points Space Usage Summary report 1	23
Drive Space Usage on a Server report	25
Drive Space Usage Summary report 1	26
Duplicate Files on a Server report 1	27
Duplicate Files Summary report 1	28
File Group Space Usage on a Server report 1	30
File Group Space Usage Summary report 1	32
Inactive Files on a Server by File Group report 1	34
Inactive Files on a Server by User report	35
Inactive Files Summary report	36
Storage Summary report	38
Storage Trends report 1	39
File Space Usage on an Archive Point report	41
Largest Files Per Volume report	43
Largest Files of a Specified File Type Per Volume report	43
Top Duplicate Files Per Volume report	44
Index 1	45

## Chapter

## About this guide

This chapter includes the following topics:

- Introducing this guide
- Where to get more information about Enterprise Vault

### Introducing this guide

This guide provides instructions on how to implement Enterprise Vault Reporting. The target audience is an administrator who wants to set up or manage Enterprise Vault Reporting, with or without FSA Reporting. The guide also describes how to access and interpret the reports.

To set up Enterprise Vault Reporting you need a working knowledge of Microsoft SQL Server Reporting Services.

# Where to get more information about Enterprise Vault

Table 1-1 lists the documentation that accompanies Enterprise Vault.

Document	Comments
Veritas Enterprise Vault Documentation Library	Includes all the following documents in Windows Help (.chm) format so that you can search across them all. It also includes links to the guides in Acrobat (.pdf) format.
	You can access the library in several ways, including the following:
	<ul> <li>In Windows Explorer, browse to the Documentation\language subfolder of the Enterprise Vault installation folder, and then open the EV_Help.chm file.</li> </ul>
	<ul> <li>On the Help menu in the Administration Console, click Help on Enterprise Vault.</li> </ul>
Introduction and Planning	Provides an overview of Enterprise Vault functionality.
Deployment Scanner	Describes how to check the required software and settings before you install Enterprise Vault.
Installing and Configuring	Provides detailed information on setting up Enterprise Vault.
Upgrade Instructions	Describes how to upgrade an existing Enterprise Vault installation to the latest version.
Setting up Domino Server Archiving	Describes how to archive items from Domino mail files and journal databases.
Setting up Exchange Server Archiving	Describes how to archive items from Microsoft Exchange user mailboxes, journal mailboxes, and public folders.
Setting up File System Archiving	Describes how to archive the files that are held on network file servers.
Setting up IMAP	Describes how to configure IMAP client access to Exchange archives and Internet mail archives.
Setting up SMTP Archiving	Describes how to archive SMTP messages from other messaging servers.
Setting up SharePoint Server Archiving	Describes how to archive content from Microsoft SharePoint servers.
Administrator's Guide	Describes how to perform day-to-day administration procedures.

 Table 1-1
 Enterprise Vault documentation set

Document	Comments
Backup and Recovery	Describes how to implement an effective backup strategy to prevent data loss, and how to provide a means for recovery in the event of a system failure.
Classification	Describes how to assign classification values to the metadata properties of all new and existing archived items. Users of applications such as Enterprise Vault Search and Compliance Accelerator can then use the classification values to filter the items when they conduct searches or reviews.
NSF Migration	Describes how to migrate content from Domino and Notes NSF files into Enterprise Vault archives.
PST Migration	Describes how to migrate content from Outlook PST files into Enterprise Vault archives.
Reporting	Describes how to implement Enterprise Vault Reporting, which provides reports on the status of Enterprise Vault servers, archives, and archived items. If you configure FSA Reporting, additional reports are available for file servers and their volumes.
Utilities	Describes the Enterprise Vault tools and utilities.
PowerShell Cmdlets	Describes how to perform various administrative tasks by running the Enterprise Vault PowerShell cmdlets.
Registry Values	A reference document that lists the registry values with which you can modify many aspects of Enterprise Vault behavior.
Help for Administration Console	The online Help for the Enterprise Vault Administration Console.
Help for Enterprise Vault Operations Manager	The online Help for Enterprise Vault Operations Manager.

 Table 1-1
 Enterprise Vault documentation set (continued)

For the latest information on supported devices and versions of software, see the *Enterprise Vault Compatibility Charts* book, which is available from this address:

http://www.veritas.com/docs/000097605

#### Enterprise Vault training modules

The Enterprise Vault and eDiscovery Tech Center (http://www.veritas.com/elibrary) is an eLibrary of self-paced learning modules developed around key features, best practices, and common technical support questions.

More advanced instructor-led training, virtual training, and on-demand classes are also available. For information about them, see

http://www.veritas.com/education-services/training-courses.

## Chapter

## Introducing Enterprise Vault Reporting

This chapter includes the following topics:

- About Enterprise Vault Reporting
- About Enterprise Vault Reporting's reports
- How Enterprise Vault Reporting works
- How FSA Reporting works

### About Enterprise Vault Reporting

Enterprise Vault Reporting is a separately installable Enterprise Vault component that provides enterprise-level reporting for administrators. The reports cover the status of Enterprise Vault servers, archives, and archived items, plus content providers' licensed capacity usage and ingest history.

Administrators can access the reports by using the Microsoft SQL Server Reporting Services Report Manager web application, or from the Enterprise Vault Administration Console.

FSA Reporting is a separately configurable part of Enterprise Vault Reporting. If you use File System Archiving (FSA) you can configure FSA Reporting to provide reports on your target file servers and their volumes.

### **About Enterprise Vault Reporting's reports**

Enterprise Vault Reporting can provide up to two sets of reports:

The operation reports include information on the following topics:

- Exchange and Domino mailbox archiving status, health, and trends.
- The volume of items that are archived per vault store.
- The status of the Enterprise Vault archives.
- Archive quota usage per user.
- Archived item access trends.
- Vault Store usage by archive, or by billing account.
- The storage reduction that is due to Enterprise Vault single instance storage.
- The number of savesets and collections.
- Content providers' licensed capacity usage and ingest history.
- The data analysis reports are available only if you configure FSA Reporting. The data analysis reports include information on the following topics:
  - The number of archived files for target file servers, and the space that is used and saved as a result of archiving.
  - Active and archived space usage per file group, per file server, or per archive point.
  - The numbers of unaccessed or duplicated files, and the space that these files occupy.
  - Used space and free space on the drives of each file server.
  - Storage growth trends for a file server's FSA archiving targets. The reports include trends for both the file server and vault store.

When you run a report you can customize the content by using the report's input parameters. For example, many of the data analysis reports provide either an overall view for all the file servers that are configured for FSA Reporting, or a detailed view for a named file server.

You can choose from a range of report export formats: XML, comma-separated values (CSV), TIFF, Acrobat (PDF), HTML, web archive (MHTML), and Excel. You can schedule reports to be emailed to a configured email address, or saved to a shared folder.

For a description of the input parameters and the output for each report, see the report overviews:

- See "The Enterprise Vault Reporting operation reports" on page 83.
- See "The FSA Reporting data analysis reports" on page 120.

### How Enterprise Vault Reporting works

You can use Enterprise Vault Reporting with or without FSA Reporting configured.

Figure 2-1 illustrates how Enterprise Vault Reporting works when FSA Reporting is not configured.



Figure 2-1 How Enterprise Vault Reporting works: without FSA Reporting

You access the Enterprise Vault reports from the Microsoft SQL Server Reporting Services Report Manager web application. You must log on to Report Manager with a user account that belongs to a suitable administrator role. The administrator role determines which reports you can access.

Enterprise Vault displays a list of reports that are appropriate for your administrator role. When you select a report, the Enterprise Vault data extension on the Microsoft SQL Server Reporting Services server computer issues a query to obtain the required data from the Enterprise Vault databases. Report Manager then displays the generated report.

You can also access the reports from the Enterprise Vault Administration Console.

Different reports require information from different Enterprise Vault databases. Each of the operation reports requires data from one or more of the following databases:

- Vault store databases. A vault store database holds information about each item that is archived in the associated vault store.
- Directory database. The Directory database holds Enterprise Vault configuration data for one or more Enterprise Vault sites.
- Fingerprint databases. Each fingerprint database holds information about the single instance storage parts for a vault store group.
- Monitoring database. This database holds the status information that the Enterprise Vault monitoring agents gather about the Enterprise Vault servers.
- Auditing database. This database holds the data that the Enterprise Vault auditing mechanism gathers.

**Note:** Enterprise Vault monitoring and auditing must be enabled if you want to use the reports that require data from these databases.

See "Enterprise Vault reports that require monitoring or auditing to be enabled" on page 30.

### How FSA Reporting works

When you configure FSA Reporting for a file server, the data analysis reports become available in addition to the operation reports. The data analysis reports work in the same way as the operation reports, except that the data analysis reports query only the FSA Reporting databases and the Directory database.

Figure 2-2 illustrates how Enterprise Vault Reporting works if you configure FSA Reporting for Windows file servers.



Figure 2-2 How Enterprise Vault Reporting works: with FSA Reporting for Windows file servers

Table 2-1 describes the components of FSA Reporting.

archiving target

Component	Description	
File Collector service	This service runs on the Windows file server and does the following:	
	<ul> <li>Scans the file system on each file server volume for which FSA Reporting is enabled. The File Collector service performs the scans according to the FSA Reporting data collection schedule, or when an administrator triggers an immediate scan with the "Run FSA Reporting scan" option.</li> <li>Collects the archive data for a volume by querying the Vault Store databases and the Directory database through the FSA Reporting web service.</li> </ul>	
	<ul> <li>Collates the active and the archive data into an XML file.</li> <li>Divides the XML file into chunks and then transfers the chunks to the FSA Reporting web service on the Enterprise Vault server.</li> </ul>	
	The File Collector service is part of the FSA Agent. Before you can enable FSA Reporting for a Windows file server, the FSA Agent must be installed on the file server.	
	<b>Note:</b> The FSA Agent cannot run on non-Windows file servers. For non-Windows file servers another server must act as a proxy and perform the FSA Reporting data collection remotely.	
	See "About the FSA Reporting proxy servers for non-Windows file servers" on page 18.	
FSAReporting web service	This service runs on the Enterprise Vault server and does the following:	
	<ul> <li>Responds to queries from the File Collector service for archive data for any volume.</li> <li>Receives the XML file's data chunks from the File</li> </ul>	
	Collector service and reassembles them.	
	<ul> <li>Oploads the reassembled XML data to the file server's assigned FSA Reporting database.</li> </ul>	
	<ul> <li>Returns the status of the upload operation to the File Collector service.</li> </ul>	
	<ul> <li>Stores in the Directory database the FSA Reporting configuration changes that it receives from the Administration Console.</li> </ul>	

 Table 2-1
 FSA Reporting components

Component	Description
FSA Reporting databases	FSA Reporting requires at least one FSA Reporting database per Directory database. Each FSA Reporting database holds the scanned data and configuration information for one or more target file servers.
	See "About the FSA Reporting databases" on page 23.

 Table 2-1
 FSA Reporting components (continued)

The Administration Console displays the status of FSA Reporting for the target file servers and their target volumes.

See "Viewing the status of FSA Reporting" on page 64.

#### About the FSA Reporting proxy servers for non-Windows file servers

The Enterprise Vault File Collector service cannot run on non-Windows file servers, that is NetApp Filers and EMC Celerra/VNX devices. Another server must act as a proxy to perform the FSA Reporting data collection remotely. We refer to this server as the FSA Reporting proxy server.

When you configure FSA Reporting for a non-Windows file server, you must select a server to act as the FSA Reporting proxy server. You can choose an existing FSA Reporting proxy server if you have already configured one.

Any of the following can act as an FSA Reporting proxy server, subject to the necessary prerequisites:

- An Enterprise Vault server in the Enterprise Vault site.
- A Windows file server that is configured as a file server archiving target in the Enterprise Vault site.
- A Windows server on the network.

See "FSA Reporting proxy server requirements" on page 22.

If you configure several FSA Reporting proxy servers you can use a mix of the proxy server types if you want.

Figure 2-3 shows an example configuration that uses all of the FSA Reporting proxy server types.



Figure 2-3 FSA Reporting proxy server options

Non-Windows file servers

Note the following:

When a Windows file server or a networked Windows computer acts as an FSA Reporting proxy server, the FSA Agent must reside on the proxy server to provide the File Collector service. When you choose the proxy server, Enterprise Vault prompts you to install the FSA Agent if it is not already present.

**Note:** To enable FSA Reporting on NetApp C-Mode filers, you must have the Enterprise Vault 11.0.1 or later FSA Agent installed.

 When an Enterprise Vault server acts as a proxy server, a program named FSAReportingService.exe on the Enterprise Vault server performs the file collector tasks. The Enterprise Vault Admin service starts and governs the FSAReportingService.exe program.

Table 2-2 lists some factors to consider when you choose the type of proxy server.

Server type	Benefits	Disadvantages
Enterprise Vault server	Uses the existing Enterprise Vault infrastructure, so you have no additional servers to manage. Does not require the FSA Agent, so no additional installation of the FSA Agent is required.	Adds the proxy server resource demand to the Enterprise Vault server, so may adversely affect the existing Enterprise Vault tasks and applications.
Windows file server archiving target	Uses the existing Enterprise Vault infrastructure, so you have no additional servers to manage. Useful in a distributed environment with Windows file server archiving targets available locally and centralized Enterprise Vault servers. A local Windows file server archiving target can avoid the need to scan over a wide area network.	Adds the proxy server resource demand to the file server, so may adversely affect the file server's existing tasks and applications. Enterprise Vault applications on the file server may run more slowly.

 Table 2-2
 Benefits and disadvantages of the FSA Reporting proxy server types

Server type	Benefits	Disadvantages
Other Windows server on the network	Useful in a distributed environment when there are no Windows file server archiving targets or Enterprise Vault servers available locally. By using a local Windows server you can avoid the need to scan over a wide area network. Does not add the proxy server resource demand to an Enterprise Vault server or Windows file server archiving target.	Additional hardware provision required: another server to manage. Requires a separate installation of the FSA Agent.

## Table 2-2 Benefits and disadvantages of the FSA Reporting proxy server types (continued)

The resource demand on an FSA Reporting proxy server tends to increase with the following:

- The number of file servers that you have assigned to the proxy server.
- The number of archive points and volumes that require scanning for FSA Reporting.
- The number of FSA Reporting scans the proxy server performs concurrently.

If you configure FSA Reporting for several non-Windows file servers in an Enterprise Vault site, you can spread the proxy server load as follows:

- Distribute the non-Windows file servers among several FSA Reporting proxy servers.
- Assign different proxy servers to the file servers with the most volumes that are enabled for FSA Reporting.
- Assign different proxy servers to the file servers that have the same FSA Reporting scan schedule.
- Stagger the FSA Reporting scan schedules for the file servers that are assigned to the same proxy server.

We recommend that you use a separate FSA Reporting proxy server for each non-Windows file server, if possible.

#### FSA Reporting proxy server requirements

Before you configure a computer as an FSA Reporting proxy server, make sure that it conforms to Enterprise Vault's requirements.

Table 2-3 lists the requirements for each proxy server type.

**Note:** The computer must not be part of a cluster. A clustered server cannot act as an FSA Reporting proxy server.

Proxy server type	Requirement	
Enterprise Vault server	<ul> <li>The Enterprise Vault server must be in the same Enterprise Vault site as the non-Windows file server. It does not need to have the non-Windows file server as an archiving target.</li> <li>For EMC Celerra/VNX, the HTTP server on the Celerra/VNX Data Mover must accept Celerra/VNX FileMover API connections from the Enterprise Vault server.</li> <li>This condition will already be true if the EMC Celerra/VNX device is an archiving target of the Enterprise Vault server. Otherwise you need to configure the Celerra/VNX Data Mover.</li> </ul>	
Windows file server archiving target	<ul> <li>Both a forward DNS lookup and a reverse DNS lookup must succeed for the file server.</li> <li>The FSA Agent is is required. You need not install the FSA Agent in advance. When Enterprise Vault assigns the proxy server it installs the FSA Agent, if the agent is not already present.</li> <li>When you install the FSA Agent, the installer adds the Vault Service account to the local Print Operators group on the file server, and configures the other required permissions and privileges for the Vault Service account.</li> <li>For EMC Celerra/VNX, the HTTP server on the Celerra/VNX Data Mover must accept Celerra/VNX FileMover API connections from the server.</li> </ul>	

 Table 2-3
 Requirements for FSA Reporting proxy servers

Proxy server type	Requirement
Other Windows server on the network	<ul> <li>The Windows server must be in the same domain as the Enterprise Vault server, or in a child domain, or in a domain with a two-way trust relationship. A workgroup computer cannot act as a proxy server.</li> <li>Both a forward DNS lookup and a reverse DNS lookup must succeed for the server.</li> <li>The Windows computer must not act as an FSA Reporting proxy server for a file server in another site.</li> <li>The FSA Agent is required. You need not install the FSA Agent in advance. When Enterprise Vault assigns the proxy server it installs the FSA Agent, if the agent not already present.</li> <li>When you install the FSA Agent, the installer adds the Vault Service account to the local Print Operators group on the Windows server, and configures the other required permissions and privileges for the Vault Service account.</li> <li>For EMC Celerra/VNX, the HTTP server on the Celerra/VNX Data Mover must accept Celerra/VNX FileMover API connections from the server.</li> </ul>

 Table 2-3
 Requirements for FSA Reporting proxy servers (continued)

See "Preparing an EMC Celerra/VNX device to work with an FSA Reporting proxy server" on page 41.

#### About the FSA Reporting databases

An FSA Reporting database holds the FSA Reporting scan data for one or more file servers. FSA Reporting requires at least one FSA Reporting database per Directory database.

When you configure a file server for FSA Reporting, Enterprise Vault does as follows:

- If there are no FSA Reporting databases associated with the Directory database, a wizard helps you to create an FSA Reporting database.
- If at least one FSA Reporting database is already associated with the Directory database, Enterprise Vault gives you the following options:
  - Select an existing FSA Reporting database to hold the file server's data.
  - Create a new FSA Reporting database to hold the file server's data.

You can choose the name for each FSA Reporting database. The name must contain only alphanumeric characters and spaces. The name can be up to 25 characters long.

Multiple FSA Reporting databases provide the following benefits:

- Multiple databases provide scalability. FSA Reporting can upload the data faster from multiple file servers to multiple databases, which can significantly reduce scan times.
- Multiple databases let you segregate information, for example by geographical location.

A minor disadvantage of multiple FSA Reporting databases is that summary reports take longer to generate, because Microsoft SQL Server Reporting Services must gather the data from multiple databases.

When you assign FSA Reporting databases to your target file servers, take into account the following factors:

- Where possible, assign to different databases the file servers with the most volumes that are enabled for FSA Reporting. The amount of data that FSA Reporting must upload from the scan of a file server increases with the number of archive points and volumes that require scanning.
- A data upload bottleneck can result if you assign to the same database many file servers that have the same FSA Reporting scan schedule. Assign the file servers that have the same scan schedule to different FSA Reporting databases. Stagger the FSA Reporting scan schedules for the file servers that are assigned to the same FSA Reporting database.

You must maintain each FSA Reporting database to ensure that it does not become too large.

See "About maintaining the FSA Reporting databases" on page 24.

#### About maintaining the FSA Reporting databases

The initial size of an FSA Reporting database is as follows:

Data device	100 MB	
Transaction log	80 MB	
Total	180 MB	

You must trim each FSA Reporting database regularly to keep the database's history tables at a manageable size, while retaining recent and trend-related information. Enterprise Vault provides a batch file for this purpose. The batch file removes data beyond a specified age, but it retains the data for the trend reports.

See "Trimming the FSA Reporting database history tables " on page 71.

FSA Reporting also includes an SQL purging job that moves old data from a database's main tables to its history tables. The purging job helps to keep the main tables at a reasonable size, which enables FSA Reporting to generate its reports quickly.

**Note:** The purging job only purges the main tables. You must run the trimming batch file regularly to trim the history tables.

The purging job's move operation can take from one minute to a number of hours for a large database with a lot of data to move. Enterprise Vault places the FSA Reporting database into purging job maintenance mode while it performs the SQL move operation. The FSA Reporting web service suspends the upload of data to the database while the database is in purging job maintenance mode, unless a timeout period is exceeded.

By default the FSA Reporting database purging job runs daily at 9.00 P.M. You can change this schedule if required.

See "Changing the schedule for an FSA Reporting database purging job" on page 74.

You can run the purging job manually, if for some reason the job does not run automatically for some time.

See "Running the FSA Reporting database purging job manually" on page 74.

#### About the FSA Reporting user account

Before Enterprise Vault creates the first FSA Reporting database, the relevant wizard prompts you for the credentials of a Windows account. This FSA Reporting user account is for FSA Reporting to use when it accesses the FSA Reporting databases.

The FSA Reporting user account does not require any specific privileges. If you have already set up Enterprise Vault Reporting, you can specify the reporting user account that Enterprise Vault Reporting uses, if you want.

You can change the FSA Reporting user account from the **Reporting User Credentials** tab of the **File Servers** target container in the Administration Console.

## Chapter

## Overview of implementing Enterprise Vault Reporting

This chapter includes the following topics:

Implementing Enterprise Vault Reporting

### **Implementing Enterprise Vault Reporting**

You can implement Enterprise Vault Reporting with or without FSA Reporting. FSA Reporting enables you to use Enterprise Vault Reporting's data analysis reports in addition to the standard Enterprise Vault Reporting operation reports.

Table 3-1 lists the steps that you must perform to implement Enterprise Vault Reporting.

Step	Action	Description
Step 1	Decide where to install Enterprise Vault Reporting.	See "Where and when to install Enterprise Vault Reporting" on page 29.
Step 2	Satisfy the prerequisites for Enterprise Vault Reporting.	See "Prerequisites for Enterprise Vault Reporting" on page 29.

