



Managing and monitoring Infinite Volumes

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Managing and monitoring Infinite Volumes

You can monitor the capacity and availability of your storage virtual machines (SVMs) with Infinite Volume. You can manage the content placement in your storage virtual machine (SVM) with Infinite Volume by creating rules and data policy.

Viewing the details of SVMs with Infinite Volume

You can use the Health/Storage Virtual Machines inventory page to view detailed information about storage virtual machines (SVMs) with Infinite Volume that are monitored by Unified Manager. You can view details such as the capacity, configuration, and data policy and rules associated with the Infinite Volume.

Before you begin

- You must have the Operator, OnCommand Administrator, or Storage Administrator role.
- The cluster containing the SVM with Infinite Volume must be added to the Unified Manager database.

Steps

1. In the left navigation pane, click **Health > SVMs**.
2. In the **Health/Storage Virtual Machines** inventory page, use the column filter in **Allowed Volume Type** to list the Infinite Volumes that are monitored.
3. View the complete details of the SVM with Infinite Volume by clicking the SVM name.

Viewing the constituents of an Infinite Volume

You can use the Health/Volumes inventory page to view the list of constituents in your Infinite Volume. You can view details such as the constituent state, the SVM with Infinite Volume that contains the constituent, junction path of the constituent, aggregate that contains the constituent, as well as the available, used, and total data capacity of the constituent.

Before you begin

The following requirements must be met:

- You must have the Operator, OnCommand Administrator, or Storage Administrator role.
- The cluster containing the SVM with Infinite Volume must be added to the Unified Manager database.

Steps

1. In the left navigation pane, click **Health > SVMs**.
2. Click the name of a SVM with Infinite Volume.
3. In the **Health/Storage Virtual Machine** details page, click **Volumes** in the right **Related Devices** pane.

The list of constituents is displayed in the Health/Volumes inventory page.

Editing the Infinite Volume threshold settings

When you need to address any issues in your Infinite Volume's storage space, you can edit the threshold settings of the Infinite Volume's capacity based on your organization's requirements. When a threshold is crossed, events are generated, and you receive notifications if you have configured alerts for such events.

Before you begin

You must have the OnCommand Administrator or Storage Administrator role.

Steps

1. In the left navigation pane, click **Health > SVMs**.
2. In the **Health/Storage Virtual Machines** inventory page, select a SVM with Infinite Volume.
3. In the **Health/Storage Virtual Machine** details page, click **Actions > Edit Thresholds**.
4. In the **Edit SVM with Infinite Volume Thresholds** dialog box, modify the thresholds as required.
5. Click **Save and Close**.

Editing the threshold settings of storage classes

When you need to address any issues related to storage space in your storage classes, you can edit the threshold settings of the storage class capacity based on your organization's requirements. When the threshold is crossed, events are generated, and you receive notifications if you have configured alerts for such events.

Before you begin

You must have the OnCommand Administrator or Storage Administrator role.

Steps

1. In the left navigation pane, click **Health > SVMs**.
2. In the **Health/Storage Virtual Machines** inventory page, select an SVM with Infinite Volume.
3. In the **Health/Storage Virtual Machine** details page, click **Actions > Edit Thresholds**.
4. In the **Edit Storage Class Thresholds** dialog box, modify the thresholds as required.
5. Click **Save and Close**.

Understanding Infinite Volumes

An Infinite Volume is a logical storage unit that you can use to provide a large, scalable data container with a single namespace and a single mount point. Understanding some of the basic concepts of Infinite Volumes helps you to monitor and manage your SVMs with

Infinite Volume.

What an Infinite Volume is

An Infinite Volume is a single, scalable volume that can store up to 2 billion files and tens of petabytes of data.

With an Infinite Volume, you can manage multiple petabytes of data in one large logical entity and clients can retrieve multiple petabytes of data from a single junction path for the entire volume.

An Infinite Volume uses storage from multiple aggregates on multiple nodes. You can start with a small Infinite Volume and expand it nondisruptively by adding more disks to its aggregates or by providing it with more aggregates to use.

