
HiCommand® QoS for File Servers
Guide

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First Edition

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This preface describes the following:

- Intended Audience on page ix
- Where to Find Additional Information on page x

Intended Audience

This document assumes you have a basic understanding of the following:

- Networking
- Storage Area Networks (SANs)
- The Common Information Model (CIM)

To learn more about:

- **CIM** - See www.snia.org and www.dmtf.org.
-

Where to Find Additional Information

The software also ships with the following documentation:

Table 1-1: Additional Documentation

Document	Description
Release Notes	Provides late-breaking issues that might impact the usage of the product.
Installation Guide	Provides information on how to configure the management server and install the CIM Extensions
User Guide	Describes how to use the management server. The information in this guide is also accessible from the online help.
Online help	An online help system containing information from the following documents: <ul style="list-style-type: none">■ User Guide■ File Servers Guide■ CLI Guide■ Guide for monitoring applications
CLI Guide	Provides information about the CLI commands.
Guide for monitoring applications	Describes how to use the management server to monitor applications.

The documentation listed above, except for the help system, can be found in two locations:

- On the CD-ROM used to install the CIM Extensions.
 - From the online help system accessible by clicking the Help menu in the management server.
-

Overview of File Server SRM

Your business is only as good as your storage infrastructure. You depend on data for the core functions of your business. The growth of your business or just maintaining day-to-day business activities adds even more data. The challenge is in knowing if your file storage infrastructure is growing in a managed, organized and efficient manner. Given the sheer volumes of data, obtaining this sort of information can be difficult.

With the industry's most versatile scanner which creates an information store about your storage system, the management software for file systems has been designed to scale to the needs of enterprise file systems.

Also, by combining file, logical and physical storage resource monitoring and reporting with active SAN management, this software provides a single integrated system for managing your entire file storage infrastructure.

It provides detailed analysis of your file storage in four key areas:

- **Composition – Aging, Size**
 - Why are there files on a system that have not been accessed for more than six months?
 - What is the size group distribution on various file systems?
 - Do we need hierarchical storage management or a store and delete policy?
 - **Content – Extensions**
 - Are file systems being used properly?
-

- Is there misuse of storage space?
- If it is, then who are the offenders?
- **Consumer - Users, Ownership, Applications**
 - Who is using how much space?
 - Is the usage planned?
- **Capacity - Used and Available**
 - What is the total available capacity?
 - How much is being used?

File Server SRM does a recursive lookup on the file system and stores the information in an embedded database. File Server SRM can scan files very quickly for several reasons because File Server SRM never opens the files.

Keep in mind the following:

- If you do not see information for the file server, verify the collector for the file server is running. You can verify the collector is running by clicking **Configuration > FSRM**. On the **Data Collection** tab, look in the Running? column. See the topic, “Managing Collectors for File Server SRM” in the User Guide for more information.
 - Depending on your license, File Server SRM may not be available. See the “List of Features” to determine if you have access to File Server SRM. The “List of Features” is accessible from the Documentation Center (**Help > Documentation Center**).
 - If you plan to have File Server SRM scan a host, make sure you have 80-120 MB for each set of 1 million files. The actual size is dependent on the length of the file names.
 - If you want to use File Server SRM bulk import capability for non-ASCII characters (such as Chinese, Japanese, or Korean), the file should be created with UTF-8 encoding. Notepad, among other tools, lets you specify the encoding in its “Save As” dialog.
 - Reparse points (Junctions) for file servers on Microsoft Windows are scanned. For example, assume you create a “junction” named C:\DDrive, which points to the root of the D drive. The content of the D drive is available under C:\DDrive. After a scan, information on capacity and amount used are displayed for the C drive; however, the sum of the file sizes on the C drive also includes the junction (C:\DDrive), which points to the root of the D drive. If you do not want to include the scanning of reparse points, see “Disabling the Scanning of Reparse Points” on page 6. Reparse points created using the Windows Disk Management tool are discovered as a drive that can be scanned independently.
-


About Reports for File Server SRM

Reporter provides a variety of detailed reports for file servers. You can view reports for File Server SRM in Reporter by clicking **System > File Server** in Reporter. To access Reporter, click **Reporter**.

Data collectors gather information for reports. If you stop a data collector, its reports are not updated. You might want to verify a collector is running if you are having difficulty viewing a report or you believe the report is not displaying the latest information. See the User Guide for more information.

The management server provides reports that display performance information in a variety of formats:

- **HTML (Default)** - The software displays the report in a Web page by default.
- **PDF** - The software displays the report in Adobe Acrobat, a good option if you need to print the report. The software assumes you already have Adobe Acrobat Reader installed on your computer. To obtain a copy of Adobe Acrobat Reader, go to <http://www.adobe.com>.
- **Excel** - The software displays the report in Microsoft Excel, providing you have a copy of Microsoft Excel already installed.
- **XML** - The software displays the report in the XML format.

It also provides some reports with pie charts. The  icon next to the report name indicates the report displays a graphic.

Note: Non-ANSI text—for example Asian characters and the Euro symbol—included in a CSV file, is not displayed properly by Microsoft Excel. Excel replaces the non-ANSI text with a question mark (?).

Policies for File Server SRM

This chapter describes the following:

- Accessing Policy Manager for File Server SRM on page 4
 - Creating Policies for File Server SRM on page 4
-

Accessing Policy Manager for File Server SRM

This topic provides the various techniques for accessing Policy Manager. You have multiple options for accessing utilization policies for file servers. The flexibility for accessing utilization policies lets you easily create and manage utilization policies without interrupting your work flow.

Policy Manager provides the following options for accessing utilization policies:

- **To easily access other functionality, such as the Events, Topology and Volumes tabs** - Double-click a file server in System Explorer and then click the **Policies** tab. This method displays the utilization policies for just the file server that was double-clicked.
- **To easily access all utilization policies** - Click **Policy Manager**. In the Policy Manager tree in the middle pane, expand the node, **Utilization Policies**. Then, expand the **Applications** and **File Servers** nodes for the file server. Click the name of the file server for which you want to create a policy. To view all utilization policies, click the **Utilization Policies** node.
- **To easily access other functionality for file servers** - Access the Policy tab in Application Explorer. Expand the **Applications** and **File Servers** nodes in the tree in Application Explorer. Click the file server name in the Application Explorer tree. Click the **Policies** tab in the right pane.