 Table 3-1
 Implementing Enterprise Vault Reporting

Step	Action	Description
Step 3	Enable Enterprise Vault monitoring and auditing, if you want to use the reports that rely on these features.	You can perform this step at any time. However, the reports that rely on monitoring or auditing contain no data until the relevant feature is enabled and has gathered the relevant data. See "Enterprise Vault reports that require monitoring or auditing to be enabled" on page 30.
Step 4	Perform the preinstallation steps for Enterprise Vault Reporting.	See "Preparing for the installation of Enterprise Vault Reporting" on page 31.
Step 5	Install the Enterprise Vault Reporting component.	See "Installing the Enterprise Vault Reporting component" on page 31.
Step 6	Run the Reporting Configuration utility to configure Enterprise Vault Reporting and to deploy the reports.	Do not perform this step until you have run the Enterprise Vault Configuration wizard on at least one computer in the site on which Enterprise Vault services are installed. See "Configuring Enterprise Vault Reporting" on page 34.
Step 7	Check that the configuration was successful and that you can access the reports.	See "Checking that the configuration of Enterprise Vault Reporting was successful" on page 35.
Step 8	Remember to assign suitable administrator roles to any additional user accounts that require access to the reports.	See "Administrator roles that provide access to Enterprise Vault Reporting's reports" on page 54.
Step 9	Configure FSA Reporting for your target file servers, if required.	You can configure FSA Reporting for a file server at any time.
		The reports are not available until you have performed the other steps in this table.
		See "Configuring FSA Reporting" on page 38.

 Table 3-1
 Implementing Enterprise Vault Reporting (continued)

If you experience any problems at any step of the implementation process, consult the troubleshooting documentation.

See "About troubleshooting Enterprise Vault Reporting" on page 82.

## Chapter

## Installing Enterprise Vault Reporting

This chapter includes the following topics:

- Where and when to install Enterprise Vault Reporting
- Prerequisites for Enterprise Vault Reporting
- Enterprise Vault reports that require monitoring or auditing to be enabled
- Preparing for the installation of Enterprise Vault Reporting
- Installing the Enterprise Vault Reporting component

# Where and when to install Enterprise Vault Reporting

Typically, the Enterprise Vault Reporting component is installed without any other Enterprise Vault components on a server that runs Microsoft SQL Server Reporting Services. However, you can include the Reporting component as part of an Enterprise Vault server installation, if the required prerequisites are met.

You can install the Enterprise Vault Reporting component at any time. However, you must not run the Reporting Configuration utility until after you have run the Enterprise Vault Configuration wizard successfully on at least one computer in the site on which Enterprise Vault services are installed.

### **Prerequisites for Enterprise Vault Reporting**

You can install Enterprise Vault Reporting on a computer that has the following prerequisites:

- Microsoft .NET Framework 3.5 SP1
- One of the following versions of Microsoft SQL Server Reporting Services:
  - Microsoft SQL Server 2012 Reporting Services
  - Microsoft SQL Server 2014 Reporting Services
  - Microsoft SQL Server 2016 Reporting Services
- A network connection to the computer or computers that host the Enterprise Vault databases

If you intend to configure FSA Reporting, you must install the following software on the SQL Server computers that host FSA Reporting databases:

- Microsoft SQLXML 4.0 SP1
- Microsoft MSXML 6.0

# Enterprise Vault reports that require monitoring or auditing to be enabled

Some of Enterprise Vault Reporting's reports rely on Enterprise Vault monitoring or Enterprise Vault auditing for source data.

The following reports require Enterprise Vault monitoring to be enabled:

- Enterprise Vault Server 24-hour Health Status
- Enterprise Vault Server Seven Day Health Status
- Exchange Server Journal Mailbox Archiving Health
- Exchange Server Journal Mailbox Archiving Trends
- Domino Server Journal Mailbox Archiving Health
- Domino Server Journal Mailbox Archiving Trends

The following reports require Enterprise Vault auditing to be enabled:

- Archived Item Access
- Archived Item Access Trends

If you want to use these reports, you must ensure that Enterprise Vault monitoring or auditing are set up, as required.

**Note:** You can set up monitoring and auditing before or after you install and configure Enterprise Vault Reporting. The affected reports do not contain any information until the Monitoring database or the Auditing database contains the relevant data.

You can enable monitoring from the Enterprise Vault Configuration wizard.

You can also enable monitoring from the Enterprise Vault Operations Manager web application, if you have installed the Operations Manager component.

See the section "Configuring the monitoring parameters" in the chapter "Monitoring with Enterprise Vault Operations Manager" in the *Administrator's Guide*.

To set up auditing, you must enable auditing and then configure auditing on the Enterprise Vault servers for which you want to gather information.

See "About auditing" in the Administrator's Guide.

# Preparing for the installation of Enterprise Vault Reporting

Before you install the Enterprise Vault Reporting component, you must perform the following steps.

#### To prepare for the installation of Enterprise Vault Reporting

1 In the Active Directory domain, create a Windows user account named, say, "ReportingUser", for Enterprise Vault Reporting to use when accessing the Enterprise Vault databases. This reporting user account does not require a mailbox, and it need not be a member of the Windows Administrators group.

When you create the reporting user account:

- Select the Password Never Expires option.
- Leave the remaining check boxes clear (User Must Change Password At Logon, User Cannot Change Password, and Account Is Disabled).
- 2 Give the Vault Service account a "Content manager" role on the Microsoft SQL Server Reporting Services server. Refer to the Microsoft documentation for instructions on how to assign Microsoft SQL Server Reporting Services roles to user accounts.
- 3 Add the Vault Service account to the Local administrators group on the Microsoft SQL Server Reporting Services server computer.

# Installing the Enterprise Vault Reporting component

Perform the following steps to install the Enterprise Vault Reporting component.

**Note:** These instructions assume that you want to install only the Enterprise Vault Reporting component at this time. If you want to install other Enterprise Vault components on a computer at the same time as the Reporting component, follow the installation instructions in *Installing and Configuring*.

#### To install the Enterprise Vault Reporting component

- **1** Log on to the computer using the Vault Service account.
- 2 Load the Enterprise Vault media.
- **3** Open the Veritas Enterprise Vault folder.
- 4 Double-click the ReadMeFirst file and read the contents of the file before continuing with the installation.
- 5 Open the Server folder.
- **6** Double-click **SETUP**. **EXE** to start the installation.
- 7 When the Enterprise Vault installation program prompts you to select the components to install, select the Reporting component.
- 8 At the end of installation, you may be instructed to restart your computer.

## Chapter

## Configuring Enterprise Vault Reporting

This chapter includes the following topics:

- About configuring Enterprise Vault Reporting
- Configuring Enterprise Vault Reporting
- Checking that the configuration of Enterprise Vault Reporting was successful
- Enabling the synchronization of Enterprise Vault RBA role membership
- Reconfiguring the data access settings for Enterprise Vault Reporting

### About configuring Enterprise Vault Reporting

You must run the Reporting Configuration utility to configure Enterprise Vault Reporting and to deploy the reports.

See "Configuring Enterprise Vault Reporting" on page 34.

You can rerun the Reporting Configuration utility at the following times:

- After an upgrade of Enterprise Vault.
   See the Enterprise Vault upgrade instructions for more information.
- To change the data access settings for Enterprise Vault Reporting.
   See "Reconfiguring the data access settings for Enterprise Vault Reporting" on page 37.

### **Configuring Enterprise Vault Reporting**

You must run the Reporting Configuration utility to configure Enterprise Vault Reporting and to deploy the reports.

Before you run the Reporting Configuration utility, note the following:

 Do not run the Reporting Configuration utility until you have run the Enterprise Vault Configuration wizard successfully on at least one computer in the site on which Enterprise Vault services are installed.

#### To configure Enterprise Vault Reporting

- 1 Log on to the computer under the Vault Service account.
- 2 Start the Reporting Configuration utility, **Enterprise Vault Reports Configuration**.
- 3 Choose the option **Configure Reporting and deploy or upgrade reports**.
- 4 Provide the details of the reporting user account you created for Enterprise Vault Reporting to run under. Enter the Active Directory domain, the user name, and the password for the account.
- 5 Select the Microsoft SQL Server Reporting Services instance on which you want to deploy the reports. To deploy the reports on the default instance, select the instance name MSSQLSERVER.
- 6 Select the language that you want the reports to use.
- 7 Select the Directory database SQL Server. If the server does not appear in the list, type in the name of the server.
- 8 Click Configure.
- 9 When the utility has finished, click **OK** on the displayed dialog to quit the utility.
- **10** If this is the first time that you ran the Reporting Configuration utility, check that the configuration was successful.

See "Checking that the configuration of Enterprise Vault Reporting was successful" on page 35.

**11** Enable the synchronization of Enterprise Vault roles based administration (RBA) role membership with Enterprise Vault Reporting.

See "Enabling the synchronization of Enterprise Vault RBA role membership" on page 35.

### Checking that the configuration of Enterprise Vault Reporting was successful

After you have configured Enterprise Vault Reporting for the first time, perform the following checks to confirm that the Enterprise Vault configuration was successful.

#### To check that the configuration of Enterprise Vault Reporting was successful

- 1 Check that the reporting user account has an SQL login on the SQL servers that hold the following databases:
  - The Enterprise Vault Directory database
  - The Enterprise Vault Monitoring database
  - The Enterprise Vault Audit database
  - All vault store databases
  - All vault store group fingerprint databases
  - All FSA Reporting databases, if you have configured FSA Reporting

If a logon does not exist on all these SQL servers, create it.

- 2 Check that the SQL server role EVReportingRole has been added to each Enterprise Vault database, and that this role has been assigned to the reporting user.
- 3 Attempt to access the reports.

See "About accessing Enterprise Vault Reporting's reports" on page 53.

Note that before you can use the data analysis reports you must configure FSA Reporting for one or more target file servers and perform at least one successful FSA Reporting data scan.

See "Configuring FSA Reporting" on page 38.

If you experience any problems, refer to the Enterprise Vault Reporting troubleshooting documentation.

See "About troubleshooting Enterprise Vault Reporting" on page 82.

# Enabling the synchronization of Enterprise Vault RBA role membership

Enterprise Vault Reporting uses RBA roles to control access to its reports. When you run the Enterprise Vault Reporting Configuration utility, Enterprise Vault

synchronizes the Enterprise Vault Reporting report security settings with the current RBA roles.

If you subsequently modify RBA roles or role membership, Enterprise Vault must synchronize Enterprise Vault Reporting again to reflect the changes. The synchronization process requires some specific Internet Explorer security settings on the computer on which you make the changes to the roles.

The following procedure sets Internet Explorer's security settings to the required values to enable the synchronization of role changes.

### To enable the synchronization of Enterprise Vault Reporting roles-based security

- 1 Log on with the Vault Service account to the Enterprise Vault server.
- 2 Open Internet Explorer. If the Enterprise Vault server is installed on a server in which User Account Control (UAC) is enabled, you must open Internet Explorer with administrator privileges. Right-click the Internet Explorer shortcut and then click **Run As Administrator**.
- 3 On Internet Explorer's **Tools** menu, select **Internet Options**.
- 4 On the Security tab, click **Trusted sites** and then **Sites**.
- **5** Add the following URLs to the Trusted sites zone:
  - http://SSRS\_hostname
  - http://SSRS\_computername
  - http://SSRS\_IP\_address

Where:

- SSRS\_hostname is the fully qualified host name of the Microsoft SQL Server Reporting Server, for example blackbird.demo.local.
- SSRS\_computername is the computer name of the Microsoft SQL Server Reporting Server, for example blackbird.
- SSRS\_IP\_address is the IP address of the Microsoft SQL Server Reporting Server.
- 6 On the Security tab, make sure that the **Trusted sites** zone is still selected and then click **Custom level**.
- 7 In the Security Settings Trusted Sites Zone dialog box, under User Authentication > Logon, select Automatic logon with current user name and password.
- 8 Save the Internet Explorer settings and close Internet Explorer.
## Reconfiguring the data access settings for Enterprise Vault Reporting

You can rerun the Reporting Configuration utility to do either of the following:

- Change the details of the reporting user account. This is the account that Enterprise Vault Reporting uses to access the Enterprise Vault databases.
- Reconfigure Enterprise Vault Reporting to use a different SQL Server for the Enterprise Vault Directory database.

### To reconfigure the data access settings for Enterprise Vault Reporting

- 1 Make sure that you are logged on under the Vault Service account.
- 2 Start Enterprise Vault Reports Configuration.

The Reporting Configuration utility starts.

- 3 Choose the option Reconfigure data access settings for Reporting
- 4 Provide the details of the reporting user account that you want to use. Enter the Active Directory domain, the user name, and the password for the account. Re-enter the details for the account, even if you do not want to change them.
- 5 Select the Microsoft SQL Server Reporting Services instance on which you deployed the reports. If you deployed the reports on the default instance, select the instance name MSSQLSERVER.
- **6** Select the Directory database SQL Server. If the server does not appear in the list, type in the name of the server.
- 7 Click Reconfigure.
- 8 When the utility has finished, click **OK** on the displayed dialog to quit the utility.

# Chapter

# **Configuring FSA Reporting**

This chapter includes the following topics:

- Configuring FSA Reporting
- Preparing for an FSA Reporting proxy server
- Adding a file server as an archiving target with FSA Reporting data collection enabled
- Enabling FSA Reporting data collection for an existing target file server
- Enabling or disabling FSA Reporting data collection for a file server target volume
- Setting the defaults for FSA Reporting data collection
- Setting the storage location for FSA Reporting's temporary files
- Verifying the placeholders on EMC Celerra/VNX devices
- Including NetApp filer snapshot folders in FSA Reporting scans
- Checking that the configuration of FSA Reporting was successful

## **Configuring FSA Reporting**

To obtain reports from FSA Reporting for a file server you must configure FSA Reporting for that file server.

**Note:** Before you can access the reports, you must also perform all of the steps to implement Enterprise Vault Reporting.

See "Implementing Enterprise Vault Reporting" on page 26.

Step	Action	Description
Step 1	If the file server is not yet a target for File System Archiving, prepare to configure it for File System Archiving.	<ul> <li>See the appropriate section in Setting up File System Archiving:</li> <li>For a Windows file server, see "Setting the permissions for FSA on a Windows file server".</li> <li>For a NetApp filer, see "Setting the permissions for FSA on a NetApp filer".</li> <li>For an EMC Celerra/VNX device, see "Preparing a Celerra/VNX device for FSA".</li> </ul>
Step 2	For non-Windows file servers, prepare for the FSA Reporting proxy server.	See "Preparing for an FSA Reporting proxy server" on page 40.
Step 3	Enable FSA Reporting data collection for the file server.	<ul> <li>Do one of the following:</li> <li>If the file server is not yet a target for File Server Archiving, add the file server as a target with FSA Reporting enabled:</li> <li>See "Adding a file server as an archiving target with FSA Reporting data collection enabled" on page 41.</li> <li>If the file server is already a target for File Server Archiving, enable FSA Reporting for the target:</li> <li>See "Enabling FSA Reporting data collection for an existing target file server" on page 44.</li> </ul>
Step 4	Specify whether data is to be collected on individual volumes.	See "Enabling or disabling FSA Reporting data collection for a file server target volume" on page 46.
Step 5	Set the default FSA Reporting data collection settings if you have not already done so.	See "Setting the defaults for FSA Reporting data collection" on page 47.
Step 6	Make sure that there is sufficient space on the file server for FSA Reporting's temporary files.	See "Setting the storage location for FSA Reporting's temporary files" on page 47.

 Table 6-1
 Steps to configure FSA Reporting for a file server

Step	Action	Description
Step 7	For EMC Celerra/VNX devices, decide whether you want to verify which files are placeholders on the target.	If programs other than Enterprise Vault set the offline attribute on Celerra/VNX files, some reports can show incorrect space saving information for Celerra/VNX. To avoid this problem you can configure FSA Reporting to perform an enhanced scan that verifies which files are placeholders.
		See "Verifying the placeholders on EMC Celerra/VNX devices" on page 49.
Step 8	Wait until at least one successful FSA Reporting data scan has completed on the file server. Then check that you can access the data analysis reports.	See "Checking that the configuration of FSA Reporting was successful" on page 51.

 Table 6-1
 Steps to configure FSA Reporting for a file server (continued)

## Preparing for an FSA Reporting proxy server

When you enable a non-Windows file server for FSA Reporting you must assign another server to act as the FSA Reporting proxy server.

Table 6-2 lists the steps to perform before you assign the proxy server.

Step	Action	Description
Step 1	Consider what server to use as the proxy server.	See "About the FSA Reporting proxy servers for non-Windows file servers" on page 18.
Step 2	Make sure that the server meets all of the prerequisites for a proxy server.	See "FSA Reporting proxy server requirements" on page 22.
Step 3	For an EMC Celerra/VNX device, prepare the device to work with the proxy server.	See "Preparing an EMC Celerra/VNX device to work with an FSA Reporting proxy server" on page 41.

**Table 6-2**Preparing for an FSA Reporting proxy server

# Preparing an EMC Celerra/VNX device to work with an FSA Reporting proxy server

Before you assign a server as the FSA Reporting proxy server for an EMC Celerra/VNX device, you must configure the HTTP server on the Celerra/VNX Data Mover to accept Celerra/VNX FileMover API connections from the server.

**Note:** This procedure should already have been performed if the proxy server is an Enterprise Vault server that has the Celerra/VNX device as an FSA target. In that case you performed this procedure when you prepared the Celerra/VNX device for FSA.

### To prepare a Celerra/VNX device to work with an FSA Reporting proxy server

- 1 Log on to the Celerra/VNX Control Station.
- 2 Use the following command to configure the HTTP server on the data mover to accept Celerra/VNX FileMover API connections:

server\_http server\_x -append dhsm -users
DataMover user name -hosts proxy ip address

where:

server\_x is the name of the data mover.

*DataMover\_user\_name* is the name of the data mover account that Enterprise Vault uses for authentication.

*proxy\_ip\_address* is the IP address of the server that you want to use as the proxy server.

The command also tests the connectivity between the EMC Celerra/VNX device and the server over HTTP.

# Adding a file server as an archiving target with FSA Reporting data collection enabled

You can enable FSA Reporting data collection for a file server when you add the file server as an archiving target.

The New File Server wizard takes you through the steps to add the file server. Note the following:

 To support FSA Reporting, an Enterprise Vault Directory database must have at least one FSA Reporting database associated with it. The wizard helps you to select an existing FSA Reporting database, or to configure a new database in which to hold the file server's FSA Reporting data. See "About the FSA Reporting databases" on page 23.

 Before Enterprise Vault creates the first FSA Reporting database, it prompts you for the credentials of a Windows account to use when it accesses FSA Reporting databases.

See "About the FSA Reporting user account" on page 25.

 For non-Windows file servers, the wizard prompts you to select a proxy server to perform the FSA Reporting data collection on the file server.
 See "About the FSA Reporting proxy servers for non-Windows file servers" on page 18.

### To add a file server as an archiving target with FSA Reporting enabled

- 1 Make sure that both a forward DNS lookup and a reverse DNS lookup succeed for the file server.
- 2 Start the Enterprise Vault Administration Console. If you are adding a Windows file server, use an account that is a member of the local Administrators group on the file server. If you are adding a non-Windows file server and you want to configure a new proxy server for FSA Reporting, use an account that is a member of the local Administrators group on the proxy server.
- **3** In the Administration Console, expand the Enterprise Vault site until the **Targets** container is visible.
- 4 Expand the **Targets** container.
- 5 Right-click the **File Servers** container, and on the shortcut menu click **New** and then **File Server**.
- 6 On the second page of the New File Server wizard, do as follows:
  - Enter the fully-qualified DNS name of the file server, or click Browse and select the file server.
  - For a Windows file server, select the option to install the FSA Agent unless the file server already has the latest version of the FSA Agent.
     For a non-Windows file server, do not select the option to install the FSA Agent.
- 7 For EMC Celerra/VNX file servers, select whether to use placeholder shortcuts. If you want to use placeholder shortcuts, enter the details of the account on the Celerra/VNX that has permission to use the dhsm feature.

See "Preparing a Celerra/VNX device for FSA" in Setting up File System Archiving.

**8** For NetApp filers, select whether to configure a File Blocking agent server.

See "Configuring File Blocking" in Setting up File System Archiving.

- 9 On the summary page, click **Next** to add the file server as an archiving target.
- **10** On the next wizard page the configuration of FSA Reporting begins. Select **Enable data collection**.
- **11** The next wizard pages help you to select an FSA Reporting database in which to hold the FSA Reporting data for the new file server.
  - If no FSA Reporting databases are associated with the Directory database, the wizard helps you to create an FSA Reporting database.
  - If one or more FSA Reporting databases are already associated with the Directory database, you can choose to select an existing database, or to create a new one.
- **12** For non-Windows file servers you must select a proxy server to perform the FSA Reporting data collection. You can select an existing proxy server for FSA Reporting if one or more exist, or configure a new proxy server.

**Note:** If FSA Reporting performs scans on the proxy server, make sure that no scan of the proxy server occurs while you perform this step. If an FSA Reporting scan is in progress, stop the scan or wait for it to finish.

- **13** Specify when to collect FSA Reporting data, and the scope of data collection on this file server. Do one of the following:
  - Check Use the default settings for FSA Reporting data collection. FSA Reporting then uses the default FSA Reporting data collection settings, which are set on the properties of the File Servers container.
  - Or uncheck Use the default settings for FSA Reporting data collection and provide the non-default settings for this file server.

The final wizard page confirms that the wizard has added the file server successfully, and that the file server is enabled for use.

The final wizard page also notes that you must do the following before you can use the FSA Reporting reports:

- Add the required target volumes and enable them for FSA Reporting data collection, if required.
- Install and configure Enterprise Vault Reporting if you have not already done so.
- Wait for at least one FSA Reporting scan to complete successfully.

**Note:** When you enable FSA Reporting data collection for a file server, Enterprise Vault automatically enables data collection for any existing target volumes.

If you add new target volumes you must enable them for data collection, if required.