Maximum number of files an Infinite Volume can store

In most cases, an Infinite Volume can hold up to 2 billion files. If an Infinite Volume is relatively small, its maximum number of files might be less than 2 billion.

The maximum number of files that an Infinite Volume can hold is determined by the size of its namespace constituent. If the namespace constituent is 10 TB, the Infinite Volume can hold 2 billion files. If the namespace constituent is less than 10 TB, the Infinite Volume can hold proportionally fewer files.

The size of the namespace constituent is roughly proportional to the size of the Infinite Volume, depending on several factors, such as the namespace constituent's 10 TB maximum size, the available space in the aggregate that holds the namespace constituent, and the SnapDiff setting.

For a two-node Infinite Volume or a multi-node Infinite Volume without SnapDiff enabled, setting the Infinite Volume to a size of 80 TB or greater typically creates a namespace constituent of 10 TB.

The file count not only includes regular files, but also other file system structures, such as directories and symbolic links.

What a storage class is

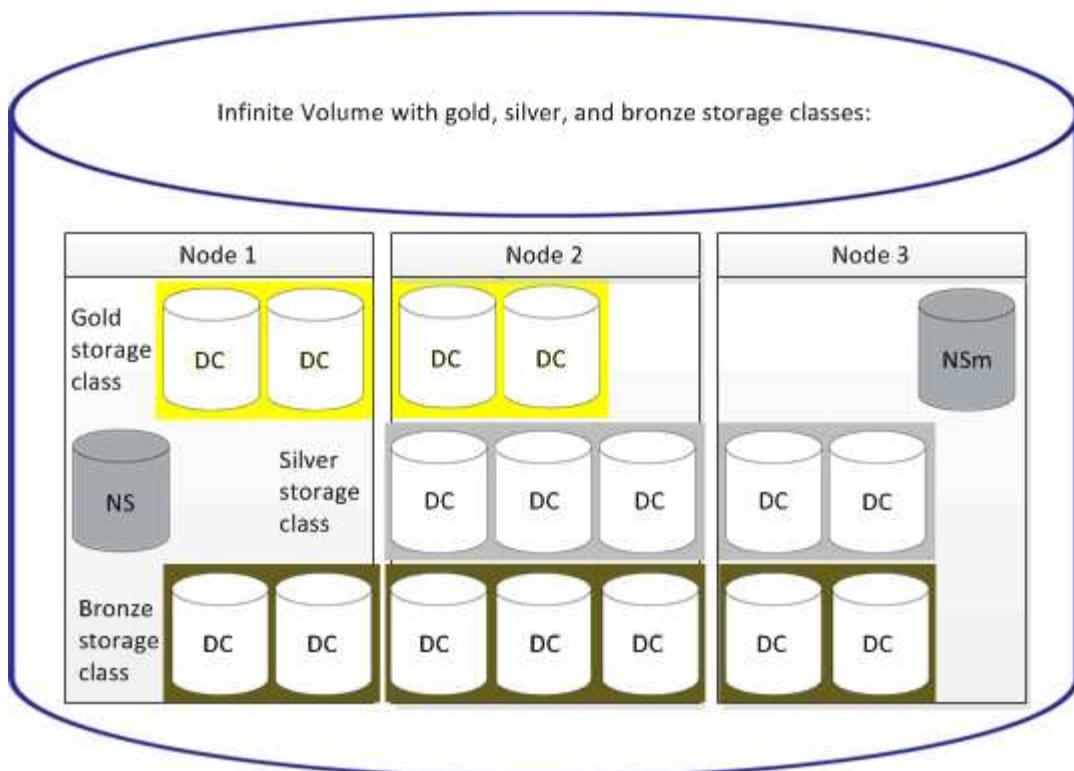
A storage class is a definition of aggregate characteristics and volume settings. You can define different storage classes and associate one or more storage classes with an Infinite Volume. You must use OnCommand Workflow Automation to define workflows for your storage class requirements and to assign storage classes to Infinite Volumes.