Creating Policies for File Server SRM

You can create a utilization policy that generates an event, sends an e-mail, or runs a custom command when an element is being overused. For example, you can configure Policy Manager so you receive an e-mail message when the amount of free space on a server decreases to a specified level.

Important: If you plan to use e-mail notification with your policy, first assign an SMTP server from which the management server can send its e-mail notifications. See the topic, "Setting Up E-mail Notification."

To create a utilization policy for a file server:

1. Access Policy Manager as described in the topic, "Accessing Policy Manager for File Server SRM" on page 4.
 2. In the right pane, click the **Add** button.
-

3. Select a policy. Then, click **Next**.
The following types may be displayed.

Table 1-1: Policy Templates

Policy Type	Description
Free Space	Amount of free space on the file server.
Percent Used	Percentage of disk space used.
Free Space Trending	Free space trending for File Server SRM.
Trending for Percent Used	Trending for percent of storage used for File Server SRM

4. In the **Name** field on the Policy Properties tab, modify the name of the policy or keep the default.
5. In the **Description** field, modify the description for the policy or keep the default.
6. In the **Re-arm Period** field, specify a re-arm period in minutes.
The rearm period is the amount of time after the policy executes before it can execute again. It is useful for limiting the number of times the same actions will execute.
Important: Specify shorter periods for important applications.
7. To the right of the comparison operator drop-down menu, type a percentage or an amount in gigabytes (GB) depending on the field name displayed.
8. For trending policies, enter the number of days in the **Historic period** field (min=7; max=180) and **Projection period** field (min=1; max=180).
9. Select an action to occur when the policy condition is fulfilled by clicking one of the following buttons (more than one action can be assigned to a policy):
 - Send E-mail** - Policy Manager sends an e-mail when the condition is fulfilled. Enter a comma-separated list of e-mail addresses, and then click **OK**.
 - Generate Event** - Policy Manager generates an event of the specified event type. The event appears in Event Manager. Select one of the following event types.
Important: Since the severity level for an element is set by the manufacturer, the meanings of the severity levels vary. It is best to view the description of the event.
 - **Unknown** - The severity level is not known.
 - **Informational** - An example of an informational event is a progress report event for firmware download operation currently in progress.

- **Warning** - An example of a warning is one or more new physical fabric objects (device port, switch, or fabric) have appeared.
- **Minor** - An example of a minor event is a physical fabric object (switch port or fabric) has changed state.
- **Major** - An example of a major event is one or more physical fabric objects (device port, switch, or fabric) have disappeared.
- **Critical** - An example of a critical event is Brocade switches that have a failed firmware download and the failure reason code for each respective switch.

After you select an event level, click **OK**.

- **Execute a Custom Command** - Policy Manager executes a custom command on the management server when the condition is fulfilled. Type a command that will execute the script in the field. Then, click **OK**. The software assumes you are in the `[Install_Dir]\JBossandJetty\server\appiq\remotescripts` directory on the management server when the script is executed. You can use environment variables in your script, such as `POLICY_NAME` and `POLICY_DESCRIPTION`. `POLICY_NAME`. `POLICY_NAME` provides the policy name and `POLICY_DESCRIPTION` provides the policy description. See the topic, "Software Environment Variables for Scripting" in the *User Guide* for more information. Prefix the command with "start" if the custom command triggers a UI component, such as a program that uses the UI (Example: Microsoft Internet Explorer) or a command prompt window.

For example, assume you want the custom command to open a command prompt window and list the contents in the directory. You would prefix the command with start as shown below:

```
start dir
```

10. Click **Finish**.
11. To test a policy, click the **Test** button in the Utilization Policy table.
12. For more information about editing, deleting and e-mailing policies, see the chapter on Policy Manager in the User Guide.

Disabling the Scanning of Reparse Points

Reparse points (Junctions) for file servers on Microsoft Windows are scanned. For example, assume you create a "junction" named `C:\DDrive`, which points to the root of the D drive. The

content of the D drive is available under C:\DDrive. After a scan, information on capacity and amount used are displayed for the C drive; however, the sum of the file sizes on the C drive also includes the junction (C:\DDrive), which points to the root of the D drive.

To disable the scanning of reparse points on Windows file servers:

1. Click **Configuration** > **Product Health**. Then, click **Advanced** in the Disk Space tree.
2. Click **Show Default Properties** at the bottom of the page.
3. Copy the `fileSrm.disableReparsePointsScan` property. How you copy the text depends on your Web browser. If you are using Microsoft Explorer or Netscape Navigator, select the text and then right-click the selected text. Then, select **Copy**.
4. Return to the Advanced page (**Configuration** > **Product Health**. Then, click **Advanced** in the Disk Space tree).
5. Paste the copied text into the **Custom Properties** field. How you paste the text depends on your Web browser. If you are using Microsoft Explorer or Netscape Navigator, right-click the field and select **Paste**.
6. Change the value assigned to the `fileSrm.disableReparsePointsScan` property to `true` in the **Custom Properties** field.
`fileSrm.disableReparsePointsScan=true`
7. When you are done, click **Save**.

This chapter describes the following:

- Viewing Summary Information About File Servers on page 9
- Types of Files on the File Servers on page 10
- Age Properties of Files on File Servers on page 12
- Viewing Security and User Identifiers for All File Servers on page 14
- Viewing Size Group Distribution Information on page 17
- Managing Users on page 19

Viewing Summary Information About File Servers

The management server provides a page that displays the summary information about all the file servers. To access the Summary page expand the **Applications** node in the tree in Application Explorer. Then, click **File Servers** node. The Summary page is displayed by default. It provides a snapshot of the applications the management server detects by displaying the following:

- A graph displaying the top five file servers by usage and the amount of space they occupy.
- A summary table to the right of the graph displaying the number of:
 - Total File Servers
 - Total Volumes
 - Total Capacity
 - Used Space
 - Free Space
 - Percent Used Space
 - Percent Free Space
 - Total Users
 - Total Users Space
- A table under the graph displaying the following for each file server:
 - File Server name
 - Total Volumes
 - Capacity
 - Used
 - Percentage Used
 - Number of Users
 - User Space

Types of Files on the File Servers

The Extensions page provides information about the types of files on the file servers. For example, it can let you know how many mpg files are stored on the file servers and their file size.