See "Enabling or disabling FSA Reporting data collection for a file server target volume" on page 46.

# Enabling FSA Reporting data collection for an existing target file server

You can enable FSA Reporting data collection for a file server that is already configured as an FSA archiving target in the Administration Console.

Note the following:

- You must select an FSA Reporting database to hold the file server's FSA Reporting data. A wizard helps you to select an existing FSA Reporting database, or to set up a new FSA Reporting database.
   See "About the FSA Reporting databases" on page 23.
- Before Enterprise Vault creates the first FSA Reporting database, it prompts you for the credentials of a Windows account to use when it accesses FSA Reporting databases.
   See "About the FSA Reporting user account" on page 25.

See "About the FSA Reporting user account" on page 25.

 For non-Windows file servers, you must select a proxy server to perform the FSA Reporting data collection on the file server.
 See "About the FSA Reporting proxy servers for non-Windows file servers" on page 18.

### To enable FSA Reporting data collection for an existing target file server

- 1 Make sure that both a forward DNS lookup and a reverse DNS lookup succeed for the file server.
- 2 For a Windows file server, install the FSA Agent on the file server if it is not already present. You can install the FSA Agent by using the Install FSA Agent wizard, or manually.

See "Installing the FSA Agent on a Windows file server" in *Setting up File System Archiving*.

- 3 Start the Enterprise Vault Administration Console. If you are configuring FSA Reporting for a non-Windows file server and you want to configure a new proxy server for FSA Reporting, you must use an account that is a member of the local Administrators group on the proxy server.
- 4 In the Administration Console, expand the Enterprise Vault site until the **Targets** container is visible.
- 5 Expand the Targets container and then the File Servers container.
- 6 Right-click the file server target for which you want to configure FSA Reporting, and from the shortcut menu click **Properties**.
- 7 On the file server's properties, select the **Reporting Data Collection** tab.
- 8 Check Enable data collection for FSA Reporting.
- **9** Choose the data collection settings to use with this file server. Do one of the following:
  - Check Use the default settings for FSA Reporting data collection. FSA Reporting then uses the default FSA Reporting data collection settings, which are set on the properties of the File Servers container.
  - Or uncheck Use the default settings for FSA Reporting data collection and provide the non-default settings for this file server.
- 10 Under Database server for FSA Reporting, click Select.
- **11** The FSA Reporting Database Configuration Wizard then helps you to select an FSA Reporting database in which to hold the FSA Reporting data for the new file server:
  - If no FSA Reporting databases are associated with the Directory database, the wizard helps you to create an FSA Reporting database.
  - If one or more FSA Reporting databases are already associated with the Directory database, you can choose to select an existing database, or to create a new one.

12 For non-Windows file servers, under Proxy server for FSA Reporting, click Select. The Proxy Server Selection wizard then helps you to select a proxy server to perform the FSA Reporting data collection. You can select an existing proxy server for FSA Reporting if one or more exist, or configure a new proxy server.

**Note:** If FSA Reporting performs scans on the proxy server, make sure that no scan of the proxy server occurs while you perform this step. If an FSA Reporting scan is in progress, stop the scan or wait for it to finish.

**13** On the **Reporting Data Collection** tab, click **OK** to save your changes and to exit from the file server's properties.

**Note:** When you configure FSA Reporting data collection for a file server, Enterprise Vault automatically enables data collection for any existing target volumes.

If you add new target volumes you must enable them for data collection, if required.

See "Enabling or disabling FSA Reporting data collection for a file server target volume" on page 46.

# Enabling or disabling FSA Reporting data collection for a file server target volume

If FSA Reporting data collection is enabled for a file server when you run the New Volume wizard, the wizard gives you the option to enable FSA Reporting data collection for the volume.

You can also enable or disable FSA Reporting data collection for a target volume from the volume's Properties.

# To enable or disable FSA Reporting data collection for a file server target volume

- 1 In the Administration Console, expand the Enterprise Vault site until the **Targets** container is visible.
- 2 Expand the Targets container.
- 3 Expand the File Servers container to show the target file servers.

- **4** Expand the target file server whose volume you want to configure, to show the target volumes.
- 5 Right-click the volume you want to configure and on the shortcut menu click **Properties**.
- 6 On the General tab, check or uncheck Enable FSA Reporting.

This option is only available if FSA Reporting data collection is enabled for the file server.

7 Click **OK** to save your changes and close the Properties dialog box.

# Setting the defaults for FSA Reporting data collection

FSA Reporting uses its default data collection settings if a target file server is configured to use these settings.

The settings determine the following:

- The default FSA Reporting data collection interval and collection time.
- Whether by default FSA Reporting collects data for all of a file server's physical drives, in addition to the target volumes that are enabled for data collection.

### To set the defaults for FSA Reporting data collection

- 1 In the Administration Console, expand the Enterprise Vault site until the **Targets** container is visible.
- 2 Expand the Targets container.
- **3** Right-click the **File Servers** container and, on the shortcut menu, click **Properties**.
- 4 On the **Reporting Data Collection** tab, set the required information.
- 5 Click **OK** to save your changes and close the Properties dialog.

# Setting the storage location for FSA Reporting's temporary files

FSA Reporting creates temporary files on the target file server to hold the data from FSA Reporting scans. On a file server with a large number of files, these temporary files can become very large.

FSA Reporting stores the temporary files by default in the FSAReports subfolder of the Enterprise Vault installation folder. The installation folder is often on drive C,

which typically has limited space. If the temporary files fill up all the space on the installation drive, the computer may suffer performance problems or stop responding. If there is likely to be insufficient space for the temporary files on the installation drive, relocate the storage location to a drive that has sufficient free space.

The **TempFilePath** registry value determines the path to the storage location.

### To set the storage location for FSA Reporting's temporary files

1 Create a suitable location on a drive that has sufficient free space, and give the Vault Service account write access to the location.

Note: The path must not exceed 100 characters, including spaces.

2 For a Windows file server, start the registry editor on the file server.

For a NetApp filer or an EMC Celerra/VNX device, start the registry editor on the server that acts as the FSA Reporting proxy server.

**3** Navigate to the following registry key:

On a 32-bit installation of Windows:

```
HKEY_LOCAL_MACHINE
\SOFTWARE
\KVS
\Enterprise Vault
\FSA
\Reporting
```

On a 64-bit installation of Windows:

```
HKEY_LOCAL_MACHINE
\SOFTWARE
\Wow6432Node
\KVS
\Enterprise Vault
\FSA
\Reporting
```

4 Edit the **TempFilePath** registry value and specify the existing path that you chose in step 1.

The path that you specify with **TempFilePath** must not exceed 100 characters, including spaces.

Enterprise Vault creates a subfolder named FSAReports under the path that **TempFilePath** defines, in which to hold the temporary files.

- 5 Exit from the registry editor.
- 6 On Windows file servers, restart the Enterprise Vault File Collector service.

For NetApp filers and Celerra/VNX devices, restart the Enterprise Vault Admin service on the Enterprise Vault server on which you have changed the registry value.

# Verifying the placeholders on EMC Celerra/VNX devices

When FSA Reporting scans an EMC Celerra/VNX device it assumes by default that any file that has the offline attribute set is an Enterprise Vault placeholder. This assumption enables faster scans of Celerra/VNX devices.

FSA Reporting uses the placeholder count when it calculates the space that is saved by archiving for the following reports:

- Archive Points Space Usage Summary
- File Group Space Usage on a Server
- File Group Space Usage Summary
- Storage Summary
- File Space Usage on an Archive Point

If programs other than Enterprise Vault set the offline attribute on Celerra/VNX files, these reports may therefore show incorrect space saving information.

If you have programs other than Enterprise Vault that set the offline attribute on Celerra/VNX files, you can configure FSA Reporting to perform an enhanced scan. The enhanced scan uses an HTTP call to each file that has the offline attribute set, to determine whether the file is a placeholder. The reports can then show accurate space savings.

**Note:** Placeholder verification can lengthen the time of an FSA Reporting scan on an EMC Celerra/VNX device significantly.

To configure FSA Reporting to verify the placeholders you must set a registry value on the proxy server for FSA Reporting.

### To verify the placeholders on EMC Celerra/VNX devices

- 1 Log on with the Vault Service account to the FSA Reporting proxy server for the Celerra/VNX device.
- **2** Open the registry editor and go to the following registry key:

On a 32-bit installation of Windows:	On a 64-bit installation of Windows:
HKEY_LOCAL_MACHINE	HKEY_LOCAL_MACHINE
\SOFTWARE	\SOFTWARE
\KVS	\Wow6432Node
\Enterprise Vault	\KVS
\FSA	\Enterprise Vault
\Reporting	\FSA
	\Reporting

- **3** Add a DWORD registry value named CheckEVPHOnCelerra.
- **4** Set the registry value to 1 to configure FSA Reporting to verify placeholders.

Set the registry value to 0 to revert to the default identification of placeholders by using the offline attribute.

**5** If the proxy server is an Enterprise Vault server, restart the Enterprise Vault Admin service. Otherwise, restart the Enterprise Vault File Collector service on the proxy server.

## Including NetApp filer snapshot folders in FSA Reporting scans

With NetApp filers it is frequent practice to make a <code>~snapshot</code> folder available as a file system backup that users can access. By default, FSA Reporting does not scan any folders named <code>~snapshot</code> in a NetApp filer target volume. It is usually undesirable to include the data from <code>~snapshot</code> folders in the reports, for the following reasons:

- The reports do not reflect the state of the live system. For example, the ~snapshot data is likely to make the reports inaccurate for policy-making purposes or for chargeback calculations.
- FSA Reporting scan times are increased unnecessarily.

If you want FSA Reporting to scan the contents of NetApp filer ~snapshot folders, you must set the ExcludeSnapshotFolder registry value on the FSA Reporting proxy server.

**Note:** FSA Reporting always scans ~snapshot folders that are present on Windows file servers or Celerra/VNX devices. The registry value has no effect with these file server types.

#### To include NetApp filer snapshot folders in FSA Reporting scans

- Log on with the Vault Service account to the FSA Reporting proxy server for the NetApp filer.
- 2 Start the registry editor and go the following registry key:

On a 32-bit installation of Windows:

HKEY\_LOCAL\_MACHINE \SOFTWARE \Wow6432Node

On a 64-bit installation of Windows:

\Enterprise Vault \FSA \Reporting

HKEY LOCAL MACHINE

\SOFTWARE

\KVS

\KVS \Enterprise Vault \FSA \Reporting

- **3** Add a DWORD registry value named ExcludeSnapshotFolder.
- **4** Set the registry value to 0.

If you set any other value, FSA Reporting reverts to its default behavior and excludes  $\sim {\tt snapshot}$  folders from scans.

**5** If the proxy server is an Enterprise Vault server, restart the Enterprise Vault Admin service. Otherwise, restart the Enterprise Vault File Collector service on the proxy server.

# Checking that the configuration of FSA Reporting was successful

After you have configured FSA Reporting for one or more target file servers, you can check that the configuration was successful.

**Note:** You must perform all the steps to implement Enterprise Vault Reporting before checking that the configuration was successful.

See "Implementing Enterprise Vault Reporting" on page 26.

### To check that the configuration of FSA Reporting was successful

1 Wait until at least one successful FSA Reporting data scan has completed on the file server. The data analysis reports do not show any data until at least one successful FSA Reporting data scan has occurred.

You can view the status of FSA Reporting scans from the Administration Console.

See "Viewing the status of FSA Reporting" on page 64.

If you do not want to wait until a scheduled FSA Reporting scan has occurred, you can run an unscheduled reporting scan manually on the file server.

See "Running an unscheduled FSA Reporting scan on a file server" on page 67.

2 When at least one FSA Reporting data scan has successfully completed, attempt to run some data analysis reports.

See "About accessing Enterprise Vault Reporting's reports" on page 53.

If you experience any problems, refer to the troubleshooting documentation.

See "About troubleshooting Enterprise Vault Reporting" on page 82.

# Chapter

# Accessing the reports

This chapter includes the following topics:

- About accessing Enterprise Vault Reporting's reports
- Administrator roles that provide access to Enterprise Vault Reporting's reports
- Accessing Enterprise Vault Reporting's reports from SQL Server Reporting Services Report Manager
- Accessing Enterprise Vault Reporting's reports from the Administration Console

# About accessing Enterprise Vault Reporting's reports

The Vault Service account can access all of Enterprise Vault Reporting's reports. Other accounts must belong to an administrator role that allows access to the reports that you require.

See "Administrator roles that provide access to Enterprise Vault Reporting's reports" on page 54.

You can access Enterprise Vault Reporting's reports in the following ways:

- From the Microsoft SQL Server Reporting Services Report Manager web application.
   See "Accessing Enterprise Vault Reporting's reports from SQL Server Reporting Services Report Manager" on page 57.
- From the Enterprise Vault Administration Console.
   See "Accessing Enterprise Vault Reporting's reports from the Administration Console" on page 59.

For instructions on how to assign Enterprise Vault administrator roles, see the information on roles-based administration in the *Administrator's Guide*.

**Note:** You must enable the synchronization of Enterprise Vault Reporting roles-based security on the computers on which you perform roles administration.

See "Enabling the synchronization of Enterprise Vault RBA role membership" on page 35.

## Administrator roles that provide access to Enterprise Vault Reporting's reports

Of the default Enterprise Vault administrator roles, only the Power Administrator can access every Enterprise Vault Reporting report. The other administrator roles allow access to the reports that are appropriate for the role.

- See "Administrator roles that provide access to Enterprise Vault Reporting's operation reports" on page 54.
- See "Administrator roles that provide access to FSA Reporting's reports" on page 56.

**Note:** The Vault Service account can access all of Enterprise Vault Reporting's reports.

If your administrator role permits access to a report, you can access the report's **Properties**, **History**, and **Subscription** tabs. However, note that in the **Properties** tab you can make changes only within the **Execution** and **History** options.

# Administrator roles that provide access to Enterprise Vault Reporting's operation reports

Of the default Enterprise Vault administrator roles, only the Power Administrator can access all of Enterprise Vault Reporting's reports.

The reports are grouped as follows:

- Archive and server:
  - Archive Quota Usage
  - Archived Items Access
  - Archived Items Access Trends
  - Enterprise Vault Server 24-hour Health Status
  - Enterprise Vault Server Seven Day Health Status

- Items Archival Rate
- Move Archive
- Content Provider:
  - Content Provider Ingest History
  - Content Providers Licensing and Usage Summary
- Domino:
  - Domino Mailbox Archiving Status
  - Domino Server Journal Mailbox Archiving Health
  - Domino Server Journal Mailbox Archiving Trends
- Exchange:
  - Exchange Mailbox Archiving Status
  - Exchange Server Journal Mailbox Archiving Health
  - Exchange Server Journal Mailbox Archiving Trends
- Single Instance Storage
  - Single Instance Storage Reduction by File Type
  - Single Instance Storage Reduction per Vault Store Group
  - Single Instance Storage Reduction Summary
- Vault Store:
  - Vault Store Savesets
  - Vault Store Usage by Archive
  - Vault Store Usage by Billing Account
  - Vault Store Usage Summary

Table 7-1 lists the operation reports that are available to the default administrator roles.

Table 7-1	Enterprise Vault Reporting operation reports available to the
	default administrator roles

Admin Role	Archive and server	Content provider	Domino	Exchange	Single Instance Storage	Vault Store
Power Admin	Yes	Yes	Yes	Yes	Yes	Yes

Admin Role	Archive and server	Content provider	Domino	Exchange	Single Instance Storage	Vault Store
Messaging Admin	Yes	Yes	Yes	Yes	No	No
Domino Admin	Yes	Yes	Yes	No	No	No
Exchange Admin	Yes	Yes	No	Yes	No	No
File Server Admin	Yes	Yes	No	No	No	No
Storage Admin	Yes	Yes	No	No	Yes	Yes
Extension Content Provider Admin	Yes	Yes	No	No	No	No
NSF Admin	No	Yes	No	No	No	No
Indexing Admin	No	Yes	No	No	No	No
SharePoint Admin	No	Yes	No	No	No	No
PST Admin	No	Yes	No	No	No	No
SMTP Admin	Yes	Yes	No	No	No	No

Table 7-1	Enterprise Vault Reporting operation reports available to the
	default administrator roles (continued)

## Administrator roles that provide access to FSA Reporting's reports

The Vault Service account can access all of Enterprise Vault Reporting's reports. Other accounts must belong to an administrator role that allows access to the reports that you require.

The following Enterprise Vault default administrator roles provide access to the FSA Reporting data analysis reports:

Power Administrator

File Server Administrator

These roles can access all of the data analysis reports.

## Accessing Enterprise Vault Reporting's reports from SQL Server Reporting Services Report Manager

You can access Enterprise Vault Reporting's reports from the Microsoft SQL Server Reporting Services Report Manager web application.

Note the following:

- The operation reports are available if you have installed and configured Enterprise Vault Reporting. Some operation reports do not include any data unless Enterprise Vault monitoring or Enterprise Vault auditing is enabled.
   See "Enterprise Vault reports that require monitoring or auditing to be enabled" on page 30.
- The data analysis reports are available if you have configured FSA Reporting and performed at least one successful FSA Reporting data scan. The data analysis reports do not show any data until at least one successful FSA Reporting data scan has completed.

Do not change the names of the reports, otherwise the hyperlinks that are present in some of the reports to other reports may fail.

### To access Enterprise Vault Reporting's reports from SQL Server Reporting Services Report Manager

1 Enter the following URL in your Web browser:

http://host\_name/reportmgr\_webapp\_name/

where:

- host\_name is the fully qualified host name of the computer that hosts the Microsoft SQL Server Reporting Services Report Manager web application.
- reportmgr\_webapp\_name is the name of the Microsoft Reporting Services Report Manager web application.

For example:

http://jupiter.evdomain.com/Reports/

or:

http://jupiter.evdomain.com/Reports\$MyInstance/

where MyInstance is the Microsoft SQL Server Reporting Services instance name.

**2** Enter the credentials of a user account that is assigned to an Enterprise Vault administrator role that provides access to the required reports.

See "Administrator roles that provide access to Enterprise Vault Reporting's reports" on page 54.

- 3 From the Report Manager Home page, select **Veritas Enterprise Vault** > *language*, where *language* is the language that you want to use for the reports.
- 4 Do one of the following:
  - To access the operation reports, select **Operation Reports**.
  - To access the data analysis reports, select Data Analysis Reports.
     Before you can use the data analysis reports you must configure FSA
     Reporting and perform at least one successful FSA Reporting data scan.
- 5 Click the link for the report that you want to run.

If you select an operation report, Enterprise Vault generates a report immediately with the default values for the input parameters.

**6** To run the report with your chosen input parameter values, enter the parameter values and then click **View Report**.

If you select a value that changes the possible values of other parameters, you may have to wait a short time for the report screen to refresh before you can select the remaining values. A typical example is when you change a **Period** parameter value from "Last week" to "Week Beginning". In this case you may need to wait for the **Year**, **Month** and **Day** parameters to display the appropriate values.

7 The report output may extend over several pages. Use the page selector in the report toolbar to view different pages.

From the report toolbar you can also search for text within a report, and change the display size of the report.

For general help on using Microsoft SQL Server Reporting Services, click **Help** at the top right of any Report Manager web page.

## About exporting Enterprise Vault Reporting reports from SQL Server Reporting Services Report Manager

You can export reports from Report Manager in the following formats:

Acrobat (PDF)

- CSV (comma-separated values)
- Excel
- MHTML (web archive)
- TIFF file
- Word
- XML

To export a report, select the required output format from the Export list in the report toolbar. Then click **Export**, and specify a location for the output.

If you set up a subscription to a report, you can also choose HTML as the render format.

### About scheduling Enterprise Vault Reporting reports in SQL Server Reporting Services Report Manager

From Report Manager you can schedule reports to be emailed to a configured email address, or saved to a shared folder. To perform these actions, use the Microsoft SQL Server Reporting Services Subscription mechanism. For more information see the Microsoft help on Subscriptions.

# Accessing Enterprise Vault Reporting's reports from the Administration Console

You can access Enterprise Vault Reporting's reports from **Common Tasks** in the Enterprise Vault Administration Console.

The operation reports on single instance storage reduction are also available from the Administration Console's **Vault Store Groups** container.

The operation reports for content provider license usage and ingest history are also available from the Administration Console's **Content Providers** container.

Note the following:

- The operation reports are available if you have installed and configured Enterprise Vault Reporting. Some operation reports do not include any data unless Enterprise Vault monitoring or Enterprise Vault auditing is enabled.
   See "Enterprise Vault reports that require monitoring or auditing to be enabled" on page 30.
- The data analysis reports are available if you have configured FSA Reporting and performed at least one successful FSA Reporting data scan. The data

analysis reports do not show any data until at least one successful FSA Reporting data scan has completed.

# To access Enterprise Vault Reporting's reports from the Administration Console's Common Tasks

- 1 In the left pane of the Administration Console, expand the site hierarchy until the name of the site is visible.
- 2 Click the site name.
- 3 In the right pane of the Administration Console, click **Enterprise Vault Server Management** to display the server management options.
- 4 Click Run operation reports or Run data analysis reports.

Or to access the operation report that summarizes content providers' licensing and usage, click **Run Licensing and Usage Summary Report**.

# To access the storage reduction reports from the Administration Console's Vault Store Groups container

- **1** In the left pane of the Administration Console, expand the site for which you want information.
- 2 Do one of the following:
  - Right-click the Vault Store Groups container and on the shortcut menu click Single Instance Storage Reduction Summary.
     See "Single Instance Storage Reduction Summary report" on page 113.
  - Expand the **Vault Store Groups** container. Then right-click the required vault store group, and on the shortcut menu click one of the following:
    - Single Instance Storage Reduction per Vault Store Group See "Single Instance Storage Reduction per Vault Store Group report" on page 111.
    - Single Instance Storage Reduction by File Type
       See "Single Instance Storage Reduction by File Type report" on page 109.