You can define the following characteristics for a storage class:

- Aggregate characteristics, such as the type of disks to use
- Volume settings, such as compression, deduplication, and volume guarantee

For example, you can define a storage class that uses only aggregates with SAS disks and the following volume settings: thin provisioning with compression and deduplication enabled.

The following diagram illustrates an Infinite Volume that spans multiple nodes and uses the following storage classes: gold, silver, and bronze. Each storage class can span two or more nodes within an Infinite Volume. The diagram also illustrates the placement of data constituents in each storage class.



What a namespace constituent is

Each Infinite Volume has a single namespace constituent that maps directory information and file names to the file's physical data location within the Infinite Volume.

Clients are not aware of the namespace constituent and do not interact directly with it. The namespace constituent is an internal component of the Infinite Volume.

What data constituents are

In an Infinite Volume, data is stored in multiple separate data constituents. Data constituents store only the data from a file, not the file's name.

Clients are not aware of data constituents. When a client requests a file from an Infinite Volume, the node retrieves the file's data from a data constituent and returns the file to the client.

Each Infinite Volume typically has dozens of data constituents. For example, a 6 PB Infinite Volume that contains 1 billion files might have 60 data constituents located on aggregates from 6 nodes.

What a namespace mirror constituent is

A namespace mirror constituent is an intracluster data protection mirror copy of the namespace constituent in an Infinite Volume. The namespace mirror constituent performs two roles: It provides data protection of the namespace constituent, and it supports SnapDiff for incremental tape backup of Infinite Volumes.

Creating rules

You can add new rules to your data policy to determine the placement of data that is written to the Infinite Volume. You can create rules either by using rule templates that are defined in Unified Manager or create custom rules.

Before you begin

- You must have the OnCommand Administrator or Storage Administrator role.
- The cluster containing the SVM with Infinite Volume with storage classes must be added to the Unified Manager database.

Creating rules using templates

You can add new rules by using rule templates defined by Unified Manager to determine the placement of data that is written to the SVM with Infinite Volume. You can create rules based on file types, directory paths, or owners.

Before you begin

- You must have the OnCommand Administrator or Storage Administrator role.
- The cluster containing the SVM with Infinite Volume with storage classes must be added to the Unified Manager database.

About this task

The Data Policy tab is visible only for an SVM with Infinite Volume.

Steps

1. In the left navigation pane, click **Health > SVMs**.
2. In the **Health/Storage Virtual Machines** inventory page, select the appropriate SVM.
3. Click the **Data Policy** tab.

The list of rules in the data policy for the selected SVM with Infinite Volume is displayed.

4. Click **Create**.
5. In the **Create Rule** dialog box, choose an appropriate rule template from the drop-down list.

The template is based on three categories: file type, owner, or directory path.

6. Based on the template selected, add the necessary conditions in the **Matching Criteria** area.
7. Select an appropriate storage class from the **Place the matching content in Storage Class** drop-down list.
8. Click **Create**.

The new rule you created is displayed in the Data Policy tab.

9. Preview any other changes made to the data policy.

10. Click **Activate** to activate the changes in the rule properties in the SVM.

Creating custom rules

Based on your data center requirements, you can create custom rules and add them to a data policy to determine the placement of data that is written to the SVM with Infinite Volume. You can create custom rules from the Create Rule dialog box without using any existing template.

Before you begin

- You must have the OnCommand Administrator or Storage Administrator role.
- The cluster containing the SVM with Infinite Volume with storage classes must be added to the Unified Manager database.

About this task

The Data Policy tab is visible only for an SVM with Infinite Volume.

Steps

1. In the left navigation pane, click **Health > SVMs**.
2. In the **Health/Storage Virtual Machines** inventory page, select the appropriate SVM.
3. Click **Data Policy**.
4. Click **Create**.
5. In the **Create Rule** dialog box, select **Custom rule** from the **Template** list.
6. In the **Matching Criteria** area, add conditions as required.