To access the Extension page:

1. Click **AppExplorer**.
 2. Expand the **Applications** node in the tree in Application Explorer.
 3. Click **File Servers** node.
 4. Click the **Extensions** tab in the right pane.
You see the following:
 - A graph displaying the top 10 extensions and their size.
-

- A table below the graph displaying the extensions and the following properties:
 - **Size** - The size of all the files with that extension. This property lets you see which types of files are using the most space on the file servers.
 - **Count** - The number of files with this extension.
- 5. To filter extensions, type the extension name and click the **Submit** button.
- 6. In the right pane, click an extension under the Extension column.

The following is displayed:

 - A pie chart showing the sizes of the files with the extension per server.
 - A pie chart showing the number of files with the extension per server.
 - A table showing the number of files with the extension per server, the amount of space they occupy, and the collection time.

Data less than 1 MB is not displayed in the graphs. This could result in an empty graph if all data points are less than 1 MB.
- 7. To view more information about the extensions on a volume, click a file server in the File Server column in the table.

The following is displayed:

 - A pie chart showing the sizes of the files with the extension per volume
 - A pie chart showing the number of files with the extension per volume
 - A table showing the number of files with the extension per volume and the amount of space they occupy.

Data less than 1 MB is not displayed in the graphs. This could result in an empty graph if all data points are less than 1 MB.
- 8. To view a listing of the largest N and oldest N files with the extension on the volume, click a volume in the Drive column in the table. The value of N is governed by the property fileSrm.countForFSRMDrilldowns, which has a default value of 25 and is configurable in the range 10 to 100.

Note: You can save the files with the extension for a volume in a comma-separated list (CSV file) by clicking the **Save Extension Detail** button in the right pane.

Filtering Files

Filters use the following expressions:

- d* will return all extensions starting with d
 - *d will return all extensions ending with d
-

- *d* will return all extensions having d in the extension

You can enter a list of extensions separated by a comma.

Age Properties of Files on File Servers

The Aging page provides information about the age of the files on the file servers. It is accessible by doing the following:

1. Click **AppExplorer**.
2. Expand the **Applications** node in the tree in Application Explorer.
3. Click **File Servers** node.
4. Click the **Aging** tab in the right pane.
5. To save the aging details to a comma-separated list (CSV file):
 - a. In the right pane under the File Server column on the Aging tab, click a link for a file server.
 - b. Click a link for a volume in the right pane.
 - c. Click one of the following headings in the right pane:
 - 0-30 days
 - 30-60 days
 - 60-90 days
 - 90-180 days
 - 180+ days
 - d. Click the **Save Aging Details** button.

By default the page displays the following information about the last time a file was accessed.

- A graph displaying the size of each set of files belonging to an age group:
 - 30** - Files accessed in the last 30 days
 - 60** - Files accessed within 30 and 60 days
 - 90** - Files accessed within 60 and 90 days
 - 180** - Files accessed within 90 and 180 days
 - 180+** - Files accessed more than 180 days ago.
 - A graph displaying the number of files belonging to an age group:
-

- 30** - Files accessed in the last 30 days
- 60** - Files accessed within 30 and 60 days
- 90** - Files accessed within 60 and 90 days
- 180** - Files accessed within 90 and 180 days
- 180+** - Files accessed more than 180 days ago.
- **Age Distribution** combo box. You can change this page to display information according to when the files were last modified or created. Select one of the options and click **Submit**.
- A table under the graph displaying the number of files accessed within the specified time period and the size of those files.

Viewing Individual Files

To view a listing of files with a particular age attribute, do the following:

1. Click the one of the following headings in the table on the Age tab for the file servers.
 - 0-30 days
 - 30-60 days
 - 60-90 days
 - 90-180 daysThe following is displayed:
 - A pie-chart showing the size of the files that fit the criteria. They are color coded by server.
 - A pie-chart showing the number of files that fit the criteria. They are color coded by server.
 - A table listing the file servers and the size of files and number of files fitting the criteria.
2. Click a file server in the **File Server** column.
The volumes on the file server are listed.
3. Click a volume. The largest N files that meet the criteria are listed. The value of N is governed by the property fileSrm.countForFSRMDrilldowns, which has a default value of 25 and is configurable in the range 10 to 100.
4. To save the aging details to a comma-separated list (CSV file), click the **Save Aging Details** button.

Viewing Security and User Identifiers for All File Servers

You can get owner related details by accessing the Ownership tab. This tab also lets you determine how many files this owner is using on file server.

Important: The Ownership tab is disabled by default for file servers running on Microsoft Windows. To view the Ownership tab, you must set the `fileSrm.collectWindowsSID` property to true as described in “Enabling the Ownership Tab on Windows” on page 16, or you can select the **Collect Ownership Information** checkbox when configuring a file server scan.

The Ownership tab is accessible by doing the following:

1. Click **AppExplorer**.
 2. Expand the **Applications** node in the tree in Application Explorer.
 3. Click the **File Servers** node.
 4. Click the **Ownership** tab in the right pane.
 - A graph displaying the top 10 owners, who use the most in megabytes.
 - A table displaying the following:
 - **Ownership** - The security identifier (Windows) or user identifier (UNIX).
 - **Files** - The files that the security identifier or user identifier uses.
 - **Size** - The total size of the files the security identifier or user identifier uses.
 5. To filter by owner, enter the owner name and click the **Submit** button
 6. To learn more about an owner, click an owner's name.

The following is displayed:

 - A pie chart showing the sizes of the files with the owner per server.
 - A pie chart showing the number of files with the owner per server.
 - A table showing the number of files with the owner per server and the amount of space they occupy.
-

Note: Data less than 1 MB is not displayed in the graphs. This could result in an empty graph if all the data points are less than 1 MB.

7. To view more information about the owner on a volume, click a file server in the File Server column in the table.

The following is displayed:

- A pie chart showing the sizes of the files with the owner per volume
- A pie chart showing the number of files with the owner per volume
- A table showing the number of files with the owner per volume and the amount of space they occupy.

Note: Data less than 1 MB is not displayed in the graphs. This could result in an empty graph if all the data points are less than 1 MB.

8. To learn more about what is assigned to the owner on a volume, click the volume name. This page not only displays owner details, but it also lets you save them. See “Saving Owner Details” on page 15 and “Saving Owner Details” on page 15. The following tabs are provided on this page:

- Aging** - Aging information of files owned by the owner.
- Extensions** - The Extension summary of files owned by the owner.
- Sizes** - The size group information of the files assigned to the owner.
- Largest Files** - List of N largest files assigned to the owner.
- Aged Files** - The list of N most aged files by access assigned to the owner.