# To access the content provider reports from the Administration Console's Content Providers container

- 1 In the left pane of the Administration Console, expand the **Extensions** container under the Enterprise Vault Directory.
- **2** Do one of the following:
  - Right-click the Content Providers container and on the shortcut menu click Content Providers Licensing and Usage Summary Report.

The report shows license usage and ingest information for all content providers.

See "Content Providers Licensing and Usage Summary report" on page 94.

 Click the Content Providers container. Then in the right-hand pane, right-click a content provider instance and on the shortcut menu click Content Provider Ingest History Report.

The report shows the ingest history for the content provider instance that you selected.

See "Content Provider Ingest History report" on page 92.

# Chapter

# Managing FSA Reporting

This chapter includes the following topics:

- Managing FSA Reporting
- Viewing the status of FSA Reporting
- Running an unscheduled FSA Reporting scan on a file server
- Stopping FSA Reporting scans
- Disabling all FSA Reporting data collection
- Changing the default FSA Reporting data collection schedule
- Changing a file server's FSA Reporting database
- Maintaining the FSA Reporting databases
- Changing the FSA Reporting proxy server for a non-Windows file server
- Modifying the FSA Reporting data collection parameters
- Obtaining data for a specific file type in the FSA Reporting reports
- Upgrading the FSA Agent

## **Managing FSA Reporting**

A number of tasks are associated with the management of FSA Reporting and the FSA Reporting databases.

Table 8-1 describes these tasks.

Task	Description
View the status of FSA Reporting.	You can view the status of FSA Reporting for all of your target file servers, or for the individual volumes of a target file server.
	See "Viewing the status of FSA Reporting" on page 64.
Run an unscheduled scan on a file server.	You can run an unscheduled FSA Reporting scan on a file server to obtain the most up-to-date information.
	See "Running an unscheduled FSA Reporting scan on a file server" on page 67.
Stop an FSA Reporting scan.	You can stop any FSA Reporting scans that are currently running on a single file server, or on all file servers.
	See "Stopping FSA Reporting scans" on page 68.
Disable all FSA Reporting data collection.	You can disable all FSA Reporting data collection for the Enterprise Vault site.
	See "Disabling all FSA Reporting data collection" on page 68.
Change the default FSA Reporting data collection schedule.	You can change the default data collection schedule if required.
	See "Changing the default FSA Reporting data collection schedule" on page 69.
Manage the FSA Reporting databases.	You can change the FSA Reporting database that is assigned to a target file server. You can configure a new FSA Reporting database for a target file server if you want.
	See "Changing a file server's FSA Reporting database " on page 69.
Maintain the FSA Reporting databases.	You must trim the FSA Reporting databases, and make sure that Enterprise Vault purges the main tables regularly.
	See "Maintaining the FSA Reporting databases" on page 70.

 Table 8-1
 FSA Reporting management

Task	Description
Change the FSA Reporting proxy server for a non-Windows file server.	For a non-Windows file server you can change the assigned FSA Reporting proxy server.
	See "Changing the FSA Reporting proxy server for a non-Windows file server" on page 75.
Modify the FSA Reporting data collection parameters.	You can change the values of some of the parameters that determine what data FSAReporting collects.
	See "Modifying the FSA Reporting data collection parameters" on page 76.
Obtain data for a specific file type in the FSA Reporting reports.	You can ensure that data for specific file types is shown in the reports that provide data about file groups and file types.
	See "Obtaining data for a specific file type in the FSA Reporting reports" on page 78.

### Table 8-1 FSA Reporting management (continued)

## Viewing the status of FSA Reporting

You can view the status of FSA Reporting for all of your target file servers, or for the individual volumes of a target file server.

- See "To view the status of FSA Reporting for the target file servers" on page 64.
- See "To view the status of FSA Reporting for a file server's volumes" on page 65.

### To view the status of FSA Reporting for the target file servers

- 1 In the Administration Console, expand the Enterprise Vault site until the **Targets** container is visible.
- 2 Expand the Targets container.
- 3 Click the File Servers container.

The main pane of the Administration Console lists the target file servers and provides the following information for each file server:

File Server

The UNC path for the file server.

Reporting	Whether FSA Reporting is enabled for the file server. The value is one of the following:
	<ul> <li>On. FSA Reporting is enabled.</li> <li>Off. FSA Reporting is not enabled.</li> <li>Unknown. Enterprise Vault cannot determine whether FSA Reporting is enabled for the file server.</li> </ul>
	You can enable or disable FSA Reporting for a file server from the file server's <b>Propertites</b> tab.
Reporting Scan Start Time	The start time of the most recent FSA Reporting scan.
Reporting Scan End Time	The end time of the most recent successful FSA Reporting scan.
	No time is shown if a scan is currently in progress.
	Note that the end times of failed scans are not shown.
Reporting Scan Status	The FSA Reporting scan status for the file server. The status is one of the following:
	<ul> <li>Reporting enabled. FSA Reporting is enabled on the file server. No scan status is currently recorded.</li> <li>Started. An FSA Reporting scan of the file server has started.</li> </ul>
	<ul> <li>Stopped. An administrator stopped the FSA Reporting scan manually.</li> </ul>
	<ul> <li>Completed. An FSA Reporting scan of the file server has completed successfully.</li> </ul>
	<ul> <li>Completed with errors. A scan of one or more of the file server's volumes failed.</li> </ul>
	See "To view the status of FSA Reporting for a file server's volumes" on page 65.
	• Not enabled. FSA Reporting is not enabled for the file server.
	<ul> <li>Cannot obtain status. FSA Reporting cannot obtain the scan status of the file server.</li> </ul>

### To view the status of FSA Reporting for a file server's volumes

- 1 In the Administration Console, expand the Enterprise Vault site until the **Targets** container is visible.
- 2 Expand the Targets container.
- 3 Expand the **File Servers** container to show the target file servers.
- 4 Click the file server for which you want to view the volume status information.

The main pane of the Administration Console lists the file server's target volumes, and provides the following information for each volume:

Volume	The name of the volume.
Policy Name	The archiving policy that Enterprise Vault applies when you archive from the volume.
Vault Store	The vault store where Enterprise Vault stores the files that are archived from the volume.
Task	The File System Archiving task that processes this volume.
Archiving	The status of archiving for the volume. The status is <b>On</b> or <b>Off</b> .
Reporting	Whether FSA Reporting is enabled or disabled for the volume. The value is one of the following:
	<ul> <li>On. FSA Reporting is enabled for the volume.</li> <li>Off. FSA Reporting is not enabled for the volume.</li> <li>Unknown. Enterprise Vault cannot determine whether FSA Reporting is enabled or disabled for the volume.</li> </ul>
	You can enable or disable FSA Reporting for a volume from the volume's <b>Propertites</b> tab.

See "Enabling or disabling FSA Reporting data collection for a file server target volume" on page 46.

Reporting ScanThe FSA Reporting scan status for the volume. The scan statusStatusis one of the following:

- Reporting enabled. FSA Reporting is enabled for the volume. No scan status is currently recorded.
- Scan pending. A file server scan is started and a scan of the volume is pending.
- Scan started. A scan of the volume is started.
- **Obtaining archive point data**. FSA Reporting is obtaining archive point data for the volume.
- Obtaining archive data. FSA Reporting is obtaining archive data for the volume.
- Scan in progress. FSA Reporting is performing a scan of the volume.
- **Uploading scanned data**. FSA Reporting is uploading scanned data for the volume to the FSA Reporting database.
- Scan completed. A scan of the volume has completed successfully.
- Scan failed. A scan of this volume failed.
- Scan stopped manually. An administrator stopped the scan.
- Maintenance mode. The FSA Reporting database is in purging job maintenance mode. FSA Reporting cannot upload data to the database until the database exits from purging job maintenance mode.
- Not enabled. FSA Reporting is not enabled for the volume.
- Cannot obtain status. FSA Reporting cannot obtain the scan status of the volume.

# Running an unscheduled FSA Reporting scan on a file server

FSA Reporting collects data according to the default FSA Reporting schedule or to the schedule that is set for a specific file server.

To obtain a report with the most up-to-date information, you can run an unscheduled FSA Reporting scan immediately on a file server.

**Note:** If a scheduled scan is due to start while another scan is running, FSA Reporting does not start the scheduled scan. FSA Reporting generates a warning in the Enterprise Vault event log to indicate that the scan will run at the next scheduled time.

### To run an unscheduled FSA Reporting scan on a file server

- 1 In the Administration Console, expand the Enterprise Vault site until the **Targets** container is visible.
- 2 Expand the Targets container.
- 3 Expand the **File Servers** container to show the file servers that have been added.
- 4 Right-click the file server on which you want to run the scan and, on the shortcut menu, click **Run FSA Reporting Scan**.

## Stopping FSA Reporting scans

You can stop any FSA Reporting scans that are currently running on a single file server, or on all file servers. These procedures may be useful if a scan is running when you want to turn off a file server, for example.

**Note:** These procedures do not cancel any scheduled reporting scans that have not yet started.

### To stop an FSA Reporting scan on a file server

- 1 In the Administration Console, expand the Enterprise Vault site until the **Targets** container is visible.
- 2 Expand the Targets container.
- 3 Expand the **File Servers** container to show the file servers that have been added.
- 4 Right-click the file server on which you want to stop the scan and, on the shortcut menu, click **Stop FSA Reporting Scan**.

### To stop FSA Reporting scans on all file servers

- 1 In the Administration Console, expand the Enterprise Vault site until the **Targets** container is visible.
- 2 Expand the Targets container.
- 3 Right-click the **File Servers** container and, on the shortcut menu, click **Stop All Reporting Scans**.

## **Disabling all FSA Reporting data collection**

You can disable FSA Reporting for all the file servers in an Enterprise Vault site.

**Note:** If you want to re-enable FSA Reporting data collection after performing this procedure, you must re-enable it on the properties of each target file server.

### To disable all FSA Reporting data collection

- 1 In the Administration Console, expand the Enterprise Vault site until the **Targets** container is visible.
- 2 Expand the Targets container.
- 3 Right-click the **File Servers** container and, on the shortcut menu, click **Disable All FSA Reporting Data Collection**.
- 4 Click **Yes** on the confirmation dialog to continue.

When the process of disabling FSA Reporting data collection has completed, a dialog indicates the status of FSA Reporting data collection for each file server.

# Changing the default FSA Reporting data collection schedule

FSA Reporting uses the default data collection schedule for a target file server if the file server has no non-default schedule defined.

You can change the default FSA Reporting data collection schedule if required.

### To change the default FSA Reporting data collection schedule

- 1 In the Administration Console, expand the Enterprise Vault site until the **Targets** container is visible.
- 2 Expand the Targets container.
- 3 Right-click the **File Servers** container and, on the shortcut menu, click **Properties**.
- 4 On the **Reporting Data Collection** tab, change the required information.
- 5 Click **OK** to save your changes and close the Properties dialog.

## Changing a file server's FSA Reporting database

You can provide scalability for FSA Reporting by assigning your target file servers to different FSA Reporting databases.

See "About the FSA Reporting databases" on page 23.

Use the following procedure to change a target file server's assigned FSA Reporting database. You can assign another existing FSA Reporting database, or configure a new database.

Note the following before you change the FSA Reporting database:

- Enterprise Vault does not copy any scan data for the file server from the old database to the new database. Therefore FSA Reporting's trend reports no longer include the data from the old database.
- After you change the database, none of the FSA Reporting reports shows any information for the file server until at least one FSA Reporting scan completes successfully.

**Note:** Enterprise Vault prevents you from changing this setting if an FSA Reporting scan is in progress for the file server.

### To change a file server's FSA Reporting database

- 1 In the Administration Console, expand the Enterprise Vault site until the **Targets** container is visible.
- 2 Expand the **Targets** container and then the **File Servers** container.
- **3** Right-click the target file server for which you want to change the database, and from the shortcut menu click **Properties**.
- 4 On the **Reporting Data Collection** tab, check **Enable data collection for FSA Reporting** if it is not already checked.
- 5 Under Database server for FSA Reporting, click Change.
- **6** The FSA Reporting Database Configuration wizard helps you to select an FSA Reporting database in which to hold the FSA Reporting data for the new file server: Choose an existing database, or create a new one.
- 7 When you have completed the wizard, click **OK** on the **Reporting Data Collection** tab to save your changes and to exit from the file server's properties.

## Maintaining the FSA Reporting databases

Each FSA Reporting database holds the FSA Reporting scan data for one or more target file servers.

See "About the FSA Reporting databases" on page 23.

Table 8-2 describes the maintenance tasks associated with each FSA Reporting database.

Task	Description
Trim the FSA Reporting database history tables.	You must run the FSA Reporting database trimming utility regularly, to keep the history tables at a manageable size.
	See "Trimming the FSA Reporting database history tables " on page 71.
Change the schedule for the FSA Reporting database purging job.	You can change the schedule for the SQL job that purges the database's main tables of old data.
	See "Changing the schedule for an FSA Reporting database purging job" on page 74.
Run the FSA Reporting database purging job manually.	You can purge old data manually from a database if for some reason the database purging job does not run automatically for some time.
	See "Running the FSA Reporting database purging job manually" on page 74.

 Table 8-2
 FSA Reporting database management

### Trimming the FSA Reporting database history tables

You must trim the history tables for each FSA Reporting database regularly to keep the tables at a manageable size, while retaining recent and trend-related information. Enterprise Vault provides a trimming utility for this purpose. The utility removes data beyond a specified age, but it retains the data for the trend reports.

The trimming utility is named FSAReporting\_TrimData.bat. It is located in the FSAReports subfolder of the Enterprise Vault program folder, for example:

C:\Program Files (x86)\Enterprise Vault\FSAReports

**Note:** To execute the utility from the Enterprise Vault server, the SQL Server client tools must be installed on the Enterprise Vault server. Alternatively you can copy the utility to the SQL Server computer where the FSA Reporting database is located, and execute the utility from there.

For security reasons only the FSA Reporting user can execute the utility. The FSA Reporting user is the Windows user account that you specified for FSA Reporting to use when you ran the FSA Reporting Configuration wizard.

**Note:** You cannot run the utility when the FSA Reporting database is in purging job maintenance mode. If you attempt to run the utility, it exits with an explanatory message.

#### To trim the FSA Reporting database history tables

1 By default, the trimming utility trims the FSA Reporting data for all of the file servers for which the specified database holds data. To specify a list of file servers on which the utility is to act, place an XML file in the same folder as the trimming utility. The XML file must contain a single line in the following format:

<FileServerList><FileServer Name=''*Site\Domain\FileServer*''/></FileServerList>

#### where:

- site is the Enterprise Vault site that contains the file server.
- Domain is the file server's domain.
- FileServer is the local name of the file server.

The file server name must use the format ''Site\Domain\FileServer'', even if the file server is specified in the Administration Console using an IP address. You must enclose the file server name in two pairs of single quotes as shown, not double quotes. The FSAReports folder contains an example XML file with a line in the required format.

The following example specifies two file servers for which to trim FSA Reporting data. Remember, the text must be contained on a single line:

```
<FileServerList><FileServer
Name=''EVSite\MyDomain\Fileserver1''/><FileServer
Name=''EVSite\MyDomain\Fileserver2''/></FileServerList>
```

- 2 Log on as the FSA Reporting user.
- **3** Open a command prompt window and change directory to the folder that contains the trimming utility.
- 4 Enter the following command to run the trimming utility, all on one line:

```
FSAReporting_TrimData.bat "SQL_Server" "FSAReportingDB_name"
trim_period ["server_list"]
```

where:

 SQL\_Server is the name of the SQL Server where the FSA Reporting database is located. Include the SQL Server instance name if appropriate, for example SQLServer1\instance1.
- FSAReporting\_db is the name of the FSA Reporting database that you want to trim.
- trim\_period is the period in days for which you want to retain data. Data older than the specified number of days is deleted.
- server\_list is the name of the XML file that specifies the list of servers.
   If you do not use an XML file, either specify ALL or omit the server\_list variable, since the utility uses a value of ALL by default.

Note that the parameters *SQL\_Server*, *FSAReporting\_db*, and *server\_list* must be enclosed in double quotes.

For example, the following command retains the last 30 days of data for all file servers whose data is saved in the database named FSAReporting1 on SQLServer1\instance1:

```
FSAReporting_TrimData.bat "SQLServer1\instance1" "FSAReporting1"
30 "ALL"
```

The following command retains the last 10 days of data for the file servers that are listed in the file fileserverlist.xml, in a database named FSARepDB that is located on sqLServer1:

```
FSAReporting_TrimData.bat "SQLServer1" "FSARepDB" 10
"fileserverlist.xml"
```

5 The utility logs its output to EV\_FSAReporting\_TrimOldData.log in the utility's folder. Examine this log file to check the results of running the utility.

# Determining whether an FSA Reporting database is in purging job maintenance mode

You cannot trim an FSA Reporting database if the database is in purging job maintenance mode. You can determine whether an FSA Reporting database is in purging job maintenance mode by either of the following methods.

# To determine the status of the purging job from SQL Server Management Studio

- 1 For the SQL Server that hosts the FSA Reporting database, make sure that the status of the SQL Server Agent service is Started.
- 2 Start SQL Server Management Studio.
- 3 Expand the SQL Server Agent node.

- 4 Expand the **Jobs** node.
- 5 Examine the Status column for the EV FSAReporting Purging Job.

If the status of the job is "Running" then the database is in purging job maintenance mode.

#### To determine the status of the purging job from the Administration Console

 If an FSA Reporting scan is in progress on a target file server you can examine the FSA Reporting scan status for the file server in the main pane of the Administration Console. Select the **Targets** > **File Servers** container and then select the target file server. If the database is in purging job maintenance mode, Reporting Scan Status for a volume indicates "Maintenance mode".

# Changing the schedule for an FSA Reporting database purging job

FSA Reporting creates an SQL purging job for each FSA Reporting database. The purging job moves data from the main tables of the FSA Reporting database to the database's history tables. By default each FSA Reporting database purging job runs daily at 9:00 P.M. You can change the schedule for a purging job if required.

#### To change the schedule for the FSA Reporting database purging job

- 1 For the SQL Server that hosts the FSA Reporting database, make sure that the status of the **SQL Server Agent** service is **Started**.
- 2 Start SQL Server Management Studio.
- 3 Expand the SQL Server Agent node.
- 4 Expand the Jobs node.
- 5 Right click EV FSAReporting Purging Job FSAReporting\_db where FSAReporting\_db is the name of the database whose purging job you want to change.
- 6 From the shortcut menu select **Properties**.
- 7 Go to the Schedules page.
- 8 Select EV FSAReporting Purging Job Schedule in the Schedule list and click Edit.
- **9** Change the purging job schedule as required.

### Running the FSA Reporting database purging job manually

FSA Reporting includes a separate FSA Reporting database purging job for each FSA Reporting database. The purging job moves data from the database's main tables to the history tables.

You can run an FSA Reporting database purging job manually if for some reason the job does not run automatically for some time.

### To run an FSA Reporting database purging job manually

- 1 For the SQL Server that hosts the database or databases that you want to purge, make sure that the status of the SQL Server Agent service is Started.
- 2 Start SQL Server Management Studio.
- 3 Expand the SQL Server Agent node.
- 4 Expand the **Jobs** node.
- 5 Right-click **EV FSAReporting Purging Job** *FSAReporting\_db* where *FSAReporting\_db* is the name of the database that you want to purge.

From the shortcut menu select the option Start Job or Start Job At.

A **Start Jobs** window opens, and shows the status of the job as the job progresses.

# Changing the FSA Reporting proxy server for a non-Windows file server

You can change the FSA Reporting proxy server that performs the data collection for a non-Windows file server.

Any of the following can act as an FSA Reporting proxy server, subject to the necessary prerequisites:

- An Enterprise Vault server in the Enterprise Vault site.
- A Windows file server that is configured as an archiving target in the Enterprise Vault site.
- A Windows server on the network. The server must be in the same domain as the Enterprise Vault server, or in a child domain, or in a trusted domain.

See "About the FSA Reporting proxy servers for non-Windows file servers" on page 18.

See "FSA Reporting proxy server requirements" on page 22.

**Note:** Enterprise Vault prevents you from changing this setting if an FSA Reporting scan is in progress for the file server.

### To change the FSA Reporting proxy server for a non-Windows file server

- 1 In the Administration Console, expand the Enterprise Vault site until the **Targets** container is visible.
- 2 Expand the Targets container and then the File Servers container.
- **3** Right-click the non-Windows file server for which you want to change the proxy server, and from the shortcut menu click **Properties**.
- 4 On the **Reporting Data Collection** tab, check **Enable data collection for FSA Reporting** if it is not already checked.
- 5 Under Proxy server for FSA Reporting, click Change.
- 6 The Proxy Server Selection wizard helps you to select a proxy server to perform the FSA Reporting data collection. Select an existing proxy server for FSA Reporting, or configure a new proxy server.
- 7 On the **Reporting Data Collection** tab, click **OK** to save your changes and to exit from the file server's properties.

# Modifying the FSA Reporting data collection parameters

You can change the values of some of the parameters that determine what data the Enterprise Vault File Collector service collects for FSAReporting. You can determine the following:

- Whether the File Collector service collects data for the Duplicate Files reports.
- The selectable options for the inactivity period in the three "Inactive Files" reports.
- The parameters that the Largest Files per Volume report uses.

**Note:** Alteration of the supplied values may result in increased scan times and increased FSA Reporting database sizes.

To change any of these parameter values you must edit a parameter value in the SQL Server **FSAReportingConfiguration** table of the Enterprise Vault Directory database.

**Note:** Take great care if you decide to edit the database table. Take a backup of the database before you make any changes.

Table 8-3 lists the details for the parameters whose values you can change.