Conditions enable you to create a rule based on file types, directory paths, or owners. A combination of these conditions are the condition sets. For example, you can have a rule: "Place all .mp3 owned by John in bronze storage class."

7. Select an appropriate storage class from the **Place the matching content in Storage Class** drop-down list.
8. Click **Create**.

The newly created rule is displayed in the Data Policy tab.

9. Preview any other changes made to the data policy.
10. Click **Activate** to activate the changes in the rule properties in the SVM.

Viewing rules

You can view the list of rules you created from the Data Policy tab before modifying the data policy for your SVM with Infinite Volume.

Before you begin

- You must have the Operator, OnCommand Administrator, or Storage Administrator role.
- The cluster containing the SVM with Infinite Volume with storage classes must be added to the Unified Manager database.

About this task

The Data Policy tab is visible only for an SVM with Infinite Volume.

Steps

1. In the left navigation pane, click **Health > SVMs**.
2. In the **Health/Storage Virtual Machines** inventory page, select the appropriate SVM.
3. Click **Data Policy**.

Results

The list of rules in the data policy for the selected SVM is displayed. You can use Filter by Storage Class to view rules about a specific storage class.

Editing template-based rules

You can edit a rule that was created using the rule templates from the Edit Rule dialog box. You can add, modify, or delete rule properties such as directory paths, file types, and owners. You can also modify the rule name and the storage class associated with the rule.

Before you begin

You must have the OnCommand Administrator or Storage Administrator role.

Steps

1. In the left navigation pane, click **Health > SVMs**.
2. In the **Health/Storage Virtual Machines** inventory page, select an appropriate SVM.
3. Click **Data Policy**.

The list of rules in the data policy for the selected SVM with Infinite Volume is displayed.

4. Select the rule for which you want to include new conditions or condition sets.
5. Click **Edit**.
6. In the **Edit Rule** dialog box, edit the rule as required:

If you want to...	Do this...
Add a new rule property	Click Add .

If you want to...	Do this...
Delete a rule property	Click Delete by selecting the appropriate rule property.
Modify a rule property	Double-click the appropriate rule property, and then modify as required.

7. Click **Update**.
8. Verify that your modifications are applied to the rule by expanding the rule in the **Data Policy** tab.
9. Preview any other changes made to the data policy.
10. Click **Activate** to activate the changes to the rule properties in the SVM.

Editing custom rules

You can edit a rule to include new conditions or condition sets in the rule. For example, if you want to include new directory paths along with the owner names, you can do so from the Edit Rule dialog box.

Before you begin

You must have the OnCommand Administrator or Storage Administrator role.

About this task

The Data Policy tab is visible only for an SVM with Infinite Volume.

Steps

1. In the left navigation pane, click **Health > SVMs**.
2. In the **Health/Storage Virtual Machines** inventory page, select an appropriate SVM.
3. Click **Data Policy**.

The list of rules in the data policy for the selected SVM with Infinite Volume is displayed.

4. Select the rule for which you want to include new conditions or condition sets.
5. Click **Edit**.
6. In the **Edit Rule** dialog box, add new conditions or condition sets:

If you want to add...	Click...
A new condition	The  icon.
A new condition set	Add Condition Set .

7. Click **Update**.
8. Verify that your modifications are applied to the rule by expanding the rule in the **Data Policy** tab.
9. Preview any other changes made to the data policy.
10. Click **Activate** to activate the changes in the rule properties in the SVM.

Deleting rules

You can delete a rule from a data policy when it is no longer required. For example, you might want to delete a rule on a particular directory that is no longer valid.

Before you begin

You must have the OnCommand Administrator or Storage Administrator role.

About this task

The Data Policy tab is visible only for an SVM with Infinite Volume.

Steps

1. In the left navigation pane, click **Health > SVMs**.
2. In the **Health/Storage Virtual Machines** inventory page, select a appropriate SVM.
3. Click **Data Policy**.

The list of rules in the data policy for the selected SVM with Infinite Volume is displayed.

4. Select the rule that you want to delete, and then click **Delete**.



You cannot delete the default rule.