Note: Clicking on the hyperlinks provided in each of these tabs allows the download of a CSV file that lists the files that match the criteria.

Saving Owner Details

The management server lets you save owner details for a volume to a CSV (comma separated values) file, which can be opened in Microsoft Excel or in a text editor, such as Notepad.

To save owner details:

1. Click **AppExplorer**.
2. Expand the **Applications** node in the tree in Application Explorer.
3. Click the **File Servers** node.
4. Click the **Ownership** tab in the right pane.
5. Click an owner's name.
6. Click the file server name.
7. Click the volume name.
8. Click **Save Owner Details**.

Owner details for a volume are saved to a CSV file.

Note: Non-ANSI text—for example Asian characters and the Euro symbol—included in a CSV file is not displayed properly by Microsoft Excel. Excel replaces the non-ANSI text with a question mark (?).

Enabling the Ownership Tab on Windows

The Ownership tab is disabled by default for file servers running on Microsoft Windows. To view the Ownership tab, you must set the `fileSrm.collectWindowsSID` property to true. To set the `fileSrm.collectWindowsSID` property to true:

1. Click **Configuration > Product Health** then click **Advanced** in the Disk Space tree.
2. Click **Show Default Properties** at the bottom of the page.
3. Copy the `fileSrm.collectWindowsSID` property. How you copy the text depends on your Web browser. If you are using Microsoft Explorer or Netscape Navigator, select the text and then right-click the selected text. Then, select **Copy**.
4. Return to the Advanced page (**Configuration > Product Health** then click **Advanced** in the Disk Space tree).
5. Paste the copied text into the **Custom Properties** field. How you paste the text depends on your Web browser. If you are using Microsoft Explorer or Netscape Navigator, right-click the field and select **Paste**.
6. Make your changes in the **Custom Properties** field.
Change the value assigned to the `fileSrm.collectWindowsSID` property to true.

```
fileSrm.collectWindowsSID=true
```

7. When you are done, click **Save**.

Viewing Information for Owners on a Volume

1. Click **Configuration > FSRM**.
2. Click the volume you want to find more information about. Information about the volume is displayed.
3. Click a link under the **Ownership** column. The following information is displayed for an owner:
 - Age tab** - Displays the number of files and their size that have been accessed, modified, and created.
 - Extension tab** - Lists the file extensions by size and count.
 - Sizes tab** - Lists the files by size.
 - Aged Files tab** - Lists the file and the last date and time it was accessed, modified, or created. The date and time are based on the management server.
 - Largest files tab** - It lists the largest files first by size. The date and time the file was last accessed, modified or created is displayed.

The information is saved to a csv (comma separated list) file, which can be viewed in a text editor as well as Microsoft Excel.

The following information is saved in the file:

- file name
- size
- last accessed
- last modified
- when created

Viewing Size Group Distribution Information

The Sizes tab displays size distribution information for file servers.

To access the Sizes tab:

1. Click **AppExplorer**.
2. Expand the **Applications** node in the tree in Application Explorer.
3. Click the **File Servers** node.
4. Click the **Sizes** tab in the right pane.
The page displays the following:
 - A bar chart displaying the size group distribution by usage
 - A bar chart displaying the size group distribution by count
 - A table listing the number of files and the total size for each size group on each file server.

5. Click one of the following headings in the table on the Size tab:
 - 0 Bytes
 - 0 -10 KB
 - 10 -100 KB
 - 100 -1 MB
 - 1 -10 MB
 - 10 - 100 MB
 - 100 + MB

The following is displayed:

- A pie chart showing the sizes of the files with the size group per server.
- A pie chart showing the number of files with the size group per server.
- A table showing the number of files with the size group per server and the amount of space they occupy.

Note: Data less than 1 MB is not displayed in the graphs. This could result in an empty graph if all the data points are less than 1 MB.

6. To view more information about the size group on a volume, click a file server in the File Server column in the table.
The following is displayed:
 - A pie chart showing the sizes of the files with the size group per volume
 - A pie chart showing the number of files with the size group per volume
 - A table showing the number of files with the size group per volume, the amount of
-

space they occupy, and the collection time.

Note: Data less than 1 MB is not displayed in the graphs. This could result in an empty graph if all the data points are less than 1 MB.

7. To view a listing of the oldest N files with the size group on the volume, click a volume in the Drive column in the table. The value of N is governed by the property `fileSrm.countForFSRMDrilldowns`, which has a default value of 25 and is configurable in the range 10 to 100.

Note: You can save the files with the size group for a volume in a comma-separated list (CSV file) by clicking the Save SizeGroup Details button in the right pane.

Managing Users

This section describes the following:

- Properties of Users on page 19
- Viewing Details for a File Server SRM User on page 21
- Adding File Server SRM Users on page 21
- Modifying File Server SRM Users on page 23
- Deleting File Server SRM Users on page 23
- Exporting the List of Users on page 24
- Modifying a List of Users on page 25
- Importing a List of Users on page 27

Properties of Users

The Users tab displays the properties of the user accounts assigned to file servers.

It is accessible by doing the following:

1. Click **AppExplorer**.
2. Expand the **Applications** node in the tree in Application Explorer.
3. Click the **File Servers** node.
4. Click the **Users** tab in the right pane.

Important: The users described on this page are different from the users for the management server. If you are not seeing data on this page, you must first create your File Server SRM users, as described in the topic, “Adding File Server SRM Users” on page 21.

The page displays the following:

- A graph displaying the top 5 users by usage and the amount of space they use.
- A summary table to the right of the graph displaying the following:
 - **Users** - The number of users assigned to all of the file servers monitored.
 - **Users Size** - The amount of space the users use.
 - **Largest User** - The user who uses the most space.
 - **Largest User Size** - The amount of space the largest user uses.
- A table below the graph displaying the users and the following properties:
 - ***User ID** - The ID of the user
 - ***User Name** - The name of the user
 - ***Home Directory** - The home directory of the user. The home directory is assigned to a user by the user’s organization. By default, the user has full access rights (read, write, execute) to the home directory. A user can have multiple home directories.
 - ***Owner** - The owners who are associated with the user. A user can have multiple owners.
 - **Department Number** - The number of the department to which the user is assigned. The department number was entered when the department was created in Chargeback.
 - ***Quota** - The amount of space the user is allocated
 - **Used** - The amount of space the user is using
 - **Instances** - The number of file servers on which the user’s home directory is present.
 - *These properties and the full name are entered manually.