Parameter	Description	Supplied value (units)
CheckDuplicates	A Boolean value that determines whether the File Collector service collects data for the duplicate files reports:	False
	<ul> <li>Duplicate Files on a Server</li> <li>Duplicate Files Summary</li> <li>Top Duplicate Files per Volume</li> </ul>	
	The File Collector service does not collect data for these reports by default. The collection of this data causes a slight performance degradation in the File Collector service.	
	Set this parameter to <b>True</b> if you want to collect data for the duplicate files reports.	
DAYSOLD	A list of the periods in days for which the File Collector service collects data for the three "Inactive Files" reports. The list defines the options for the <b>Interval</b> input parameter when you run the report.	90,180,365,730 (days)
	The list can contain a maximum of 10 comma-separated values, in ascending order.	
MBLarge	A size in megabytes that defines the minimum file size that Enterprise Vault includes in the Largest Files per Volume report.	1024 (MB)
	To set no minimum size, enter a value of <b>0</b> .	
TopFiles	The number of files to list in the Largest Files per Volume report.	10 (files)
	To change the value, enter a number in the range <b>0</b> to <b>100</b> . If you set a value of <b>0</b> , FSA Reporting does not collect any data for the report.	
	<b>Note:</b> The report lists fewer files than the TopFiles value if there are fewer than that number of files in the volume with a size of MBLarge or larger.	

 
 Table 8-3
 Editable parameters in the FSAReportingConfiguration table of the 'EnterpriseVaultDirectory' database

### To modify the FSA Reporting data collection parameters

- 1 Start SQL Server Management Studio.
- 2 Expand the container for the EnterpriseVaultDirectory database.
- 3 Right-click the FSAReportingConfiguration table and select Edit top n rows.
- 4 Change the values of the appropriate parameters, as required.
- 5 Save any changes, and exit from SQL Server Management Studio.
- 6 If you changed any of the parameter values, do as follows:
  - For Windows file servers, restart the Enterprise Vault File Collector service.
  - For non-Windows file servers whose FSA Reporting proxy server is a Windows file server archiving target or a Windows computer, restart the Enterprise Vault File Collector service on the proxy server.
  - For non-Windows file servers whose FSA Reporting proxy server is an Enterprise Vault server, restart the Enterprise Vault Admin service on the proxy server.

# Obtaining data for a specific file type in the FSA Reporting reports

The following FSA Reporting data analysis reports include data about file groups and file types:

- File Group Space Usage on a Server
- File Group Space Usage Summary
- Inactive Files on a Server by File Group
- File Space Usage on an Archive Point (accessed from the Archive Points Space Usage Summary report)

From Enterprise Vault 8.0 SP3 onwards, these reports present separate data only for the file types that are included within a file group at the time the scan is performed. FSA Reporting combines the data that it gathers for the file types that are not included in any file group. The reports display this combined data as file type "misc" under the entry "Others" in the File Group column.

**Note:** To determine a file type, FSA Reporting searches backwards from the end of the file name for the first period character. For example, FSA Reporting categorizes a file that is named <code>abcd.ef.ghi</code> as file type <code>.ghi</code>

For example, suppose that you perform an FSA Reporting scan on a volume that includes the following:

- File types \*.doc and \*.xls, in the file group "Office Files".
- File types \*.001, \*.002, and \*.003, not included in any file group.

In this case the reports present separate data for the \*.doc and \*.xls file types in the data for the file group "Office Files". To view the combined data for the file types \*.001, \*.002, and \*.003 you can expand the "Others" entry in the File Group column and view the data for "misc" in the File Type column.

**Note:** If you specify more than 1000 different file types within your file groups, the Administration Console displays a warning message. To manage the data on this many file types may degrade the performance of FSA Reporting. The warning message advises you to reduce the number of file types if you use FSA Reporting.

### To obtain data for a specific file type in the FSA Reporting reports

- **1** Do one of the following:
  - Make sure that the file type is included in an existing file group.
  - Or create a new file group, and include the file type in the new file group.
- 2 Wait until a new FSA Reporting scan of the file server has completed.

# Upgrading the FSA Agent

If you upgrade Enterprise Vault, you may need to upgrade the version of the FSA Agent on the target Windows file servers and on any FSA Reporting proxy servers that are not Enterprise Vault servers.

For a list of the compatible versions of the FSA Agent when you use FSA Reporting, see the following technical note on the Veritas Support website:

http://www.veritas.com/docs/000090376

**Note:** Do not install the FSA Agent on an Enterprise Vault server, even if it acts as an FSA Reporting proxy server. Enterprise Vault servers do not require the FSA Agent.

Before you upgrade the FSA Agent on a target Windows file server, note that while the upgrade proceeds, Enterprise Vault stops the three FSA Agent services on the file server:

- Enterprise Vault File Placeholder service. While this service is stopped, Enterprise Vault cannot create placeholders or perform placeholder recalls on the Windows file server.
- Enterprise Vault File Collector service. While this service is stopped, no FSA Reporting scans run on the following:
  - The file server.
  - Any non-Windows file servers for which the file server acts as the FSA Reporting proxy server.
- Enterprise Vault File Blocking service. While this service is stopped, File Blocking does not work on the following:
  - The file server.
  - Any NetApp filers for which the file server performs File Blocking.

### To upgrade the FSA Agent on a target Windows file server

1 If the file server's firewall is on, ensure that the firewall is suitably configured, otherwise the installation will fail.

See "Configuring a file server's firewall for FSA" in *Setting up File System Archiving*.

Alternatively, perform a manual installation of the FSA Agent.

See "Installing the FSA Agent manually" in Setting up File System Archiving.

- **2** Run the Administration Console with an account that is a member of the local Administrators group on the file server.
- **3** In the Administration Console, expand the Enterprise Vault site until the **Targets** container is visible.
- 4 Expand the **Targets** container.
- 5 Expand the File Servers container.
- 6 Right-click the file server on which you want to install the FSA Agent and, on the shortcut menu, click **Install FSA Agent**. The **Install FSA Agent** wizard starts.
- **7** Work through the wizard to upgrade the version of the FSA Agent on the file server.

# To upgrade the FSA Agent on the FSA Reporting proxy server for a target non-Windows file server

1 If the FSA Reporting proxy server's firewall is on, ensure that the firewall is suitably configured, otherwise the installation will fail.

See "Configuring a file server's firewall for FSA" in *Setting up File System Archiving*.

Alternatively, perform a manual installation of the FSA Agent.

See "Installing the FSA Agent manually" in Setting up File System Archiving.

- **2** Run the Administration Console with an account that is a member of the local Administrators group on the proxy server.
- **3** In the Administration Console, expand the Enterprise Vault site until the **Targets** container is visible.
- 4 Expand the Targets container.
- 5 Expand the File Servers container.
- 6 Right-click the file server and on the shortcut menu click Upgrade FSA Agent on proxy server for FSA Reporting.

This option is not available if the proxy server is an Enterprise Vault server. Enterprise Vault servers do not run the FSA Agent.

If the proxy server is a target Windows file server, Enterprise Vault displays a dialog to warn that the FSA Agent services stop while the upgrade proceeds. Click **Yes** if you want to continue.

7 Work through the wizard to upgrade the version of the FSA Agent on the proxy server.

# Chapter

# Troubleshooting Enterprise Vault Reporting

This chapter includes the following topics:

About troubleshooting Enterprise Vault Reporting

# About troubleshooting Enterprise Vault Reporting

Enterprise Vault technical notes provide information on how to troubleshoot problems with Enterprise Vault Reporting and FSA Reporting.

Table 9-1 lists the technical notes.

Technical note	Description and location
Troubleshooting Enterprise Vault Reporting	Describes how to troubleshoot aspects of Enterprise Vault Reporting other than FSA Reporting.
	See http://www.veritas.com/docs/000033199.
Troubleshooting FSA Reporting	Describes how to troubleshoot FSA Reporting.
	See http://www.veritas.com/docs/000088358.

 Table 9-1
 Enterprise Vault Reporting troubleshooting technical notes

# Appendix

# **Report overviews**

This appendix includes the following topics:

- The Enterprise Vault Reporting operation reports
- The FSA Reporting data analysis reports

# The Enterprise Vault Reporting operation reports

Enterprise Vault Reporting's operation reports include information on the following topics:

- Exchange and Domino mailbox archiving status, health, and trends.
- Content providers' licensed capacity usage and ingest history.
- The volume of items that are archived per vault store.
- The status of the Enterprise Vault archives.
- Archive quota usage per user.
- Archived item access trends.
- Vault Store usage by archive, or by billing account.
- The storage reduction that is due to Enterprise Vault single instance storage.
- The number of savesets and collections.

Table A-1 provides a brief description of each operation report, and lists any special requirements for individual reports.

Operation report	Description	Requirements
Archive Quota Usage	Shows the current size of archived items and the archive usage limit, for the selected user or all users, in the selected Enterprise Vault site.	
	See "Archive Quota Usage report" on page 87.	
Archived Items Access	For the specified period, shows the number of items that were accessed from each vault store and the number of users who accessed those items.	Enterprise Vault Auditing
	See "Archived Items Access report" on page 88.	
Archived Items Access Trends	Shows trends in the numbers of users accessing items, and the number of items being accessed, in all archives over the specified period.	Enterprise Vault Auditing
	See "Archived Items Access Trends report" on page 89.	
Content Provider Ingest History	Shows the number and total size of the items that a content provider or a content provider instance has ingested into Enterprise Vault during the selected time period. See "Content Provider Ingest History report"	
	on page 92.	
Content Providers Licensing and Usage Summary	Shows the licensed capacity that remains for your Enterprise Vault capacity licenses, or the amount by which the licensed capacity has been exceeded, and whether any license true-ups are required. Also shows the amount of data that Enterprise Vault content providers and external content providers have ingested into Enterprise Vault.	
	See "Content Providers Licensing and Usage Summary report" on page 94.	
Domino Mailbox Archiving Status	Shows the archiving status of each mailbox for the specified Domino Server or provisioning group.	
	See "Domino Mailbox Archiving Status report" on page 96.	

### Table A-1 Enterprise Vault Reporting's Operation Reports

Operation report	Description	Requirements
Domino Server Journal Mailbox Archiving Health	Shows the status of mailbox parameters, including Inbox total and Archive pending, for each Domino server journal mailbox archiving target on an Enterprise Vault server.	Enterprise Vault Monitoring
	See "Domino Server Journal Mailbox Archiving Health report" on page 97.	
Domino Server Journal Mailbox Archiving Trends	Shows trends in the Inbox Totals, Archive Pending, Archivable or Failed Operations parameter values over the specified period for the selected Domino server.	Enterprise Vault Monitoring
	See "Domino Server Journal Mailbox Archiving Trends report" on page 98.	
Enterprise Vault Server 24-hour Health Status	Shows the status of the selected Enterprise Vault service or long-running task (Mailbox Archiving Task or Journaling Task) on the selected Enterprise Vault server, during the selected twenty-four hour period.	Enterprise Vault Monitoring
	See "Enterprise Vault Server 24-hour Health Status report" on page 99.	
Enterprise Vault Server Seven Day Health Status	Shows the status of the selected Enterprise Vault services and long-running tasks (Mailbox Archiving Tasks and Journaling Tasks) on the specified Enterprise Vault server, during the selected seven-day period.	Enterprise Vault Monitoring
	See "Enterprise Vault Server Seven Day Health Status report" on page 101.	
Exchange Mailbox Archiving Status	Shows the archiving status of each mailbox for the specified Microsoft Exchange Server or provisioning group.	
	See "Exchange Mailbox Archiving Status report" on page 101.	
Exchange Server Journal Mailbox Archiving Health	Shows the current status of Microsoft Exchange journal mailbox archiving in all the vault stores of the selected Enterprise Vault server.	Enterprise Vault Monitoring
	See "Exchange Server Journal Mailbox Archiving Health report" on page 102.	

 Table A-1
 Enterprise Vault Reporting's Operation Reports (continued)

Operation report	Description	Requirements
Exchange Server Journal Mailbox Archiving Trends	Shows trends in journal mailbox archiving for the specified Microsoft Exchange Server over the selected day or week.	Enterprise Vault Monitoring
	See "Exchange Server Journal Mailbox Archiving Trends report" on page 104.	
IMAP usage report	Shows the numbers of IMAP-enabled users, and the amount of archived data in their archives. See "IMAP usage report" on page 105.	
Items Archival Rate	Provides data on the items that Enterprise Vault has archived in each hour, day, month, or year of a specified period. The data includes the number of items archived, item size information, and space savings. You can generate a report for a specified vault store, or for all of the vault stores in a site. See "Items Archival Rate report" on page 106.	
Move Archive	Shows details of Move Archive operations that have the selected move status, and that took place during the selected period. See "Move Archive report" on page 107.	
Single Instance Storage Reduction by File Type	Shows the storage reduction that has resulted from Enterprise Vault single instance storage for each file type within a vault store group. See "Single Instance Storage Reduction by File Type report" on page 109.	
Single Instance Storage Reduction per Vault Store Group	Shows the storage reduction that has resulted from Enterprise Vault single instance storage for each vault store in a vault store group. See "Single Instance Storage Reduction per Vault Store Group report" on page 111.	
Single Instance Storage Reduction Summary	Shows the storage reduction that has resulted from Enterprise Vault single instance storage for each vault store group in an entire site. See "Single Instance Storage Reduction Summary report" on page 113.	

 Table A-1
 Enterprise Vault Reporting's Operation Reports (continued)

Operation report	Description	Requirements
Vault Store Savesets	Shows the number of uncollected and collected savesets, and the number of unmigrated and migrated collections, for each vault store in the selected Enterprise Vault site. See "Vault Store Savesets report" on page 114.	
Vault Store Usage by Archive	Shows the size and status of each archive in the selected vault store. See "Vault Store Usage by Archive report" on page 115.	
Vault Store Usage by Billing Account	Shows usage by billing account for the selected vault store. See "Vault Store Usage by Billing Account report" on page 117.	
Vault Store Usage Summary	Shows the usage of each vault store in the selected Enterprise Vault site. See "Vault Store Usage Summary report" on page 118.	

 Table A-1
 Enterprise Vault Reporting's Operation Reports (continued)

The requirements column indicates any special requirements for the report:

 "Enterprise Vault Auditing" or "Enterprise Vault Monitoring" indicates that Enterprise Vault auditing or Enterprise Vault monitoring must be configured for the report to display data.

See "Enterprise Vault reports that require monitoring or auditing to be enabled" on page 30.

### Archive Quota Usage report

This Enterprise Vault Reporting report shows the current size of archived items and the archive usage limit, for the selected user or all users in the selected Enterprise Vault site.

Table A-2 shows the parameters that you specify for this report.

 Table A-2
 Report input parameters

Parameter	Lets you do this
Site Name	Select the Enterprise Vault site.

Parameter	Lets you do this
User name	Select a user, or select <all> to obtain a summary report for all users.</all>

 Table A-2
 Report input parameters (continued)

Table A-3 shows the information that the report provides in graphical format for a selected user, or in tabular format for all users.

Table A-3Report output

ltem	Description
User Name	The user for whom the data is shown.
Total size (MB)	The total size of the user's items.
Limit size (MB)	The archive size limit.
Limit status	The archive size limit status (Enabled or Disabled). If Disabled, then no size limit is enforced.
Limit setting	The location from where the limit is set. This location can be as follows:
	<ul> <li>From Site. The size limit is inherited from the site properties.</li> <li>From Vault Store. The size limit is inherited from the vault store properties.</li> <li>From Archive. The size limit is set in the vault store archive properties.</li> </ul>

# Archived Items Access report

This Enterprise Vault Reporting report shows for the specified period, the number of items that were accessed from each vault store and the number of users who accessed those items.

**Note:** This report does not have any data to process if Enterprise Vault auditing is disabled. Auditing may be enabled from the Administration Console.

Table A-4 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select the Enterprise Vault site.
Audit Level	Select Detailed or Summary, depending on the level of auditing that was set during the period for which the report is to be generated.
Period	Select Last Week, Week Beginning, Specific Day, or Month Beginning.
Start Year, Start Month, Start Day	If you selected Week Beginning, Specific Day, or Month Beginning, specify the starting date using these parameters.

 Table A-4
 Report input parameters

Table A-5 shows the information that the report provides in tabular format for each vault store in the site.

### Table A-5Report output

Item	Description
Vault Store Name	The name of the vault store for which the data is shown.
Number of Accesses Performed	The total number of times that users accessed items from this vault store in the selected period.
Number of Individual Items Accessed	The number of different items that users accessed.
Number of Individual Users Accessing Items	The number of different users accessing items.

For example, if User A and User B have both accessed items 1 and 2 twice, and user B has accessed item 3 once, then the following is true:

- Number of accesses performed = 5
- Number of individual items accessed = 3
- Number of individual users accessing items = 2

## Archived Items Access Trends report

This Enterprise Vault Reporting report shows trends for the number of users accessing items, and the number of accessed items, in all archives over the specified period.

**Note:** This report does not have any data to process if Enterprise Vault auditing is disabled. Auditing may be enabled from the Administration Console.

Table A-6 shows the parameters that you specify for this report.

Parameter	Lets you do this	
Site Name	Select the Enterprise Vault site.	
Audit Level	Select Detailed or Summary, depending on the level of auditing that was set during the period for which the report is to be generated.	
Period	Select Last Week, Week Beginning, Specific Day, or Month Beginning.	
Start Year, Start Month, Start Day	If you selected Week Beginning, Specific Day, or Month Beginning, specify the starting date using these parameters.	

 Table A-6
 Report input parameters

Table A-7 shows the information that the report provides in graphical format for all archives over the specified period.

Item	Description
Trend in the number of different users accessing items, and the total number of accesses performed	<ul> <li>The green line shows the trend in the total number of accesses to the archive.</li> <li>The blue line shows the trend in the numbers of individual users accessing the archive.</li> </ul>
Trend in the number of different items accessed, and the total number of accesses performed	<ul> <li>The green line shows the trend in the total number of accesses to the archive.</li> <li>The blue line shows the trend in the numbers of individual items that were accessed from the archive.</li> </ul>

Table A-7Report output

See "Sample output from the Archived Items Access Trends report " on page 90.

# Sample output from the Archived Items Access Trends report

This simplified example illustrates the output of Enterprise Vault Reporting's Archived Item Access Trends report.

Say there are four items in the archive, and two users who are accessing the items. User A access two distinct items and User B accesses the other two distinct items.

In the first graph green line shows a count of four, because User A accessed the archive twice and so did User B. The blue line shows a count of two, since only two unique users were involved.

In the second graph, the green line shows a count of four (the total number of accesses is four, as in the first graph). But here the blue line also shows a count of four, because four unique items were accessed. Hence the blue line and the green line overlap.

Figure A-1 shows a report that gives the output for this example.

### Figure A-1 Example Archived Items Access Trends report

**(3) Veritas** Enterprise Vault<sup>™</sup> Report

Site Name: London

#### Archived Items Access Trends

This report shows trends in the number of users accessing items, and the number of items being accessed, in all archives, over the specified period.

Report Details		
Auditing Level	Detailed	
Date	Sunday, April 23, 2006	
Period	Month beginning	

Trend in the number of different users accessing items, and the total number of accesses performed, in all archives, over the specified period.





# Content Provider Ingest History report

This report shows the number and total size of the items that a content provider or content provider instance has presented to Enterprise Vault for archiving over the chosen time period.

**Note:** The report only includes data that has been ingested with Enterprise Vault 10.0.4 or later.

### **Report input parameters**

Table A-8 shows the parameters that you specify for this report.

 Table A-8
 Report input parameters

Parameter	Lets you do this
Content Provider	Select the content provider for which you want to view the ingest history data.
Content Provider Instance	Select an instance of the content provider, or select All to view the combined data for all instances of the content provider.
Time Period	Select Last 24 Hours, This Week, Last Week, This Month, Last Month, This Year, or Last Year. The report displays the ingestion rates during this period.

### **Report output**

Table A-9 shows the information that the report provides for the chosen content provider or content provider instance.

Table A-9	Report output
-----------	---------------

Item	Description
Content Provider Usage Summary	<ul> <li>The report shows the following information:</li> <li>The total number of items that were ingested into Enterprise Vault during the whole of the chosen period.</li> <li>The total size of items that were ingested into Enterprise Vault during the whole of the chosen period.</li> <li>The average rate of ingestion during the chosen period, both in terms of the number of items and terabytes.</li> </ul>
Content Provider <interval> Usage</interval>	<ul> <li>Two charts show the following information in graphical format:</li> <li>The number of items that were ingested during each interval of the chosen period.</li> <li>The size in terabytes of the items that were ingested during each interval of the chosen period.</li> </ul>

Item	Description
Content Provider <interval> Usage Details</interval>	<ul> <li>A table gives the following information:</li> <li>The number of items that were ingested during each interval of the chosen period.</li> <li>The size in terabytes of the items that were ingested during each interval of the chosen period.</li> <li>The average rate of ingestion during the interval, both in terms of the number of items and terabytes.</li> </ul>

 Table A-9
 Report output (continued)

The interval that the report uses depends on the selected Time Period, as follows:

Table A-10	Interval used in Ingest History Report output
------------	---

Selected Time Period for the report	Report interval
Last 24 Hours	Hourly
This Week, or Last Week	Daily
This Month, or Last Month	Weekly
This Year, or Last Year	Monthly

# Content Providers Licensing and Usage Summary report

This Enterprise Vault Reporting report provides the following information:

- The Veritas Enterprise Vault capacity license usage. The report shows the licensed capacity that remains, or the amount by which the licensed capacity has been exceeded. Data is shown separately for Enterprise Vault Archiving and Enterprise Vault Extensions. If you have exceeded your licensed capacity, the report warns that a license true-up is required.
- The total amount of data that has been ingested into Enterprise Vault by all content providers, both capacity licensed and per-user licensed. You can expand the report's table to show the amount of ingestion by archive type, and by each content provider.

### **Report input parameters**

Table A-11 lists the parameters that you specify for this report.