5. Preview any other changes made to the data policy.
6. Click **Activate** to activate the changes in the rule properties in the SVM.

Previewing changes to your data policy

You should preview any changes that you have made to your rules in a data policy before you submit the changes in the data policy to the SVM with Infinite Volume for activation.

Before you begin

You must have the OnCommand Administrator or Storage Administrator role.

About this task

The Data Policy tab is visible only for an SVM with Infinite Volume.

Steps

1. In the left navigation pane, click **Health > SVMs**.
2. In the **Health/Storage Virtual Machines** inventory page, select the appropriate SVM.
3. Click **Data Policy**.

The list of rules in the data policy for the selected SVM with Infinite Volume is displayed.

4. Modify the data policy as required.

Data policy modifications can include creating new rules, editing existing rules, deleting existing rules, or reordering the rules.

5. Click **Activate**.

6. In the **Summary of Changes to Data Policy Configuration** window, preview the changes to your data policy, and then click **Activate** to activate the changes in the data policy in the SVM with Infinite Volume.

Exporting a data policy configuration

You can export a data policy configuration from Unified Manager to a file. For example, after you have taken the required backup, and in the event of a disaster, you can export the data policy configuration from the primary.

Before you begin

You must have the OnCommand Administrator or Storage Administrator role.

About this task

The Data Policy tab, which is used while performing this task, is displayed only for SVMs with Infinite Volume.

Steps

1. In the left navigation pane, click **Health > SVMs**.
2. In the **Health/Storage Virtual Machines** inventory page, select the appropriate SVM.
3. Click **Data Policy**.

The list of rules in the data policy for the selected SVM with Infinite Volume is displayed.

4. Click **Export**.
5. In the browser-specific dialog box, specify the location to which the data policy configuration has to be exported.

Results

The data policy configuration is exported as a JSON file in the specified location.

Importing a data policy configuration

You can import a data policy configuration from a file, modify the data policy, and then activate the changes in the SVM with Infinite Volume. For example, in the event of a disaster, you can import an already defined data policy to the secondary and modify the policy as required.

Before you begin

You must have the OnCommand Administrator or Storage Administrator role.

About this task

When you import a data policy configuration, your existing rules are overwritten.

The Data Policy tab is displayed only for SVMs with Infinite Volume.

Steps

1. In the left navigation pane, click **Health > SVMs**.
2. In the **Health/Storage Virtual Machines** inventory page, select the appropriate SVM.
3. Click **Data Policy**.

The list of rules in the data policy for the selected SVM with Infinite Volume is displayed.

4. Click **Import**.
5. In the **Import Data Policy** dialog box, specify the data policy that you want to import by providing the absolute path of the data policy file.
6. Click **Import**.
7. Click **Activate** to activate the imported rules in the SVM.

Understanding rules and data policy

Understanding the concepts about rules and data policy help you to manage your Infinite Volumes efficiently.

What rules and data policies are

A *rule* determines the placement of files (data) in a storage virtual machine (SVM) with Infinite Volume. A collection of such rules is known as a *data policy*.

- **Rule**

Rules mainly consist of a set of predefined conditions and information that determine where to place files in the Infinite Volume. When a file is placed in the Infinite Volume, the attributes of that file are matched with the list of rules. If attributes match the rules, then that rule's placement information determines the storage class where the file is placed. A default rule in the data policy is used to determine the placement of files if the attributes do not match any of the rules in the rule list.

For example, if you have a rule, “Place all files of type .mp3 in the bronze storage class.”, all .mp3 files that are written to the Infinite Volume would be placed in the bronze storage class.

- **Data policy**

A data policy is a list of rules. Each SVM with Infinite Volume has its own data policy. Each file that is added to the Infinite Volume is compared to its data policy’s rules to determine where to place that file. The data policy enables you to filter incoming files based on the file attributes and place these files in the appropriate storage classes.

What the default rule is

The default rule is the rule present in the data policy of a storage virtual machine (SVM) with Infinite Volume. It is used to determine the placement of data written to the Infinite Volume when none of the conditions in the existing rules match with the data being written.