To display the properties of just one user account, type the full name in the **Filter** field and then click the **Submit** button.

Viewing Details for a File Server SRM User

You can view detailed information about a File Server SRM user, such as the following:

- Department
- Quota
- Total Used by Owners
- Total Used by Directories

To view details of a File Server SRM user:

1. Access Application Explorer.
2. Expand the **File Servers** node in the tree in Application Explorer.
3. In the right pane, click the **Users** tab.
4. Under the User ID column, click the link for the user you want to know more about. You are shown detailed information about the user.

Adding File Server SRM Users

File Server SRM provides data about users on the file servers. For example the software provides information such as:

- The amount of space the users are using
- The user who is using the most amount of space and the amount of space being used

To obtain information about users, you **must** first add them in File Server SRM. These users differ from the users for the management server. When you add a File Server SRM user, you are making File Server SRM aware of that user for monitoring. That user is not granted access to the management server.

Note: If you used File Server SRM in a previous release, you may remember users were created for a specific file server. Now users are no longer dependent on a single file server.

To add a File Server SRM user:

1. Click **AppExplorer**.
 2. Click the **File Servers** node.
-

Note: Do not click the node name for an actual file server. Click the node with the name **File Servers**.

3. In the right pane, click the **Users** tab.
4. Click the **New User** button located under the graph.
5. In the **ID** field, type the user ID.
6. In the **Name** field, type the name for the user.
7. In the **Directories** field, enter the home directory for the user. The home directory is assigned to a user by the user's organization. A user can have multiple home directories. Separate additional directories with a comma.

Note: Directory paths are case sensitive and must be fully qualified paths. Map a user's usage to the home directory when configuring a file server scan.

8. In the **Owners** field, enter the owners that are associated with the user. Separate multiple owners with a comma. The owner names should be similar to what the OS reports. For example, the domain\username on Windows.

Note: It is required that information be entered into either the **Directories** field or the **Owners** field, but not both. Entering information into both fields is accepted, but not required.

9. In the **Department No** drop-down menu, select a department number corresponding to the department to which the user belongs. The department number was assigned to the department when the department was added by using Chargeback
10. In the **E-mail** field, type the user's e-mail address.
11. In the **Quota** field, type the maximum amount in megabytes the user can use.

Note: Entering **0** in the Quota field grants unlimited storage capacity to the selected user.

12. Click **OK**.
-

Modifying File Server SRM Users

You can modify the following properties for a File Server SRM user:


- **Name**
- **Directories**
- **Owners**
- **Department Number**
- **E-mail**
- **Quota**

Important: These steps modify a File Server SRM user, not a user account for the management server.

To modify one or more of these properties for a user:

1. Click **AppExplorer**.
2. Click the **File Servers** node.

Note: Do not click the node name for an actual file server. Click the node with the name **File Servers**.

3. In the right pane, click the **Users** tab.
4. In the table below the graphic, click the Edit () button corresponding to the user you want to modify.
5. Modify one or more of the properties listed at the beginning of this section.
6. Click **OK**.
The File Server SRM user is updated.

Deleting File Server SRM Users


To delete a File Server SRM user:

Important: These steps modify a File Server SRM user, not a user account for the management server. They do not impact access to the management server nor to the file server.

To delete a File Server SRM user:

1. Click **AppExplorer**.
2. Click **File Servers** node.

Note: Do not click the node name for an actual file server. Click the node with the name **File Servers**.

3. In the right pane, click the **Users** tab.
4. In the table below the graphic, click the Delete () button corresponding to the user you want to remove.

Exporting the List of Users

After you add your users, export the list of users in case you need to reinstall the management server. The user list is saved as a comma separated list (.csv file), which can be opened in a text editor, such as Notepad. You can add to the comma separated list as described in “Modifying a List of Users” on page 25.

To export the list of users:

1. Click **AppExplorer**.
2. Click **File Servers** node.

Note: Do not click the node name for an actual file server. Click the node with the name **File Servers**.

3. In the right pane, click the **Users** tab.
 4. Click the **Export Users** button.
 5. When you are asked if you want to save the csv file, click **Save**. Then, designate a location to save the file.
-

Modifying a List of Users

After you export a list of users, you can easily add to it. The attributes for each user appears on its own row. The format of a user's record is as follows:

```
<User ID>,<User Name>,<Home Directory(s)>,<Department>,  
<E-Mail>,<Quota><Owner(s)>
```

Assume you have a user with the following attributes:

- **User ID** - JS
- **User Name** - John Smith
- **Home Directory** - Program Files
- **Department** - Engineering
- **E-Mail** - jsmith@companyname.com
- **Quota** - 500
- **Owner** -jsmith

The information for the user would appear as follows in the list:

```
JS,John Smith,\Program Files,Engineering,jsmith@companyname.com,500,jsmith
```

A list with multiple users would appear as follows:

```
JS,John Smith,\Program Files,Engineering,jsmith@companyname.com,500,jsmith  
JD,John Doe,\Program Files,Engineering,jdoe@companyname.com,500,jdoe  
DD,David Double,\Program Files,Engineering,jdouble@companyname.com,  
500,ddouble
```

The record for a user with multiple home directories would appear as follows:

```
JS,John Smith,"\\jsmith,\home\jsmith",Engineering,  
jsmith@companyname.com,500
```

The record for a user with multiple owners would appear as follows:

```
Adm,Administrator,, ,netadmin@mycompany.com,, "root,bin,adm,uucp,nobody,  
Administrator"
```

Note: The owner can be omitted if the home directory is provided, and the home directory can be omitted if the owner is provided.

The following fields must be valid. Failure of any of these conditions causes the management server to log that record as an error and continue to the next record:

- <User ID>
- <Home Directory> Or <Owner>
- <Department> - (Optional) If you provide a department, the department must exist on the management server. The department can be empty.
- <Quota> - (Optional)
- E-Mail - (Optional)

Table 2-1: Restrictions for User Fields

Field	Condition
User ID	Required field. Can't include the following: <ul style="list-style-type: none"> ■ More than 64 characters ■ Single quote (') ■ Double quote (") ■ Forward slash (/) ■ Back slash (\)
User Name	Required field. Can't include more than 64 characters.
Home Directory	Required if the owner is not specified. List of one or more directories separated by commas, with each directory name not more than 4000 characters. Individual directory names should not contain commas.
Department	Null or an existing department.
E-Mail	Null or a string of up to 253 characters.