**Note:** The report calculates your capacity license usage based on the values that you input for the licensed capacity and the FSA/SharePoint license type. To obtain meaningful output you must input the correct values for these parameters.

Parameter	Lets you do this
Site Name	Select the Enterprise Vault site, or select All to receive a report on all the sites.
FSA/SharePoint License Type	Select Capacity Licensed, Per User Licensed, or None. The report uses this information when it calculates the Enterprise Vault Archiving licensed capacity balances.
Veritas Enterprise Vault Archiving Licensed Capacity in TB	Enter the total capacity of your Veritas Enterprise Vault Archiving capacity licenses, in terabytes. The report uses this value when it calculates your licensed capacity balances.
	If you do not have any Veritas Enterprise Vault Archiving capacity licenses, enter 0.
Veritas Enterprise Vault Extensions Licensed Capacity in TB	Enter the capacity of your Veritas Enterprise Vault Extensions capacity license, in terabytes. The report uses this value when it calculates the licensed capacity balances.
	If you do not have a Veritas Enterprise Vault Extensions capacity license, enter 0.

 Table A-11
 Report input parameters

### **Report output**

The report's introductory text and the Licensing Usage Summary indicate the Veritas Enterprise Vault licensed capacity that remains, or the amount by which it has been exceeded. Data is shown separately for:

- Veritas Enterprise Vault Archiving content providers
- Veritas Enterprise Vault Extensions content providers

If you have exceeded your licensed capacity, the report warns that a Veritas Enterprise Vault license true-up is required. For information on purchasing Enterprise Vault licenses, see the MyVeritas website at https://my.veritas.com.

The Content Provider Ingest Details table shows information on the amount of data that the content providers have targeted for Enterprise Vault storage.

Table A-12 describes the contents of the table.

ltem	Description
Capacity Licensed Content Providers	The total number of items and the size in terabytes ingested by all content providers that are licensed on a capacity basis.
	<ul> <li>Expand the Capacity Licensed Content Providers row to show the ingestion totals for each archive type.</li> <li>Expand an entry in the Archive Type column to show the ingestion totals for each content provider that is associated with the archive type. The totals are for all instances of the content provider that are associated with the selected archive type.</li> <li>Click a hyperlink in the Content Provider column to see a Content Provider Ingest History report for all instances of the selected content provider. See "Content Provider Ingest History report" on page 92.</li> </ul>
Per-User Licensed Content Providers	The total number of items and the size in terabytes ingested by all content providers that are licensed on a per user basis.
	<ul> <li>Expand the Per-User Licensed Content Providers row to show the ingestion totals for each archive type.</li> <li>Expand an entry in the Archive Type column to show the ingestion totals for each content provider that is associated with the archive type. The totals are for all instances of the content provider that are associated with the selected archive type.</li> <li>Click a hyperlink in the Content Provider column to see a Content Provider Ingest History report for all instances of the selected content provider. See "Content Provider Ingest History report" on page 92.</li> </ul>
Total Ingested Data	The total amount of data that all of the content providers have targeted for Enterprise Vault storage.

 Table A-12
 The Content Provider Ingest Details table

# Domino Mailbox Archiving Status report

This Enterprise Vault Reporting report shows the archiving status of each mailbox for the specified Domino Server or provisioning group.

Table A-13 shows the parameters that you specify for this report.

Table A-13	Report input parameters
------------	-------------------------

Parameter	Lets you do this
Site Name	Select the Enterprise Vault site.

Parameter	Lets you do this
Mailboxes for	Select Domino Server or Provisioning Group.
Name	Select a server or a provisioning group. The available options depend on what is selected in "Mailboxes for". The list for a provisioning group includes an option to select Unspecified.
Archiving State	Select <all>, Enabled, Disabled, or Never Enabled. The list displays only those options applying to the current archiving states.</all>
Sorting on column	Select a report table column to sort on.
Sort Direction	Select either Ascending or Descending, to set the sort direction for the column on which you are sorting.

 Table A-13
 Report input parameters (continued)

Table A-14 shows the information that the report provides in tabular format for each mailbox.

#### Table A-14Report output

ltem	Description
Mailbox Name	The name of the Domino journaling location for which information is shown.
Archiving State	Enabled, Disabled, or Never Enabled.
Mailbox Type	User mailbox or Journal mailbox.
Provisioning Target	The provisioning target.
Provisioning Group	The provisioning group, if you selected Provisioning Group.
Mailbox Server	The mailbox server, if you selected Domino Server.

At the bottom of the table, the total number of mailboxes is shown.

# Domino Server Journal Mailbox Archiving Health report

This Enterprise Vault Reporting report shows the status of mailbox parameters for each Domino server journal mailbox archiving target on an Enterprise Vault server.

Table A-15 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select the Enterprise Vault site.
Vault Server	Select an Enterprise Vault server.

 Table A-15
 Report input parameters

Table A-16 shows the information that the report provides for each Domino Journaling Archive.

#### Table A-16 Report output

ltem	Description
Journal Mailbox Location	The journaling location for which the totals for all mailboxes are shown.
Inbox Total	The total number of items in all Inboxes.
Archive Pending	The number of items in a pending archive state.
Archivable	The number of Inbox items that were marked for archiving.
Failed Operations	The number of items that failed to be archived

The figures in the report are color-coded as follows:

Amber	The figure breaches the Warning threshold.
Red	The figure breaches the Critical threshold.

At the bottom of the report, a table lists the current parameter threshold values.

## Domino Server Journal Mailbox Archiving Trends report

This Enterprise Vault Reporting report shows trends in the Inbox Totals, Archive Pending, Archivable, or Failed Operations parameter values over the specified period for the selected Domino server.

Table A-17 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select the Enterprise Vault site.
Domino Server	Select the Domino server.
Journal Mailbox Location	Select the journaling location.
Parameter Name	<ul> <li>Select <all>, or one of the following:</all></li> <li>Inbox Total. The total number of items in the Inbox.</li> <li>Archive Pending. Items in a pending archive state.</li> <li>Archivable. Inbox items that were marked for archiving.</li> <li>Failed Operations. The number of failed operations.</li> </ul>
Period	Select from Last Week, Week Beginning, or Specific Day.
Year, Month, Day	If you selected Week Beginning or Specific Day as the Period parameter, specify the starting date or day using these parameters.

 Table A-17
 Report input parameters

The report contains a graph for the selected Parameter Name. If you selected <ALL> for the Parameter Name, the report contains four graphs, one for each parameter.

Each graph shows the trend in the chosen parameter value over the specified period, plus the Critical threshold and Warning threshold values.

## Enterprise Vault Server 24-hour Health Status report

This Enterprise Vault Reporting report shows the status of the selected Enterprise Vault service or long-running task on the selected Enterprise Vault server, during the selected 24-hour period.

You can select from the following services and tasks:

- Indexing Service
- Shopping Service

- Storage Service
- Task Controller Service
- Mailbox archiving task
- Journaling task

Table A-18 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site	Select the Enterprise Vault site.
Vault Server	Select the Enterprise Vault server.
Service or task	Select an Enterprise Vault service or long-running task.
Year, Month and Day	Specify the day to provide data for.

Table A-18Report input parameters

The report contains a graph and a table showing the status of the selected service or long-running task over the period of the selected day.

Table A-19 shows the information that both the graph and table provide.

Table A-19Report output

Item	Description
Snapshot time	The snapshot times correspond to the Enterprise Vault monitoring agent's sampling times.
	If you have installed the Enterprise Vault Operations Manager component, these sampling times are configurable.
Status	The status of the selected task: Running, Transient, Stopped, or Data unavailable.

# Enterprise Vault Server Seven Day Health Status report

This Enterprise Vault Reporting report shows the status of Enterprise Vault services and long-running tasks on the specified Enterprise Vault server, during the selected seven-day period.

**Note:** This report does not have any data to process if Enterprise Vault monitoring is disabled. Monitoring may be enabled or disabled either during the configuration of Enterprise Vault, or from the Enterprise Vault Operations Manager web application.

Table A-20 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site	Select the Enterprise Vault site.
Vault Server	Select the Enterprise Vault server.
Week	Select Last week or Week Beginning.
Year, Month, Day	If you selected Week Beginning as the Week parameter, specify the starting date using these parameters.

Table A-20 Report input parameters

The generated report contains a status graph for each of the following:

- Indexing Service
- Shopping Service
- Storage Service
- Task Controller Service
- Mailbox archiving task for server\_name
- Journaling task for server\_name

The graphs indicate the number of hours during which the service or task was running, transient, stopped, or when data was unavailable.

## Exchange Mailbox Archiving Status report

This Enterprise Vault Reporting report shows the archiving status of each mailbox for the specified Microsoft Exchange Server or provisioning group.

Table A-21 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select the Enterprise Vault site.
Mailboxes for	Select Exchange Server or Provisioning Group.
Name	Select a server or a provisioning group. The available options depend on what is selected in "Mailboxes for". The list for a provisioning group includes an option to select Unspecified.
Archiving State	Select <all>, Enabled, Disabled, or Never Enabled. The list displays only those options applying to the current archiving states.</all>
Sorting on column	Select a report table column to sort on.
Sort Direction	Select either Ascending or Descending to set the sort direction for the column on which you are sorting.

 Table A-21
 Report input parameters

Table A-22 shows the information that the report provides for each mailbox.

#### Table A-22Report output

ltem	Description
Mailbox Name	The name of the mailbox for which the information is provided.
Archiving State	Enabled, Disabled or Never Enabled.
Mailbox Type	User mailbox or Journal mailbox.
Provisioning Target	The provisioning target.
Provisioning Group	The provisioning group for the mailbox, if Exchange Server was selected.
Mailbox Server	The mailbox server, if Provisioning Group was selected.

At the bottom of the table, the total number of mailboxes is shown.

# Exchange Server Journal Mailbox Archiving Health report

This Enterprise Vault Reporting report shows the current status of Microsoft Exchange journal mailbox archiving in all the vault stores of the selected Enterprise Vault server.

Table A-23 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select the Enterprise Vault site.
Vault Server	Select an Enterprise Vault server.

 Table A-23
 Report input parameters

The report contains two tables.

Table A-24 shows the information that the report provides in the first table, for each Exchange journal mailbox on the Enterprise Vault server.

ltem	Description
Journal Mailbox	The active directory Distinguished Name for the journal mailbox.
Inbox Total	The total number of items in the Inbox.
Archive Pending	The number of items in a pending archive state.
Archivable	The number of Inbox items that were marked for archiving.
Failed to Copy	The number of items in the Exchange journal mailbox Failed to Copy folder.
Failed to Store	The number of items in the Exchange journal mailbox Failed to Store folder.
Failed DL Expansion	The number of items in the Exchange journal mailbox Failed DL Expansion folder.
Failed External Filter	The number of items in the Exchange journal mailbox Failed External Filter folder.

Table A-24Report output

A second table shows the current threshold values of the warning and critical status indicators that the Enterprise Vault Operations Manager web application uses, if it is installed.

# Exchange Server Journal Mailbox Archiving Trends report

This Enterprise Vault Reporting report shows trends in journal mailbox archiving for the specified Microsoft Exchange Server over the selected day or week.

**Note:** This report does not have any data to process if Enterprise Vault monitoring is disabled. Monitoring may be enabled or disabled either during the configuration of Enterprise Vault, or from the Enterprise Vault Operations Manager web application.

Table A-25 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select the Enterprise Vault site.
Exchange Server	Select the Microsoft Exchange Server.
Journal Mailbox	Select a Journal Mailbox.
Parameter Name	Select <all>, or one of the following:</all>
	<ul> <li>Archivable. Inbox items that were marked for archiving.</li> <li>Archive Pending. Items in a pending archive state.</li> <li>Failed DL Expansion. The number of items in the Exchange journal mailbox Failed DL Expansion folder.</li> <li>Failed External Filter. Items in the Exchange journal mailbox Failed External Filter folder.</li> <li>Failed to Copy. Items in the Exchange journal mailbox Failed to Copy folder.</li> <li>Failed to Store. Items in the Exchange journal mailbox Failed to Store folder.</li> <li>Inbox Total. The total number of items in the Inbox.</li> <li>Period. Select Last Week, Week Beginning, or Specific Day.</li> </ul>
Year, Month, Day	If you selected Week Beginning or Specific Day as the Period parameter, specify the starting date or day using these parameters.

 Table A-25
 Report input parameters

The generated report contains a graph showing the values for the requested journal mailbox archiving parameter or parameters over the selected day or week.

In addition to the parameter values, each graph shows the current threshold values of the warning and critical status indicators, as used by the Enterprise Vault Operations Manager web application, if it is installed.

You can configure these threshold values from the Enterprise Vault Operations Manager web application, if it is installed.

### IMAP usage report

This Enterprise Vault Reporting report shows the numbers of IMAP-enabled users, and the amount of data in their archives.

Table A-26 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select the Enterprise Vault site.

 Table A-26
 Report input parameters

Table A-27 lists the information that is shown in the report's IMAP usage summary table.

ltem	Description
Archive type	Lists each archive type that can be enabled for IMAP access.
Archives enabled for IMAP	The number of archives of each type that are currently enabled for IMAP access.
Total	The total number of archives that are currently enabled for IMAP access.

 Table A-27
 Report output: IMAP usage summary

Table A-28 lists the information that is shown in the report's Internet mail archive details table.

Table A-28	Report	output:	Internet	mail	archive	details
		output.	million	man		actune

Item	Description
Total number of archives	The total number of Internet mail archives.
Total number of archived items	The total number of items archived in all Internet mail archives.
Total size of archived items	The total volume of data in all Internet mail archives.

## Items Archival Rate report

This Enterprise Vault Reporting report provides data on the items that Enterprise Vault archived in each hour, day, month, or year of a specified period. The data includes the number of items that were archived, item size information, and space savings. You can generate a report for a specified vault store, or for all of the vault stores in a site.

Enterprise Vault Reporting uses UTC time for the start date and end date that you specify. But the report displays the results in local time, as determined by the time zone that is set on the computer that runs Microsoft SQL Server Reporting Services. For example, suppose you select an hourly granularity, a start date of **11 July 2010** and an end date of **12 July 2010**. Enterprise Vault Reporting then collects summarized data from the vault store for the 24-hour period from 12:00 A.M. on 11 July 2010 UTC to 12:00 A.M. on 12 July 2010 UTC. Enterprise Vault Reporting then presents the data for each hour of that period, but shown in the SSRS computer's local time.

Table A-29 shows the parameters that you specify for this report.

Parameter	Lets you do this	
Site Name	Select the Enterprise Vault site.	
Vault Store	Select the vault store, or select <all>.</all>	
Granularity	Select from Hourly, Daily, Monthly, or Yearly.	
Start Year, Start Month, Start Day	<ul> <li>Specify the start date of the period for which to obtain data.</li> <li>The oldest start date that you can select depends on the chosen granularity, as follows:</li> <li>Hourly: 32 days ago</li> <li>Daily: 366 days ago</li> <li>Monthly: five years ago</li> <li>Yearly: 50 years ago</li> </ul>	
End Year, End Month, End Day	Specify the end date of the period for which to obtain data.	

 Table A-29
 Report input parameters

Table A-30 shows the information that the report provides for hour, day, month, or year of the specified period.

ltem	Description
Granularity Beginning	The row shows data for the sub-period that began at this time; for example "Hour beginning" or "Year beginning".
Items Archived	The number of items that were archived.
Total Size Archived	The total compressed size in the archive of all the items that were archived (KB).
Average Size Archived	The average compressed size in the archive of all the items that were archived (KB).
Total Original Size Archived	The total original size of all the items that were archived (KB).
Average Original Size Archived	The average original size of all the items that were archived (KB).
Spaced Saved by Compression	The space that is saved in the archive by compression (KB).
% Space Saved by Compression	The percentage space that is saved in the archive by compression.

Table A-30Report output

## Move Archive report

This Enterprise Vault Reporting report shows details of Move Archive operations that have the selected move status, and that took place during the selected period.

You can use this report if you have used Move Archive, otherwise there is no data to display.

Table A-31 shows the parameters that you specify for this report.

Table A-31Report input parameters

Parameter	Lets you do this
Status	Select <all>, Stopped, Running, Failed, Completed Successfully, or Completed with Errors.</all>
Start Year, Start Month, Start Day	Specify the start date for your report using these parameters.
End Year, End Month, End Day	Specify the end date for your report using these parameters.

The report contains two sections, "Move Archive Summary" and "Move Archive Details".

"Move Archive Summary" contains a summary of all the Move Archive operations for the selected period.

Table A-32 shows the information that the Move Archive Summary table provides for each move operation.

Item	Description
Source Archive	The name of the source archive. Each name is hyperlink to the associated Move Archive Details table.
Source Vault Store	The vault store that contains the source archive.
Destination Archive	The name of the destination archive.
Destination Vault Store	The vault store that contains the destination archive.
Status	The status of the move operation.

 Table A-32
 Report output: Move Archive Summary data

"Move Archive Details" contains a table for each Move Archive operation that is included in the report.

Each table in this section shows the following information:

- Source Archive
- Source Vault Store
- Source Site
- Destination Archive
- Destination Vault Store
- Destination Site
- Start Time End Time
- Count of items in source archive
- Items moved
- Items for which move failed
- Count of shortcuts in source mailbox
- Shortcuts updated
- Shortcuts for which updates failed
Status

# Single Instance Storage Reduction by File Type report

This Enterprise Vault Reporting report shows the storage reduction that has resulted from Enterprise Vault single instance storage for each file type within a vault store group.

For more information on Enterprise Vault single instance storage, see "How single instance storage works" in *Installing and Configuring*.

Table A-33 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select the Enterprise Vault site.
Vault Store Group Name	Select a vault store group.

 Table A-33
 Report input parameters

The generated report contains two sections, "Storage reduction by file type", and "Most shared file types by number of references".

The report's "Storage reduction by file type" section contains a chart and a table:

- The chart shows the 10 file types for which there is the greatest amount of storage reduction due to Enterprise Vault single instance storage. Note that the horizontal axis is logarithmic.
- The table shows the storage reduction due to Enterprise Vault single instance storage for up to 25 file types. The table groups any remaining file types as "Others".

Table A-34 shows the information that the report provides for each listed file type.

Table A-34	Report output: storage	reduction	by file	type t	able
------------	------------------------	-----------	---------	--------	------

Item	Description
File Type	The file type for which information is shown.
Number of Shareable Parts	The number of shareable parts (SIS parts) for this file type in the vault stores.

Item	Description
Number of References to Shareable Parts	The number of references that exist to the SIS parts for this file type.
	Before it stores a SIS part, Enterprise Vault checks whether an identical SIS part is already stored within the target vault store's sharing boundary. If an identical SIS part is already stored, Enterprise Vault references the stored SIS part and does not store it again.
	The ratio of the number of references and the number of parts gives some indication of the amount of storage duplication saved.
Total Original Size (GB)	The sum of the sizes of the items to which Enterprise Vault applied single instance storage, before Enterprise Vault archived them.
Total On-Disk Size (GB)	The sum of the sizes of the items that Enterprise Vault archived but to which it did not apply single instance storage.
Storage Reduction (GB)	The total original size minus the total compressed size, in gigabytes. The value indicates the storage reduction that Enterprise Vault single instance storage has produced for this file type.

 Table A-34
 Report output: storage reduction by file type table (continued)

The report's "Most shared file types by number of references" section contains a table that ranks the file types by the greatest number of references to SIS parts.

Table A-35 shows the information that the report provides for each listed file type.

Table A-55 Treport output: Most shared life types table		
ltem	Description	
File Type	The file type for which information is shown.	
Number of References to Shareable Parts	The number of references that exist to the SIS parts for this file type.	
	Before it stores a SIS part, Enterprise Vault checks whether an identical SIS part is already stored within the target vault store's sharing boundary. If an identical SIS part is already stored, Enterprise Vault references the stored SIS part and does not store it again.	
Total Original Size (GB)	The sum of the sizes of the items to which Enterprise Vault applied single instance storage, before Enterprise Vault archived them.	
Total On-Disk Size (GB)	The sum of the sizes of the items that Enterprise Vault archived but to which it did not apply single instance storage.	

 Table A-35
 Report output: Most shared file types table

For more information on how to interpret this report, see the following technical note on the Veritas Enterprise Support site:

http://www.veritas.com/docs/000005821

# Single Instance Storage Reduction per Vault Store Group report

This Enterprise Vault Reporting report shows the storage reduction that has resulted from Enterprise Vault single instance storage for each vault store in a vault store group.

For more information on Enterprise Vault single instance storage, see "How single instance storage works" in *Installing and Configuring*.

Table A-36 shows the parameters that you specify for this report.

 Table A-36
 Report input parameters

Parameter	Lets you do this
Site Name	Select the Enterprise Vault site.
Vault Store Group Name	Select a vault store Group.

The report output contains up to three sections. Each section provides storage reduction information for the vault stores with a particular sharing level.

There are three possible sharing levels:

- Share within group
- Share within vault store
- No sharing

**Note:** If none of the vault stores in the group uses one of the sharing levels, then the report omits the section for that sharing level.

The sections provide the storage reduction information as a summary, a chart, and a table:

- The summary provides the following information:
  - The total number of vault stores with the indicated sharing level.
  - The total original size of the items that are associated with these vault stores.
  - The total stored size of the items that are archived in these vault stores.

- The total storage reduction in these vault stores that is the result of Enterprise Vault single instance storage.
- The chart shows the top vault stores by percentage storage reduction, up to a maximum of 10 vault stores.
- The table provides storage reduction information for each vault store in the vault store group. It ranks the vault stores by percentage storage reduction.

Table A-37 lists the information that is shown in the report's table for each vault store.