The default rule is always the last rule in a data policy and cannot be reordered. For example, consider a data policy with three rules. Rule-1 places all .pdf files in the *high_performance* storage class. Rule-2 places all files owned by the administrator and file names that end with *.xls in the *archival_constituent* storage class. The third rule is the default rule with the *low_performance* storage class.

When a set of *.jpg files that are not owned by the administrator is written to the Infinite Volume, the default rule is used to place these .jpg files in the *low_performance* storage class. Rule-1 and Rule-2 are not used because the data that is written does not match these rules.

How a data policy filters data written to an Infinite Volume

A data policy automatically filters data written to the Infinite Volume into different storage classes. All files are written to the single file system in the Infinite Volume’s namespace, and rules in the data policy determine which storage class stores the data for the files.

A default data policy is automatically created for a storage virtual machine (SVM) with Infinite Volume when you create the Infinite Volume. The data policy is active and contains a default rule. The default rule stores incoming data for files as follows for Infinite Volumes with and without storage classes:

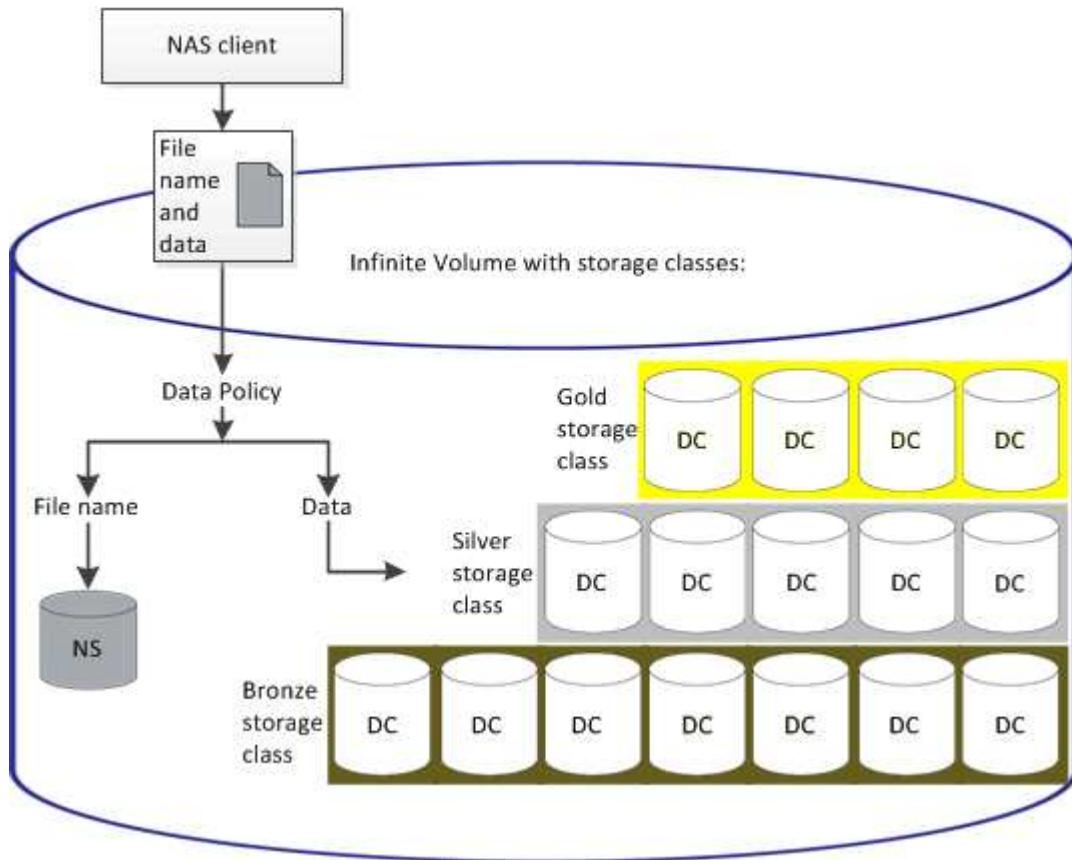
For an Infinite Volume...	The default data policy does this...
Without storage classes	Places all incoming data for files in the Infinite Volume
With one storage class	Places all incoming data for files into the storage class
With one or more storage classes	Places all incoming data for files into the first storage class that is created

 For an Infinite Volume with two or more storage classes, you should modify the data policy as soon as possible to create rules that filter data for different types of files into the different storage classes. You should modify the data policy by using Unified Manager.