Table 2-1: Restrictions for User Fields (Continued)

Field	Condition
Quota (Megabytes)	Null or 0 to indicate unlimited, or a rational decimal number less than 99999999999999. Value is in MBs.
Owner	Required if the home directory is not specified. List of one or more owner names separated by commas, with each individual owner name not exceeding 256 characters. Individual owner names should not contain commas.

Importing a List of Users

You can import a list of users from a csv file. For information on how to add to the current list of users in File SRM, see “Exporting the List of Users” on page 24 and “Modifying a List of Users” on page 25.

The management server provides two ways to import a list of users:

- **Full Import** - Replaces all current users in the list with the users in the import file.
- **Partial Import** - Updates existing users and adds new users.

To import a list of users:

1. Click **File Servers** node.

Note: Do not click the node name for an actual file server. Click the node with the name **File Servers**.

2. In the right pane, click the **Users** tab.
 3. Click the **Import Users** button.
 4. Click the **Browse** button to select the list of users you want import.
 5. Select **Full Import** or **Partial Import**.
-

6. Click **OK**.

When you perform a partial or full import, you are provided with a report with the following information:

- Number of records read
- Number of users created
- Number of users updated
- Number of users failed to create
- Format errors
- Directory and owner both not specified
- Directory already mapped to a user
- Owner already mapped to a user
- Invalid departments
- Multiple entries for users

Viewing Information About Users on a Volume

You can view information about users on a volume, as follows:

1. Click **Configuration > FSRM**.
 2. Click the volume you want to find more information about. Information about the volume is displayed.
 3. Click the **Users** tab. Information about users on the volume is displayed.
 4. Click a user. The following information is displayed for the user:
 - File Server
 - Volume
 - Size
 - Owner
-

Individual File Server Details

This chapter describes the following:

- Viewing Properties for a File Server on page 29
- Finding Volume Details on page 31
- Types of Files on a File Server on page 34
- Aging Properties of Files on a File Server on page 36
- Viewing Size Group Distribution Information on page 38
- Viewing Events for a File Server on page 39
- Viewing Policies for a File Server on page 41
- Finding Individual Volume Details on page 41

Viewing Properties for a File Server

To view the properties for a file server:

1. Click **AppExplorer**.
 2. Expand the **Applications** node in the tree in Application Explorer.
 3. Expand the **File Servers** node.
-

4. Click a file server name in the tree.
5. Click the **Properties** tab in the right pane.

The Properties page displays the following information.

- **Custom Name** - A unique name for the file server. The custom name is displayed for the File Server SRM application instead of the file server's default name. The unique name helps in distinguishing this File Server SRM instance from the actual server. To create a unique name, type the name in the Custom Name field, and then click the **Save** button.
- ***Vendor** - The vendor that created the file server.
- **Business Cost** - Used to determine the cost impact of the application on the network. The currency displayed is dependent upon the standards and formats setting on the management server. In the Business Cost field, type an amount, for example 35.25. Then click **OK**.
Keep in mind the following:
 - You cannot enter a symbol in front of the number, except for the dollar sign (\$).
 - You can enter a number with decimal points, 30.50.
- ***Contacted** - The last time the software contacted the file server.
- ***Record Created** - When a record was created for the file server.
- ***Discovery Status** - The status of the last discovery. If the element was just discovered, the status is at "created."
- **Install Date** - When the file server was installed.
- ***Name Detected** - The name of the file server detected.
- **OID** - The Object Identifier
- ***Description** - Provides information about the type of element. In this instance, it would display FileServer.
- ***Target Operating System** - The operating system of the file server.
- **IdentificationCode** - The identification code of the file server.
- ***Product Name** - The product name of the file server.
- **Serial Number** - The serial number of the file server.
- **Build Number** - The build number of the file sever.
- **Version** - The version number of the file server.
- ***Host** - The name of the host
- **Business Cost (per hour)** - The business cost that was set at the top of this page.

*These fields are populated. The rest of the fields are blank by default.

Finding Volume Details

To view the properties of the volumes on a file server:

1. Click **AppExplorer**.
2. Expand the **Applications** node in the tree in Application Explorer.
3. Expand the **File Servers** node.
4. Click a file server name in the tree.
5. Click the **Volumes** tab in the right pane.

Note: You can view additional information on volumes that have had file server collection. See “Viewing Detailed Information for Scanned Volumes” on page 32 for more information.

This page displays the following:

- A graph displaying the top five volumes by usage on the file server. The amounts for free space and used space are displayed. Data less than 1 MB is not displayed in the graph. This could result in an empty graph if all data points are less than 1 MB.
 - A summary table to the right of the graph displaying the following:
 - **Volumes** - The number of volumes on the file server.
 - **Capacity** - The size of all volumes on the file server.
 - **Used** - The amount of used space on all volumes on the file server.
 - **Free** - The amount of free space on all volumes on the file server.
 - **Used Percent** - The amount of used space on all volumes on the file server.
 - **Free Percent** - The amount of free space on all volumes on the file server.
 - **Users** - The number of users assigned to one or more of the volumes on the file server.
 - **Users' Space** - The amount of space the users use on the file server.
 - A table below the graph displaying the volumes and the following properties:
 - **Capacity** - The size of the volume.
 - **Used** - The amount of space that is used on that volume.
 - **Used%** - The percentage used on the volume.
 - **Users** - The number of users assigned to that volume.
 - **Users Space** - The amount of space the users use.
-

Viewing Detailed Information for Scanned Volumes

You can find even more information about a volume by clicking a volume that has had file server collection.

To access this information:

1. Click **Configuration > FSRM**.
2. Click the volume you want to find more information about.

This page displays the following:

- A graph represented in one of the following ways:
 - If all large directories are less than 1 MB, the pie chart will have only two sectors (Free and Used).
 - If the volume has lot of large directories with a size larger than 1 MB, the pie chart will have one sector for Free, 8 sectors for the top 8 directories, and a last sector for Used (Rest).
 - A summary table to the right of the graph displaying the following:
 - **Total Storage** - The amount of total storage space on the volume.
 - **Used** - The amount of used space on the volume.
 - **Free** - The amount of free space on the volume.
 - **Used Percent** - The amount of used space on the volume.
 - **Free Percent** - The amount of free space on the volume.
 - **File System** - The type of file system on the volume.
 - **No. of Files** - The number of files on the volume.
 - **No. of Directories** - The number of directories on the volume.
 - Below the chart, there are three tabs which provide the following:
 - **Largest Directories** - This table lists the largest N directories on the volume, and the size of the directory, number of files in the directory, and number of subdirectories in the directory. The information in this table consists only of the files and directories directly contained in the directory in question and not those in the subdirectories. Click the hyperlink on the directory name to display a summary snapshot of the directory where the Aging, Extension, Size, Largest Files, and Aged Files information is presented in respective tabs. Click the hyperlinks in the tabs to download a list of the files satisfying the conditions. Click the **Save All Files** button to download a list of all the files in the directory. The downloaded file is in CSV format.
 - **Largest Files** - This table lists the largest N files on the volume. It displays the name of the file, its size, and the accessed, modified, and created time.
-

- **Aged Files** - This table lists the most aged N files on the volume based on the access time stamp. It displays the name of the file, its size, and the accessed, modified, and created time.