Item	Description
Vault Store Name	The target vault store for which data is shown.
Number of References to Shareable Parts	The number of references that exist to the shareable parts (SIS parts) in the vault store.
	Before it stores a SIS part, Enterprise Vault checks whether an identical SIS part is already stored within the target vault store's sharing boundary. If an identical SIS part is already stored, Enterprise Vault references the stored SIS part and does not store it again.
	The ratio of the number of references and the number of parts gives some indication of the amount of storage duplication saved.
Number of Shareable Parts	The number of SIS parts for the items that are associated with the target vault store.
Total On-Disk Size (GB)	The sum of the sizes of the items that Enterprise Vault archived but to which it did not apply single instance storage.
Total Original Size (GB)	The sum of the sizes of the items to which Enterprise Vault applied single instance storage, before Enterprise Vault archived them.
Total Compressed Size (GB)	The sum of the sizes of all of the SIS parts, excluding the saveset file (.DVS).
Storage Reduction (GB)	The total original size minus the total compressed size, in gigabytes. This value indicates the storage reduction that Enterprise Vault single instance storage has produced for the vault store.
Storage Reduction (%)	The total original size minus the total compressed size, as a percentage value.

 Table A-37
 Report output: storage reduction per vault store table

For more information on how to interpret this report, see the following technical note on the Veritas Enterprise Support site:

http://www.veritas.com/docs/000005821

#### Single Instance Storage Reduction Summary report

This Enterprise Vault Reporting report shows the storage reduction that has resulted from Enterprise Vault single instance storage for each vault store group in an entire site.

For more information on Enterprise Vault single instance storage, see "How single instance storage works" in *Installing and Configuring*.

Table A-38 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select the Enterprise Vault site.

 Table A-38
 Report input parameters

The report output provides the storage reduction information for the site as a summary, a chart, and a table:

- The summary provides the following information:
  - The total number of vault store groups in the site.
  - The total original size of the items that are associated with all the vault stores in the site.
  - The total stored size of the items that are archived in these vault stores.
  - The total storage reduction in these vault stores that is the result of Enterprise Vault single instance storage.
- The chart shows the top vault store groups in the site by percentage storage reduction, up to a maximum of 10 groups.
- The table provides storage reduction information for each vault store group in the site. It ranks the vault store groups by percentage storage reduction.

Table A-39 lists the information that is shown in the report's table for each vault store group.

 Table A-39
 Report output: storage reduction per vault store group table

Item	Description
Vault Store Group Name	The vault store group for which data is shown.

Item	Description
Number of References to Shareable Parts	The number of references that exist to the shareable parts (SIS parts) in the vault store group.
	Before it stores a SIS part, Enterprise Vault checks whether an identical SIS part is already stored within the target vault store's sharing boundary. If an identical SIS part is already stored, Enterprise Vault references the stored SIS part and does not store it again.
	The ratio of the number of references and the number of parts gives some indication of the amount of storage duplication saved.
Number of Shareable Parts	The number of SIS parts for the items that are stored within the target vault store group.
Total On-Disk Size (GB)	The sum of the sizes of the items that Enterprise Vault archived but to which it did not apply single instance storage.
Total Original Size (GB)	The sum of the sizes of the items to which Enterprise Vault applied single instance storage, before Enterprise Vault archived them.
Total Compressed Size (GB)	The sum of the sizes of all of the SIS parts, excluding the saveset file (.DVS).
Storage Reduction (GB)	The total original size minus the total compressed size, in gigabytes. The value indicates the storage reduction that Enterprise Vault single instance storage has produced for the vault store group.
Storage Reduction (%)	The total original size minus the total compressed size, as a percentage value.

 Table A-39
 Report output: storage reduction per vault store group table (continued)

For more information on how to interpret this report, see the following technical note on the Veritas Enterprise Support site:

http://www.veritas.com/docs/000005821

#### Vault Store Savesets report

This Enterprise Vault Reporting report shows the number of uncollected and collected savesets, and the number of unmigrated and migrated collections, for each vault store in the selected Enterprise Vault site.

Table A-40 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select an Enterprise Vault site.

 Table A-40
 Report input parameters

Table A-41 shows the information that the report provides for each vault store in the Enterprise Vault site.

Table A-41Report output

Item	Description
Vault Store name	The vault store for which the data is shown.
Uncollected Savesets	The number of uncollected savesets.
Collected Savesets	The number of collected savesets.
Unmigrated Collections	The number of unmigrated collections.
Migrated Collections	The number of migrated collections.

# Vault Store Usage by Archive report

This Enterprise Vault Reporting report shows the size and status of each archive in the selected vault store.

Table A-42 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select an Enterprise Vault site.
Vault Store	Select a vault store.

 Table A-42
 Report input parameters

The report contains a table that lists information for each archive in the selected vault store.

Table A-43 shows the information that the report provides for each archive.

 Table A-43
 Report output: data for each archive

ltem	Description
Archive Name	The name of the archive for which the data is shown.

Item	Description	
Billing Account	The name of the billing account.	
Total Items	The total number of items in the vault store.	
Total Size (MB)	The total size of items in the vault store.	
Limit status	The archive size limit status (Enabled or Disabled). If Disabled, then no size limit is enforced.	
Limit Size (MB)	The archive size limit.	
Limit setting	<ul> <li>From where the limit is set. This can be as follows:</li> <li>From Site. The size limit is inherited from the site properties.</li> <li>From Vault Store. The size limit is inherited from the vault store properties.</li> <li>From Archive. The size limit is set in the vault store archive properties.</li> </ul>	
Last Modified	The date and time when the archive was last modified.	
Archive Description	The archive description, as obtained from the archive properties that are stored in the database.	

**Table A-43**Report output: data for each archive (continued)

The report then provides summary data for the entire vault store.

Table A-44 shows the summary data that the report provides.

Table A-44Report output: summary data

Item	Description	
Total number of items in the Vault Store	The total number of items in the vault store.	
Number of items with original size data available	The total number of items in the vault store for which original size data is available. This data is not available for any items that were archived before Enterprise Vault 7.0.	
Total size of items in the Vault Store (MB)	The total space that all archived items occupy in the vault store.	
Average size of items in the Vault Store (KB)	The average space that all archived items occupy in the vault store.	

Item	Description
Total original size of items (MB)	The total original size of all the archived items for which data is available for original size. (See Number of items with original size data available.)
Average original size of items (KB)	The average original size of all the archived items for which data is available for original size.

 Table A-44
 Report output: summary data (continued)

**Note:** To view a Vault Store Usage by Billing Account report or a Vault Store Usage Summary report, select the appropriate link.

# Vault Store Usage by Billing Account report

This Enterprise Vault Reporting report shows usage by billing account for the selected vault store.

Table A-45 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select an Enterprise Vault site.
Vault Store	Select a vault store.

 Table A-45
 Report input parameters

The report contains a table that lists data for each billing account that is associated with the selected vault store.

Table A-46 shows the information that the report provides for each billing account.

**Table A-46**Report output: data for each billing account

Item	Description
Billing Account	The billing account for which the data is shown.
Full Name	The full name of the billing account.
Total Items	The total number of items in the vault store.
Total Size (MB)	The total size of items in the vault store.
Account Comment	The account comment, obtained from Active Directory.

The report then provides summary data for the entire vault store.

Table A-47 shows the summary data for the vault store.

Item Description Total number of items The total number of items in the vault store. in the Vault Store Number of items with The total number of items in the vault store for which original size original size data data is available. This data is not available for any items that were available archived before Enterprise Vault 7.0. Total size of items in The total space that all archived items occupy in the vault store. the Vault Store (MB) Average size of items The average space that all archived items occupy in the vault store. in the Vault Store (KB) Total original size of The total original size of all the archived items for which data is items (MB) available for original size. (See Number of items with original size data available.) Average original size of The average original size of all the archived items for which data items (KB) is available for original size.

 Table A-47
 Report output: summary data

**Note:** To view a Vault Store Usage by Archive report or a Vault Store Usage Summary report, select the appropriate link.

#### Vault Store Usage Summary report

This Enterprise Vault Reporting report shows the usage of each vault store in the selected Enterprise Vault site.

Table A-48 shows the parameters that you specify for this report.

 Table A-48
 Report input parameters

Parameter	Lets you do this
Site Name	Select an Enterprise Vault site.

The report contains a table that lists data for each vault store in the selected Enterprise Vault site.

Table A-49 shows the information that the report provides for each vault store.

ltem	Description
Vault Store	The name of the vault store for which the data is shown.
Active Archives	The number of active archives in the vault store.
Total Items	The total number of items in the vault store.
Total Archived Size (MB)	The total size of archived items in the vault store.
Awaiting Backup	The number of items not yet backed up.
SQL Server	The SQL server that the vault store uses.

 Table A-49
 Report output: data for each vault store

The report then provides summary data for the site.

Table A-50 shows the summary data that appears at the bottom of the report.

Table A-50

-50 Report output: summary data

ltem	Description
Total number of Vault Stores	The number of vault stores.
Total number of active archives	The number of active archives.
Total number of items in Vault Stores	The total number of items in the vault stores.
Number of items with original size data available	The total number of items in the vault stores for which original size data is available. This data is not available for any items that were archived before Enterprise Vault 7.0.
Total size of archived items (MB)	The total space that all archived items occupy in the vault store.
Average size of archived items (KB)	The average space that all archived items occupy in the vault store.
Total original size of items (MB)	The total original size of all the archived items for which data is available for original size. (See Number of items with original size data available.)
Average original size of items (KB)	The average original size of all the archived items for which data is available for original size.

**Note:** To view a report showing vault store usage by archive for a particular vault store, click the vault store name in the table.

# The FSA Reporting data analysis reports

FSA Reporting's data analysis reports provide information about the active data on target file servers and on the data that Enterprise Vault has archived from them.

Note the following:

- Before you can use the data analysis reports, you must configure FSA Reporting in addition to Enterprise Vault Reporting.
- The data analysis reports do not include any data until FSA Reporting has performed at least one data scan.
- The data analysis reports include data only for the volumes and physical drives that are enabled for FSA Reporting data collection, and that FSA Reporting has scanned.

Table A-51 provides a brief description of each data analysis report.

#### Table A-51 FSA Reporting's data analysis reports

Data analysis report	Description	Notes
----------------------	-------------	-------

The following reports are listed in the Enterprise Vault Data Analysis Reports folder of Microsoft SQL Server Reporting Services Report Manager, and in the Enterprise Vault Administration Console's Common Tasks:

Archive Points Space Usage Summary	Summarizes space usage information for archive points on the archiving targets of file server volumes.	
	See "Archive Points Space Usage Summary report" on page 123.	
Drive Space Usage on a Server	Shows the amount of used and free space on the physical drives of the specified file server.	
	See "Drive Space Usage on a Server report" on page 125.	
Drive Space Usage Summary	Shows the total amount of used and free space on physical drives.	
	See "Drive Space Usage Summary report" on page 126.	

Data analysis report	Description	Notes
Duplicate Files on a Server	Provides information on the number of duplicate files on a specified file server, by volume.	FSA Reporting does not collect data for this report by default.
	See "Duplicate Files on a Server report" on page 127.	
Duplicate Files Summary	Provides information on duplicate files by file server.	FSA Reporting does not collect data for this report by default.
	See "Duplicate Files Summary report" on page 128.	
File Group Space Usage on a Server	Shows Enterprise Vault file group space usage for a particular file server. The data includes the original file sizes, and the file server space that is used after archiving.	
	See "File Group Space Usage on a Server report" on page 130.	
File Group Space Usage Summary	Provides file counts and storage space data for the files in each Enterprise Vault file group. The data includes the original file sizes, and the file server space that is used after archiving.	
	See "File Group Space Usage Summary report" on page 132.	
Inactive Files on a Server by File Group	Shows the space that used by files that have not been modified or accessed over the specified period. The files are listed by file group.	
	Group report" on page 134.	
Inactive Files on a Server by User	Shows the space that is used by files that have not been modified or accessed over the specified period. The files are listed by user.	
	See "Inactive Files on a Server by User report" on page 135.	

 Table A-51
 FSA Reporting's data analysis reports (continued)

Data analysis report	Description	Notes
Inactive Files Summary	Shows the space that is used by files that have not been modified or accessed over the selected period. You can choose to list the files by user or file group See "Inactive Files Summary report" on page 136.	
Storage Summary	Provides information on the number of archived files for each FSA target. The report also shows the space that is used and saved on the file server as a result of archiving. See "Storage Summary report" on page 138.	
Storage Trends	Provides information on storage growth trends for FSA archiving targets on the chosen file server. You can generate a report showing trends on a weekly, monthly, quarterly, or yearly basis. See "Storage Trends report" on page 139.	Requires SQL Server Agent service to be running.

 Table A-51
 FSA Reporting's data analysis reports (continued)

You can run the following additional reports from hyperlinks within the other reports:

File Space Usage on an Archive Point	Shows file space usage by Enterprise Vault file group. See "File Space Usage on an Archive Point report" on page 141.	Available from the Archive Points Space Usage Summary report.
Largest Files per Volume	Lists the 100 largest files in the selected volume. See "Largest Files Per Volume report" on page 143.	Available from the Drive Space Usage on a Server report, and the Storage Summary report.
Largest Files of a Specified File Type per Volume	List the 100 largest files of the selected file type in the selected volume. See "Largest Files of a Specified File Type Per Volume report" on page 143.	Available from the File Group Space Usage on a Server report, and the File Space Usage on an Archive Point report.

Data analysis report	Description	Notes
Top Duplicate Files per Volume	Lists the names of the 100 largest duplicate files in the selected volume.	Available from the Duplicate Files on a Server report.
	See "Top Duplicate Files Per Volume report" on page 144.	FSA Reporting does not collect data for this report by default.

 Table A-51
 FSA Reporting's data analysis reports (continued)

**Note:** The File Collector service does not collect data for the three Duplicate Files reports by default, due to the performance demands. If you want to use these reports you must change the value of the **CheckDuplicates** database parameter.

See "Modifying the FSA Reporting data collection parameters" on page 76.

# Archive Points Space Usage Summary report

This FSA Reporting report summarizes space usage information for archive points. The report contains information on both active space usage on the file servers and archive space usage.

The report contains information for archive points on the archiving targets of the file server volumes that are configured for FSA Reporting data collection.

Table A-52 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select an Enterprise Vault site.
Domain Name	Select the domain.
Display Sizes In	Select the units in which you want to display the results.

 Table A-52
 Report input parameters

The report contains two pie charts and a table.

Table A-53 shows the information that the pie charts provide.

 Table A-53
 Report output: pie chart data

Item	Description
Active Space Usage: Top Five Archive Points	The five archive points using the most file server space.

Item	Description
Archive Space Usage: Top Five Archive Points	The five archive points using the most archive space.

 Table A-53
 Report output: pie chart data (continued)

Table A-54 shows the information that the tables provide.

Item	Description
Server Name	The server for which the information is shown.
	To view more details for a particular server, expand that server.
Volume Name	To see the details for a server's volumes, expand the server in the Server Name column.
	To display the archive point information for a volume, expand the volume.
Archive Point	Details for the archive points on a volume are listed if you expand the volume in the Volume Name column.
	To see a detailed report for a specific archive point, click the name of that archive point.
	See "File Space Usage on an Archive Point report" on page 141.
Number of Files	The number of files on the file server including shortcuts.
Number of Archived Files	The number of files Enterprise Vault has archived.
Total Size (units)	The estimated amount of space that would be occupied on the file server, if Enterprise Vault had not archived any files.
Active Files (units)	The space that the unarchived files and any shortcuts for the archived files occupy.
Archive Files (units)	The estimated amount of space that is saved on the file server as a result of archiving.

 Table A-54
 Report output: table data

Note that the "Total Size" and "Archive Files" values are estimates. The estimation process assumes that the archived files are not present on the file server or that shortcuts represent the archived files. The estimates are not accurate if users recall archived files to the file server, or if archived files remain on the file server. Archived files may remain on the file server if either of the following applies:

- The archiving policy uses the shortcut creation option "Create shortcut later".
- The vault store is configured so that safety copies are removed after backup or replication, or so that safety copies are never removed.

#### Drive Space Usage on a Server report

This FSA Reporting report shows the amount of used space and free space on the physical drives of the specified file server.

This report shows data for a file server only if you have selected the FSA Reporting data collection option "Collect data from all physical drives", or if you have added target volumes that are physical shares such as H\$, and enabled them for FSA Reporting.

Table A-55 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select an Enterprise Vault site.
Domain Name	Select the domain.
Server Name	Select a server.
Disk Space Usage Warning Threshold (percent)	Enables you to set a warning threshold that, if breached, causes the drive usage details to be displayed in red in the report table.
Display Sizes In	Select the units in which you want to display the results.

**Table A-55**Report input parameters

The report shows the drive space usage as a graph and a table.

The graph shows the percentage drive space that is used in each volume on the server for which FSA Reporting gathers data.

Table A-56 shows the information that the table provides for each volume.

 Table A-56
 Report output: table data

Item	Description
Volume Name	The volume to which this row of data applies.
	To see a report that lists the hundred largest files in the volume, click the link for the volume.
	See "Largest Files Per Volume report" on page 143.

Item	Description
File System	The file system type.
Size (units )	The total amount of space in the volume.
Space Used (units)	The amount of space that is used in the volume.
Total Free (units)	The amount of free space in the volume.
Percent Free	The percentage of free space in the volume.

 Table A-56
 Report output: table data (continued)

Entries in red in the table indicate drives with used space that exceeded the warning threshold value. This value is set in the report's "Disk Space Usage Warning Threshold (percent) input" parameter.

#### Drive Space Usage Summary report

This FSA Reporting report shows the total amount of used and free space on physical drives.

This report shows data for a file server only if you have selected the FSA Reporting data collection option "Collect data from all physical drives", or if you have added target volumes that are physical shares such as H\$, and enabled them for FSA Reporting.

Table A-57 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select an Enterprise Vault site.
Domain Name	Select a domain.
Disk Space Usage Warning Threshold (percent)	Set a warning threshold that, if breached, causes the drive usage details to be displayed in red in the report table.
Display Sizes In	Select the units in which you want to display the results.

**Table A-57**Report input parameters

Table A-58 shows the information that report's table provides for each server.

Item	Description
Server Name	The name of the file server.
	To view a detailed report for a server, click the server's name in the Server Name column.
	See "Drive Space Usage on a Server report" on page 125.
Size (units)	The cumulative size of all the drives of the server.
Space Used (units)	The cumulative amount of space that is used on all drives on the server's drives.
Total Free (units)	The cumulative amount of free space on all drives on the server.
Percent Free	The cumulative free space on all drives, as a percentage.

Table A-58Report output

Entries in red in the table indicate drives with used space that exceeded the warning threshold value, as set in the report's "Disk Space Usage Warning Threshold (percent) input" parameter.

#### Duplicate Files on a Server report

This FSA Reporting report provides information on the number of duplicate files on a specified file server, by volume. The report identifies duplicates based on the file name, file size, and owner.

**Note:** The File Collector service does not collect data for the three Duplicate Files reports by default, due to the performance demands. If you want to use these reports you must change the value of the **CheckDuplicates** database parameter.

See "Modifying the FSA Reporting data collection parameters" on page 76.

Table A-59 shows the parameters that you specify for this report.

Гable А-59	Report input parameters
------------	-------------------------

Parameter	Lets you do this
Site Name	Select an Enterprise Vault site.
Domain Name	Select the domain.
Server Name	Select a server.
Display Sizes In	Select the units in which you want to display the results.

The report contains two pie charts and a table.

Table A-60 shows the information that pie charts provide.

 Table A-60
 Report output: pie chart data

Item	Description
Duplicate files by number: top five volumes	The five volumes on this server with the greatest number of duplicate files.
Duplicate files by size: top five volumes	The five volumes on this server with the most space consumed by duplicates.

Table A-61 shows the information that table provides for each volume with duplicate files.

Item	Description
Volume	The volume for which the information is shown.
	To see a report on the names of the largest files in a volume that are duplicates, click the hyperlink for the volume.
	See "Top Duplicate Files Per Volume report" on page 144.
Number of Files:	The number of files on the volume.
Number of Duplicate Files	The number of files that are identical. For example, if there are five identical sets of 10 files, the number of duplicate files is 50.
Space Used (units)	The space that all the files occupy.
Duplicate Size (units)	The space that identical files occupy.
Space Wasted (units)	The excess space that the additional copies of the duplicates occupy. For example, if there are five identical sets of 10 files, the wasted space is four-fifths of the Duplicate Space Used.

 Table A-61
 Report output: table data

# **Duplicate Files Summary report**

This FSA Reporting report provides information on duplicate files by file server. The report identifies duplicates based on the file name, file size, and owner.

**Note:** The File Collector service does not collect data for the three Duplicate Files reports by default, due to the performance demands. If you want to use these reports you must change the value of the **CheckDuplicates** database parameter.

See "Modifying the FSA Reporting data collection parameters" on page 76.

Table A-62 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select an Enterprise Vault site.
Domain Name	Select a domain.
Display Sizes In	Select the units in which you want to display the results.

 Table A-62
 Report input parameters

Table A-63 shows the information that pie charts provide.

Table A-63	Report output: pie chart data
------------	-------------------------------

Item	Description
Duplicate files by number: top five servers	The five servers with the greatest number of duplicates.
Duplicate files by size: top five servers	The five servers with the most disk space consumed by duplicates.

Table A-64 shows the information that table provides for each server.

ltem	Description
Server Name	The server for which the data is shown.
	To see a detailed report on the duplicate files for a specific server, click the link for that server. The "Duplicate Files for a Server" report is displayed.
	See "Duplicate Files on a Server report" on page 127.
Number of Files	The number of files that the user owns.
Space Used (units)	The space that the user's files occupies.

 Table A-64
 Report output: table data

Item	Description
Number of Duplicate Files	The number of files that are identical. For example, if there are five identical sets of 10 files, the number of duplicate files is 50.
Duplicate Size (units)	The space that the identical files occupy.
Space Wasted (units)	The excess space that the additional copies of the duplicates occupy. For example, if there are five identical sets of 10 files, the wasted space is four-fifths of the Duplicate Space Used.