The data policy does not affect the location of the files in the file system in the Infinite Volume's namespace, and storage classes are transparent to client applications. The file system in the namespace contains the file names. The data policy affects only which storage class is used to store the data for the files. Data policies are useful when you assign two or more storage classes to an Infinite Volume.

You can modify the data policy to create additional rules, but you cannot delete the data policy or its default rule.

The following diagram illustrates how a data policy filters data for an Infinite Volume. The file name is stored in the namespace constituent, and rules in the data policy specify that data for this particular file is stored in the silver storage class.



What a rule template is

A rule template is a predefined template that can be used to create rules in a data policy. A rule template enables you to create a rule based on three categories: owner, file type, and directory path.

Example of a rule template for file types

The rule template "Place all files with the specified extensions in a suitable storage class" places all the .mp3 files that are written to the Infinite Volume in a storage class that you specify.

What conditions and condition sets are

Conditions are a set of matching criteria based on rule properties—such as the file name, directory path, and owner—that define a rule. A collection of such conditions is known as

a *condition set*. You can use conditions and condition sets only for custom rules to determine where to place content that is written into your Infinite Volume.

Conditions

For a custom rule, you can specify conditions based on rule properties such as the file name, directory path, or owner, or a combination of all the rule properties. The logic is similar to a Boolean AND operation. For example, by using conditions, you can create a custom rule to place files with .mp3 extensions and files owned by John in the directory path starting with /NS/.

Condition sets

The logic used for condition sets is similar to a Boolean OR operation. For example, by using conditions and condition sets, you can create a complex custom rule that matches either of the following conditions:

- condition-1

All files owned by Mary and are placed in /NS/Eng/

- condition-2

All files that have names ending with .pdf and owned by Mary

Description of Infinite Volume windows and dialog boxes

You can monitor SVMs with Infinite Volume from the respective Health/Storage Virtual Machine details page. You can manage rules and data policies from the Create Rule dialog box. You can also modify the storage class thresholds from the Edit Storage Class Thresholds dialog box.

Create Rule dialog box

You can use the Create Rule dialog box to create new rules for your data policy. For example, when you want to specify the placement of content of a certain file type, you can use the Create Rule dialog box to create the rule for your data policy.

Rule Name

Specifies the name of the new rule.

Templates area

Displays the list of rule templates. You can select an appropriate rule template from the list to create a rule for the data policy.

Matching Criteria

Displays a list of conditions related to the selected rule template. The condition list changes based on the rule template selected. For example, if you select “Place all files with the specified owner names in a suitable storage class”, **List of Owner that...** is displayed in Matching Criteria.

- **Add**

Enables you to add a new rule property based on the rule template selected. For example, if you selected the rule template, “Place all files with the specified owner names in a suitable storage class”, the **Add** button enables you to add the owner’s name.

- **Delete**

Enables you to delete a selected rule property.

Content Placement

Enables you to select an appropriate storage class for your rule from the list.

Command buttons

- **Create**

Creates a new rule for the data policy and closes the Create Rule dialog box.

- **Cancel**

Cancels the recent changes made to the rule and closes the Create Rule dialog box.

Edit Rule dialog box

You can use the Edit Rule dialog box to edit the properties of a rule, such as the file types, directory paths, or owners. You can also select an appropriate storage class for the rule. For example, when a certain file path is no longer valid, you can delete the file path from the corresponding rule.

Rule Name

Displays the name of the rule.

Matching Criteria

Displays a list of conditions related to the selected rule template. The condition list changes based on the rule template selected.