Note: The value of N in the above three tables is governed by the property `fileSrm.countForFSRMDrilldowns`.

Viewing Information About a Directory on a Volume

You can access the following detailed information about a directory on a volume:

- **Age tab** - Displays the number of files and their size that have been accessed, modified, and created.
- **Extension tab** - Lists the file extensions by size and count.
- **Sizes tab** - Lists the files by size.
- **Aged Files tab** - Lists the file and the last date and time it was accessed, modified, or created. The date and time are based on the management server.
- **Largest files tab** - It lists the largest files first by size. The date and time the file was last accessed, modified or created is displayed.

To access this page:

1. Click **Configuration > FSRM**.
2. Click the volume you want to find more information about.
3. Click the directory you want to find more information about.
4. If you want to save information about the files in this directory, click the **Save All Files** button.

The information is saved to a csv (comma separated list) file, which can be viewed in a text editor as well as Microsoft Excel.

The following information is saved in the file:

- file name
 - size
 - last accessed
 - last modified
 - when created
-

Viewing File Count and Size for a Volume

You can view the number of files and the amount of space they occupy on a volume.

To access this information:

1. Click **Configuration > FSRM**.
2. Click the volume you want to find more information about. Information about the volume is displayed.
3. Click the **Sizes** tab. Information about the file count and size for a volume is displayed.

Viewing Information for a File Size Group

You can view the file size group details for a volume, as follows:

1. Click **Configuration > FSRM**.
2. Click the volume you want to find more information about. Information about the volume is displayed.
3. Click the **Sizes** tab. Information about the file count and size for a volume is displayed.
4. Click a size group, for example 0-10 KB. The files belonging to this size group are displayed, as well as information about them, such as their size, last access, last modified, and when created.
5. If you want to save this information, click the **Save SizeGroup Details** button. The information is saved to a csv (comma separated list) file, which can be viewed in a text editor as well as Microsoft Excel.

Types of Files on a File Server

The Extensions page provides information about the types of files on a file server. For example, it can let you know how many mpps are stored on a file server and their file size.

To access the Extension page:

1. Click **AppExplorer**.
2. Expand the **Applications** node in the tree in Application Explorer.
3. Expand the **File Servers** node.
4. Click a file server name in the tree.
5. Click the **Extensions** tab in the right pane.
You see the following:
 - A graph displaying the top 10 extensions and their size.
 - A table below the graph displaying the extension and its following properties:
 - **Size** - The size of all the files with that extension. This property lets you see which types of files are using the most space on a file server.
 - **Count** - The number of files with this extension.
6. To filter by extension, enter the extension name and click the **Submit** button
7. Click an extension in the Extension column in the table.
The following is displayed:
 - A pie chart showing the sizes of the files with the extension per volume
 - A pie chart showing the number of files with the extension per volume
 - A table showing the number of files with the extension per volume and the amount of space they occupy.Data less than 1 MB is not displayed in the graph. This could result in an empty graph if all data points are less than 1 MB.
8. To view a listing of the files with the extension on the volume, click a volume in the Volume column in the table. The largest N and most aged N files with the extension are listed in the tabs "Largest Files" and "Aged Files." The filename with path, size, and the accessed, modified, and created time are provided.

Note: You can save the extensions for a volume in a comma-separated list (CSV file) by clicking the **Save Extension Detail** button in the right pane.

Filtering Files

Filters use the following expressions:

- `d*` will return all extensions starting with d
 - `*d` will return all extensions ending with d
 - `*d*` will return all extensions having d in the extension
-

- You can enter a list of extensions separated by a comma.

Aging Properties of Files on a File Server

To find information about the aging properties of the files on a file server:

1. Click **AppExplorer**.
2. Expand the **Applications** node in the tree in Application Explorer.
3. Expand the **File Servers** node.
4. Click a file server name in the tree.
5. Click the **Aging** tab in the right pane.
6. To save the aging details to a comma-separated list (CSV file):
 - a. Click a link for a volume in the right pane.
 - b. Click one of the following headings in the right pane:
 - 0-30 days
 - 30-60 days
 - 60-90 days
 - 90-180 days
 - 180+ days
 - c. Click the **Save Aging Details** button.

By default the page displays the following information:

- A graph displaying the size of each set of files belonging to an age group:
 - 30** - Files accessed in the last 30 days
 - 60** - Files accessed within 30 and 60 days
 - 90** - Files accessed within 60 and 90 days
 - 180** - Files accessed within 90 and 180 days
 - 180+** - Files accessed more than 180 days ago.

Data less than 1 MB is not displayed in the graph. This could result in an empty graph if all data points are less than 1 MB.
 - A graph displaying the file count of files belonging to an age group:
 - 30** - Files accessed in the last 30 days
 - 60** - Files accessed within 30 and 60 days
-

- 90** - Files accessed within 60 and 90 days
- 180** - Files accessed within 90 and 180 days
- 180+** - Files accessed more than 180 days ago.
Data less than 1 MB is not displayed in the graph. This could result in an empty graph if all data points are less than 1 MB.
- A table to the right of the graph displaying the number of:
 - Files (> 180 days)** - The number of files accessed more than 180 days
 - Files Size (> 180 days)** - The size of the files accessed more than 180 days ago.
 - Files (< 30 days)** - The number of files less than 30 days old.
 - Files Size (< 30 days)** - The size of the files less than 30 days old.
- **Age Distribution** combo box. You can change this page to display information according to when the files were last modified or created. Select one of the options and click **Submit**.
- A table under the graph displaying the number of files accessed within the specified time period and the size of those files.

To view aging properties for individual files, see “Viewing Aging Properties for Individual Files” on page 37.