 Table A-64
 Report output: table data (continued)

# File Group Space Usage on a Server report

This FSA Reporting report shows Enterprise Vault file group space usage for a particular file server. The data includes the original file sizes, and an estimate of the file server space that is saved after archiving.

Table A-65 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select an Enterprise Vault site.
Domain Name	Select the domain.
Server Name	Select a server.
Display Sizes In	Select the units in which you want to display the results.

 Table A-65
 Report input parameters

The report contains two pie charts and a table.

Table A-66 shows the information that pie charts provide.

 Table A-66
 Report output: pie chart data

Item	Description
Active Space Usage by File Group	The amount of file server space that each file group occupies.
Archive Space Usage by File Group	The amount of archive space that each file group occupies.

Table A-67 shows the information that table provides on the space usage details for each file group.

Item	Description
File Group	The name of the file group.
	To see details for a file group on a per volume basis, expand the file group.
Volume	Volume details are shown if you expand a file group in the File Group column. To see details for individual file types, expand the volume.
File Types	File type details are shown if you expand a volume in the Volume column.
	The report includes combined data for all the file types that are not in any file group. To view this combined data, expand "Others" in the File Group column and see the details for file type "misc".
	See "Obtaining data for a specific file type in the FSA Reporting reports" on page 78.
	To view the hundred largest files of a file type in a volume, click a file type link.
	See "Largest Files of a Specified File Type Per Volume report" on page 143.
Number of Files	The number of files of this file group on this server, including shortcuts.
	Note that the column records placeholders and Internet shortcuts differently, as follows:
	<ul><li>Placeholders are listed in the file group of the original file.</li><li>Internet shortcuts are listed as Internet files.</li></ul>
Number of Archived Files	The number of files of this file group that have been archived.
Original Size (units)	The estimated amount of space that would be occupied on the file server if Enterprise Vault had not archived any files.
File Server Space Used (units)	The space that the unarchived files and any shortcuts for the archived files occupy on the file server.
Space Saved (units)	The estimated amount of space that is saved on the file server as a result of archiving.

 Table A-67
 Report output: table data

Note that the "Active Space Usage by File Group" chart and the "Number of files" column classify placeholder and Internet shortcuts as follows:

- A placeholder is classified as belonging to the file group of the original file.
- An Internet shortcut is classified as an Internet file.

Note that the "Original Size" and "Space Saved" values are estimates. The estimation process assumes that the archived files are not present on the file server or that shortcuts represent the archived files. The estimates are not accurate if users recall archived files to the file server, or if archived files remain on the file server. Archived files may remain on the file server if either of the following applies:

- The archiving policy uses the shortcut creation option "Create shortcut later".
- The vault store is configured so that safety copies are removed after backup or replication, or so that safety copies are never removed.

#### File Group Space Usage Summary report

This FSA Reporting report provides file counts and storage space data for the files in each Enterprise Vault file group. The data includes the original file sizes, and the file server space that is used after archiving.

Table A-68 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select an Enterprise Vault site.
Domain Name	Select the domain name.
Display Sizes In	Select the units in which you want to display the results.

 Table A-68
 Report input parameters

The report contains two pie charts and a table.

Table A-69 shows the information that pie charts provide.

 Table A-69
 Report output: pie chart data

ltem	Description
Active Space Usage by File Group	The amount of file server space that each file group occupies.
Archive Space Usage by File Group	The amount of archive space that each file group occupies.

Table A-70 shows the information that the table provides on space usage for each file group.

ltem	Description
File Group	The name of the file group.
	To see details for a file group on a per server basis, expand the file group.
Server	Server details are shown if you expand a file group in the File Group column.
	To view a report that shows more details for a particular server, click the hyperlink for that server.
	See "File Group Space Usage on a Server report" on page 130.
	To see details for individual file types, expand the server.
File Types	File type details are shown if you expand a server in the Server column.
	The report includes combined data for all the file types that are not in any file group. To view this combined data, expand "Others" in the File Group column and see the details for file type "misc".
	See "Obtaining data for a specific file type in the FSA Reporting reports" on page 78.
Number of Files	The number of files on this server, including shortcuts.
Number of Archived Files	The number of files that have been archived.
Original Size (units)	The estimated amount of space that would be occupied on the file server if Enterprise Vault had not archived any files.
File Server Space Used (units)	The space that the unarchived files and any shortcuts for the archived files occupy on the file server.
Space Saved (units)	The estimated amount of space that is saved on the file server as a result of archiving.

 Table A-70
 Report output: table data

Note that the "Active Space Usage by File Group" chart and the "Number of files" column classify placeholder and Internet shortcuts as follows:

- A placeholder is classified as belonging to the file group of the original file.
- An Internet shortcut is classified as an Internet file.

Note that the "Original Size" and "Space Saved" values are estimates. The estimation process assumes that the archived files are not present on the file server or that shortcuts represent the archived files. The estimates are not accurate if users recall

archived files to the file server, or if archived files remain on the file server. Archived files may remain on the file server if either of the following applies:

- The archiving policy uses the shortcut creation option "Create shortcut later".
- The vault store is configured so that safety copies are removed after backup or replication, or so that safety copies are never removed.

# Inactive Files on a Server by File Group report

This FSA Reporting report shows the space that used by files that have not been modified or accessed over the specified period. The files are listed by file group.

Table A-71 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select an Enterprise Vault site.
Domain Name	Select a domain.
Server Name	Select a server.
Summary Criteria	Select whether to show a report for files that were created before, not accessed in, or not modified in the Interval (Days).
Interval (Days)	Select a period for the Summary criteria parameter.
Display Sizes In	Select the units in which you want to display the results.

 Table A-71
 Report input parameters

The report contains a chart and a table.

The chart gives a graphical representation of the space that each file group uses. The table gives a detailed breakdown of the space usage details for each file group. Table A-72 shows the information that table provides for each file group.

 Table A-72
 Report output: table data

Item	Description
File Group	The name of the file group with inactive files. To see details for a file group on a per volume basis, expand the
	file group.

Item	Description
Volume Name	Volume details are shown if you expand a file group in the File Group column. To see details for individual file types, expand the volume.
File Type	File type details are shown if you expand a volume in the Volume Name column.
	The report includes combined data for all the file types that are not in any file group. To view this combined data, expand "Others" in the File Group column and see the details for file type "misc".
	See "Obtaining data for a specific file type in the FSA Reporting reports" on page 78.
Number of Files	The number of files that are inactive.
Space Used (units)	The space that the inactive files occupy on the file server.
% Space Used	The space that each inactive file type occupies as a percentage of the total space that all the inactive files in the volume occupy.

 Table A-72
 Report output: table data (continued)

Note that the report classifies placeholder and Internet shortcuts differently, as follows:

- A placeholder is classified as belonging to the file group of the original file.
- An Internet shortcut is classified as an Internet file.

# Inactive Files on a Server by User report

This FSA Reporting report shows the space that is used by files that have not been modified or accessed over the specified period. The files are listed by user.

Table A-73 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select an Enterprise Vault site.
Domain Name	Select a domain.
Server Name	The name of the server.
Summary Criteria	Select whether to show a report for files that were created before, not accessed in, or not modified in the Interval (Days).

Table A-73Report input parameters

Parameter	Lets you do this
Interval (Days)	Select a period for the Summary criteria.
Display Sizes In	Select the units in which you want to display the results.

 Table A-73
 Report input parameters (continued)

The report displays a chart and a table.

The chart provides a graphical representation of the space that is used by each user with inactive files.

The table provides a detailed breakdown of the space usage details for each user with inactive files.

Table A-74 shows the information that the table provides for each user.

Item	Description
User Name	The name of a user with inactive files. To see details for a user on a per volume basis, expand the user.
Volume Name	Volume details are shown if you expand a user in the User Name column.
Number of Files	The number of files that are inactive.
Space Used (units)	The space that the inactive files occupy on the file server.
% Space Used	The space that each inactive file type occupies as a percentage of the total space that all the inactive files in the volume occupy.

 Table A-74
 Report output: table data

#### Inactive Files Summary report

This FSA Reporting report shows the space that is used by files that have not been modified or accessed over the selected period. You can choose to list the files by user or file group.

Table A-75 shows the parameters that you specify for this report.

 Table A-75
 Report input parameters

Parameter	Lets you do this
Site Name	Select an Enterprise Vault site.
Domain Name	Select a domain.

Parameter	Lets you do this
Summary Criteria	Select whether to show a report for files that were created before, not accessed in, or not modified in the Interval (Days).
Interval (Days)	Select a period for the Summary criteria.
Group by	Select whether to present the data by user or by file group.
Display Sizes In	Select the units in which you want to display the results.

 Table A-75
 Report input parameters (continued)

The report output contains a pie chart and a table.

The pie chart shows the space usage by each file group or user, depending on which access type you selected.

Table A-76 shows the information that the table provides for the selected criteria.

Item	Description
File Group or User Name	The name of the file group or user with inactive files, depending on which "Group by" parameter you selected.
	To see details per server, expand an entry in this column.
Server Name	The name of the server that contains the inactive files. To see details on a per volume basis, expand the server. To run a detailed report on the inactive files for a specific server, click the server name.
	See "Inactive Files on a Server by File Group report" on page 134.
Volume	Shows the details by volume, if you expand a server in the Server Name column.
Number of Files	The number of files that are inactive.
Space Used (units)	The space that the inactive files occupy on the file server.
% Space Used	The space that each inactive file type occupies as a percentage of the total space that all the inactive files in the volume occupy.

 Table A-76
 Report output: table data

Note that the report classifies placeholder and Internet shortcuts differently, as follows:

- A placeholder is classified as belonging to the file group of the original file.
- An Internet shortcut is classified as an Internet file.

# Storage Summary report

This FSA Reporting report provides information on the number of archived files for each FSA target. The report also shows the space that is used and saved on the file server as a result of archiving.

Table A-77 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select an Enterprise Vault site.
Domain Name	Select a domain.
Display Sizes In	Select the units in which you want to display the results.

 Table A-77
 Report input parameters

The report output contains two pie charts and a table.

Table A-78 shows the information that the pie charts provide.

 Table A-78
 Report output: pie chart data

Item	Description
Top five volumes by active space usage	The five volumes with the most used space.
Top five volumes by archive space usage	The five volumes using the most archive space.

Table A-79 shows the information that the tables provide for each server for which FSA Reporting gathers data.

Item	Description
Server Name	The server name.
Volume Name	The volume name.
	Click a volume name to view a report that lists the 100 largest files in the volume.
	See "Largest Files Per Volume report" on page 143.
File System	The file system type, such as NTFS.

 Table A-79
 Report output: table data

Item	Description
Number of Archived Files	The number of files that are archived.
Original Storage Space (units)	The estimated amount of space that would be occupied on the file server if Enterprise Vault had not archived any files.
Storage Space After Archiving (units)	The space that the unarchived files and any shortcuts for the archived files occupy on the file server.
Space Saved (units)	The estimated amount of space that is saved on the file server as a result of archiving.

 Table A-79
 Report output: table data (continued)

Note that the "Original Storage Space" and "Space Saved" values are estimates. The estimation process assumes that the archived files are not present on the file server or that shortcuts represent the archived files. The estimates are not accurate if users recall archived files to the file server, or if archived files remain on the file server. Archived files may remain on the file server if either of the following applies:

- The archiving policy uses the shortcut creation option "Create shortcut later".
- The vault store is configured so that safety copies are removed after backup or replication, or so that safety copies are never removed.

#### Storage Trends report

This FSA Reporting report provides information on storage growth trends for FSA archiving targets on the chosen file server. You can generate a report showing trends on a weekly, monthly, quarterly, or yearly basis.

**Note:** The SQL Server Agent service must be running for this report to include any data.

The report shows trends in:

- Active disk storage size (storage on the file server)
- Enterprise Vault archive storage size

You can use the trend data from these reports to estimate when the storage capacity is likely to be exceeded both on the file server and within the vault store

If you have configured FSA Reporting to scan all physical drives of a file server, the report includes data for the physical drives.

If Enterprise Vault is not archiving a volume, the report includes only the trending information for the file server's disk storage.

Table A-80 shows the parameters that you specify for this report.

Parameter	Lets you do this
Site Name	Select an Enterprise Vault site.
Domain Name	Select a domain.
Server Name	Select a server.
Period	Select the data period to use. For example, a monthly period shows changes in size on a monthly basis.
	For a Weekly period, the maximum time span for the reporting period is 12 months.
	<b>Note:</b> If you select a Weekly period but the FSA Reporting data collection interval for the target is set to Monthly, then the report shows a data point only once each month, for the week in which the scan happened
Start Year	Select the start year for the reporting period.
Start Month	Select the start month for the reporting period.
End Year	Select the end year for the reporting period.
End Month	Select the end month for the reporting period.
Display Sizes In	Select the units in which to display the storage data sizes.

Table A-80Report input parameters

The report displays storage trends as a graph and a table for each archiving target over the reporting period.

Table A-81 shows the information that both the graph and the table provide on the trends for each arching target.

Table A-81Report output: trend data

Item	Description
Size on Disk	File server disk storage size, in the chosen units.

Item	Description
Size in Archive (units)	Enterprise Vault archive storage size, in the chosen units.
	<b>Note:</b> The "Size in Archive" value reflects only those items that are archived from Enterprise Vault 8.0 onwards. The size of archived items was not recorded before Enterprise Vault 8.0.
	This data does not take into account any storage savings due to Enterprise Vault single instance storage. The "Single Instance Storage Reduction" operation reports include information on the actual space that is occupied in the Enterprise Vault archives.
Combined Storage	Combined file server and archive storage space, in the chosen units.

 Table A-81
 Report output: trend data (continued)

Table A-82 shows the averages data that the report includes in the bottom two rows of the table.

Table A-82

Report output: averages data

Item	Description
Weekly, Monthly, Quarterly, or Yearly Average	The average size over the reporting period.
Weekly, Monthly, Quarterly, or Yearly Average Growth	The average growth in size over the reporting period.

#### File Space Usage on an Archive Point report

This FSA Reporting report shows file counts and storage space information for an archive point, by Enterprise Vault file group.

To view this report, click the hyperlink for the archive point from within the "Archive Points Space Usage Summary" report.

See "Archive Points Space Usage Summary report" on page 123.

The report output contains two pie charts and a table.

Table A-83 shows the information that the pie charts provide.

Item	Description
Active space usage by file group	The space that each file group on the volume occupies.
Archive space usage by file group	The archive space that each file group occupies.

 Table A-83
 Report output: pie chart data

Table A-84 shows the information that the table provides for each server for which FSA Reporting gathers data.

Item	Description
File Groups	The Enterprise Vault file groups.
	Expand a file group to see details for individual file types in that file group.
File Type	File type details are shown if you expand a file group in the File Groups column.
	The report includes combined data for all the file types that are not in any file group. To view this combined data, expand "Others" in the File Groups column and see the details for file type "misc".
	See "Obtaining data for a specific file type in the FSA Reporting reports" on page 78.
	Click a file type to run a report on the largest files of that file type in the volume.
	See "Largest Files of a Specified File Type Per Volume report" on page 143.
Total Files	The total number of files, including those archived.
Total Space (units)	The space that the unarchived files and any shortcuts for the archived files of the selected file group occupy on the file server.
Archived Files	The number of archived files.
Archived Size (units)	The estimated amount of space that is saved on the volume or the file server as a result of archiving.

 Table A-84
 Report output: table data

Note that the "Archived Size" value is an estimate. The estimation process assumes that the archived files are not present on the file server or that shortcuts represent the archived files. The estimates are not accurate if users recall archived files to

the file server, or if archived files remain on the file server. Archived files may remain on the file server if either of the following applies:

- The archiving policy uses the shortcut creation option "Create shortcut later".
- The vault store is configured so that safety copies are removed after backup or replication, or so that safety copies are never removed.

# Largest Files Per Volume report

This FSA Reporting report shows the 100 largest files in a volume.

To view this report, click a hyperlink in the "Volume Name" column of a table in one of the following reports:

- Drive Space Usage on a Server
- Storage Summary

Table A-85 shows the information that the report provides for each file.

ltem	Description
File path	The full path for the file.
Size (units)	The file size.
Creation Time	The date and time when the file was created.
Last Accessed	The date and time when the file was last accessed.
Last Modified	The date and time when the file was last modified.

Table A-85Report output

# Largest Files of a Specified File Type Per Volume report

This FSA Reporting report shows the 100 largest files of a specified file type in a volume.

To view this report, click a hyperlink in the "File Type" column of a table in one of the following reports:

- File Group Space Usage on a Server
- File Space Usage on an Archive Point

The report's table that lists up to 100 files meeting the stated criteria, in size order.

Table A-86 shows the information that the report provides for each file.

Table A-86         Report output	
Item	Description
File path	The full path for the file.
Size (units)	The file size.
Creation Time	The date and time when the file was created.
Last Accessed	The date and time when the file was last accessed.
Last Modified	The date and time when the file was last modified.

#### Top Duplicate Files Per Volume report

This FSA Reporting report lists the names of the 100 largest duplicate files in a volume.

To view this report, click the hyperlink for the required volume in the "Volume" column of the table in the "Duplicate Files on a Server" report

**Note:** The File Collector service does not collect data for the three Duplicate Files reports by default, due to the performance demands. If you want to use these reports you must change the value of the **CheckDuplicates** database parameter.

See "Modifying the FSA Reporting data collection parameters" on page 76.

Note: This report shows only the file name for the duplicate files, not the full path.

The report's table lists up to 100 duplicate files.

Table A-87 shows the information that the report provides for each file.

Item	Description
File Name	The name of the file.
File Size (units)	The file's size.
Number of Instances	The number of copies of the file.
Total Size (units)	The total size of all the instances of the file.

Table A-87Report output
# Index

## Α

Administrator Roles for Enterprise Vault Reporting 54 Archive Points Space Usage Summary report 123 Archive Quota Usage report 87 Archived Items Access report 88 Archived Items Access Trends report 89

# С

CheckEVPHOnCelerra 49 Content Provider Ingest History report 60, 92 Content Providers Licensing and Usage Summary report 60, 94

# D

Data analysis reports accessing 53 report descriptions 120 Data collection schedule FSA Reporting 69 Data collection settings setting defaults for FSA Reporting 47 Domino Mailbox Archiving Status report 96 Domino Server Journal Mailbox Archiving Health report 97 Domino Server Journal Mailbox Archiving Trends report 98 Drive Space Usage on a Server report 125 Drive Space Usage Summary report 126 Duplicate Files on a Server report 127 Duplicate files reports enabling 76 Duplicate Files Summary report 128

# Ε

Enterprise Vault Reporting about 12 about the reports 12 accessing the reports 53 configuring 33 Enterprise Vault Reporting (continued) data analysis reports 120 how it works 14 implementation steps 26 operation reports 83 prerequisites 29 reconfiguring 37 reporting user account 31, 37 roles 54 roles-based security 53 troubleshooting 82 Enterprise Vault Server 24-hour Health Status report 99 Enterprise Vault Server Seven Day Health Status report 101 Exchange Mailbox Archiving Status report 101 Exchange Server Journal Mailbox Archiving Health report 102 Exchange Server Journal Mailbox Archiving Trends report 104 ExcludeSnapshotFolder 50

# F

File Collector service about 15 parameter values 76 File Group Space Usage on a Server report 130 File Group Space Usage Summary report 132 File Space Usage on an Archive Point report 141 File System Archiving FSA Reporting 12 FSA Agent upgrading 79 FSA Reporting about 12 accessing the reports 53 administering 62 Celerra/VNX placeholder verification 49 configuring 38 data analysis reports 120 data collection parameter values 76

FSA Reporting (continued) databases 23 default data collection schedule 69 default data collection settings 47 disabling all data collection 68 enabling or disabling data collection for volumes 46 enabling the duplicate files reports 76 File Collector service 76 file type data 78 how it works 15 maintaining 24 managing 62 prerequisites 29 proxy server for NetApp and Celerra/VNX file servers 18, 40 purging job maintenance mode 24 running unscheduled scans 67 status of 64 stopping scans 68 temporary file storage location 47 troubleshooting 82 user account 25 FSA Reporting database benefits of multiple databases 23 changing 69 history tables 24, 74 maintaining 70 managing 70 naming restrictions 23 purging job 24, 74 trimming 24 trimming utility 71 FSA Reporting proxy server 18, 40 changing 75 requirements 22 FSA Reporting user account 25 FSA reports 120 FSAReporting web service about 15

#### I

IMAP usage report 105 Inactive Files on a Server by File Group report 134 Inactive Files on a Server by User report 135 Inactive Files Summary report 136 Items Archival Rate report 106

#### L

Largest Files of a Specified File Type Per Volume report 143 Largest Files Per Volume report 143

#### Μ

Move Archive report 107

## 0

Operation reports accessing 53 report descriptions 83

#### Ρ

Proxy server for FSA Reporting 75 Proxy server for non-Windows file servers 40 FSA Reporting 18, 22

# R

**RBA 35** RBA role membership synchronization 35 Reporting user account reconfiguring 37 setting up 31 Reports accessing 53 accessing from Report Manager 57 accessing from the Administration Console 59 content provider licencing and usage 84 exporting 58 scheduling 59 Single Instance Storage 59 Roles for Enterprise Vault Reporting 54

Roles based administration 35

### S

Single Instance Storage Reduction by File Type report 109 Single Instance Storage Reduction per Vault Store Group report 111 Single Instance Storage reduction reports accessing from the Administration Console 59 Single Instance Storage Reduction Summary report 113 snapshot folders 50 Storage Summary report 138 Storage Trends report 139

## Т

Temporary file storage location FSA Reporting 47 Top Duplicate Files Per Volume report 144 Troubleshooting Enterprise Vault Reporting 82 FSA Reporting 82

## U

Upgrade FSA Agent on proxy server for FSA Reporting 79

## V

Vault Store Savesets report 114 Vault Store Usage by Archive report 115 Vault Store Usage by Billing Account report 117 Vault Store Usage Summary report 118