Viewing Aging Properties for Individual Files

To view a listing of files with a particular age attribute, do the following:

1. Click the one of the following headings in the table on the Age tab for a file server.
 - 0-30 days
 - 30-60 days
 - 60-90 days
 - 90-180 daysThe files that meet the criteria are listed.
2. Click a volume. The Largest N files that meet the criteria are listed.
3. To save the aging details to a comma-separated list (CSV file), click the **Save Aging Details** button.

Viewing Size Group Distribution Information

The Sizes tab displays size distribution information for file servers.

To access the Sizes tab:

1. Click **AppExplorer**.
2. Expand the **Applications** node in the tree in Application Explorer.
3. Click the **File Servers** node.
4. Click a filer server name in the tree.
5. Click the **Sizes** tab in the right pane.

The page displays the following:

- A bar chart displaying the size group distribution by usage
 - A bar chart displaying the size group distribution by count
 - A table listing the number of files and the total size for each size group on each volume.
6. Click one of the following headings in the table on the Size tab:
 - 0 Bytes
 - 0 -10 KB
 - 10 -100 KB
 - 100 -1 MB
 - 1 -10 MB
 - 10 - 100 MB
 - 100 + MB

The following is displayed:

- A pie chart showing the sizes of the files with the size group per server.
- A pie chart showing the number of files with the size group per server.
- A table showing the number of files with the size group per server and the amount of space they occupy.

Note: Data less than 1 MB is not displayed in the graphs. This could result in an empty graph if all the data points are less than 1 MB.

7. To view a listing of the oldest N files with the size group on the volume, click a volume in the Drive column in the table. The value of N is governed by the property fileSrm.countForFSRMDrilldowns, which has a default value of 25 and is configurable in the range 10 to 100.

Note: You can save the files with the size group for a volume in a comma-separated list (CSV file) by clicking the Save SizeGroup Details button in the right pane.

Viewing Events for a File Server

The Events tab lists the events that involve the file server. It provides the following information about the events:

- **ID**- The identification number assigned to the event
- **Severity** - Provides the severity level
- **Time** - The time the event was recorded.
- **Summary Text** - A brief explanation of the event. When you click the summary text, the details of the event are displayed.

You can access the Events tab by doing the following:

1. Click **AppExplorer**.
2. Expand the **Applications** node in the tree in Application Explorer.
3. Expand the **File Servers** node.
4. Click a file server name in the tree.
5. Click the **Events** tab in the right pane.

Note: Events listed on this page may not be attributed to the correct source until Getting Details has completed.

Viewing Event Details

To access event details, click the link for the event under the Summary Text column. You can also right-click an event and select **Event Details** from the drop down menu.

The Event Details pane provides information on one or more of the following:

- **Serial Number** - The number assigned to the event
- **Summary Text** - A brief explanation of the event
- **Element** - It is the source of the event. An element can be a switch, host, application, fabric or anything else on the network. If this field is blank, the event did not come from an element.
- **Source** - If the event came from an element, the name of the element is provided.
- **Time Reported** - The time the event was reported to the management server.
- **Probable Cause** - Provides an explanation of a probable cause.
- **Recommended Actions** - Provides recommendations.
- **Event Type** - Provides a description of the event.
- **Correlated Indications** - Information obtained from the provider.
- **Severity** - Provides the severity level, which can be one of the following:
 - Clear**
 - Unknown**
 - Informational**
 - Warning**
 - Minor**
 - Major**
 - Critical**
- **Journal Entries** - Use this field to enter additional information and then click **Add Journal Entry**. This field is limited to 4,000 characters.

Sorting Events

To sort events, click the column title corresponding to the attribute you want to sort the event. For example if you want to sort events by time, click the Time heading on the table on the Events tab. The events are sorted by time on the Events page.

Viewing Policies for a File Server

Policy Manager can automatically send an e-mail, generate an event, or run a custom script when the file server is being overused. For example, you can configure Policy Manager so you receive an e-mail message when the amount of free space on a file server decreases to a specified level.

Use the Policy tab to do the following:

- Add Policies
- Edit Policies
- Test Policies
- Delete Policies

You can access the Policies tab by doing the following:

1. Click **AppExplorer**.
2. Expand the **Applications** node in the tree in Application Explorer.
3. Expand the **File Servers** node.
4. Click a file server name in the tree.
5. Click the **Policies** tab in the right pane.

See “Policies for File Server SRM” on page 3 for more information.

Finding Individual Volume Details

To find volume details for a volume on a file server:

1. Click **AppExplorer**.
2. Expand the **Applications** node in the tree in Application Explorer.
3. Expand the **File Servers** node.
4. Click a file server name in the tree.
5. Click a volume under the Volume column.
The File System Info tab opens in a new window.

This page displays the following:

- A graph represented in one of the following ways:
 - If all large directories are less than 1 MB, the pie chart will have only two sectors (Free and Used).
 - If the volume has lot of large directories with a size larger than 1 MB, the pie chart will have one sector for Free, 8 sectors for the top 8 directories, and a last sector for Used (Rest).
- A summary table to the right of the graph displaying the following:
 - **Capacity** - The size of the volume
 - **Used** - The amount of used space on the volume
 - **Free** - The amount of free space on the volume
 - **Used Percentage** - Percentage of used space on the volume
 - **Free Percentage** - Percentage of free space on the volume
 - **File System** - Type of the file system on the volume
 - **Number of Files** - Total number of files on the volume
 - **Number of Directories** - Total number of file on the volume
- Below the chart, there are three tabs which provide the following:
 - **Largest Directories** - This table lists the largest N directories on the volume, and the size of the directory, number of files in the directory, and number of sub directories in the directory. The information in this table consists only of the files and directories directly contained in the directory in question and not those in the sub directories. Click the hyperlink on the directory name to display a summary snapshot of the directory where the Aging, Extension, Size, Largest Files, and Aged Files information is presented in respective tabs. Click the hyperlinks in the tabs to download a list of the files satisfying the conditions. Click the **Save All Files** button to download a list of all the files in the directory. The downloaded file is in CSV format.
 - **Largest Files** - This table lists the largest N files on the volume. It displays the name of the file, its size, and the accessed, modified, and created time.
 - **Aged Files** - This table lists the most aged N files on the volume based on the access time stamp. It displays the name of the file, its size, and the accessed, modified, and created time.

Note: The value of N in the above three tables is governed by the property `fileSrm.countForFSRMDrilldowns`.

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