- **Add**

Enables you to add a new rule property, a new file type, a file path, or a new owner. For example, if you had specified the rule template, “Place all files with the specified owner names in a suitable storage class”, the Add button enables you to add the owner’s name.

- **Delete**

Enables you to delete a selected rule property.

Content Placement area

Displays the list of storage classes. You can select an appropriate storage class for the selected rule.

Command buttons

- **Update**

Updates the changes made to the rule and closes the Edit Rule dialog box.

- **Cancel**

Cancels the recent changes made to the rule and closes the Edit Rule dialog box.

Edit Rule dialog box (Advanced edit)

You can use the Edit Rule dialog box to edit the properties of a rule that is not created by using a template. The rule properties you can edit include the file types, directory paths, matching criteria, or owners. You can select an appropriate storage class for the rule. For example, you can edit the conditions specified in the matching criteria of a rule.

Rule Name

Displays the name of the rule.

Matching Criteria

Displays a list of conditions related to the selected rule template. The condition list changes based on the rule template selected. You can expand the rules and modify the rule properties, as required.

Content Placement area

Displays the list of storage classes. You can select an appropriate storage class for the selected rule.

Command buttons

- **Update**

Updates the changes made to the rule and closes the Edit Rule dialog box.

- **Cancel**

Cancels the recent changes made to the rule and closes the Edit Rule dialog box.

Edit SVM with Infinite Volume Thresholds dialog box

You can use the Edit SVM with Infinite Volume Thresholds dialog box to modify the default threshold values of each SVM with Infinite Volume, based on your organization's requirements. The default threshold values indicate the level of activity that must be reached on the SVM before an event is triggered.

Capacity

The Capacity area enables you to set capacity threshold conditions for the selected SVM with Infinite Volume:

- **Space Nearly Full**

Specifies the percentage at which the SVM with Infinite Volume is considered to be nearly full. It also displays the corresponding space (in GB, MB, or TB) in the Infinite Volume. For example, if you have an Infinite Volume of size 10 GB, and the Space Nearly Full threshold is 80%, then the following information is displayed: (8 GB of 10 GB).

You can also use the slider to set the threshold value.

- **Space Full**

Specifies the percentage at which the SVM with Infinite Volume is considered full. It also displays the corresponding space (in GB, MB, or TB) in the Infinite Volume. For example, if you have an Infinite Volume of size 10 GB, and the Space Full threshold is 90%, then the following information is displayed: (9 GB of 10 GB).

You can also use the slider to set the threshold value.

- **Snapshot Usage Limit**

Specifies the limit, in percentage, of space reserved for Snapshot copies in the Infinite Volume.

Command buttons

The command buttons enable you to perform the following tasks:

- **Restore to Global Defaults**

Enables you to restore the threshold settings to the current values that are set at the global level.

- **Save**

Saves all the threshold settings.

- **Save and Close**

Saves all the threshold settings and then closes the Edit SVM with Infinite Volume Thresholds dialog box.

- **Cancel**

Ignores any changes to the threshold settings and closes the Edit SVM with Infinite Volume Thresholds dialog box.

Edit Storage Class Thresholds dialog box

You can use the Edit Storage Class Thresholds dialog box to modify the default threshold values of various storage classes in each SVM with Infinite Volume based on your organization's requirements. The default threshold values indicate the level of activity that must be reached on a storage class before an event is triggered.

You must have the OnCommand Administrator or Storage Administrator role.

Capacity

The Capacity area enables you to set capacity threshold conditions for the selected storage class.

- **Space Nearly Full**

Specifies the percentage at which a storage class in the SVM with Infinite Volume is considered to be nearly full. It also displays the corresponding space (in GB, MB, or TB) in the storage class. For example, if you have a storage class of size 10 GB and the Space Nearly Full threshold is 80%, then the following information is displayed: (8 GB of 10 GB).

You can also use the slider to set the threshold value.

- **Space Full**

Specifies the percentage at which the storage class in the SVM with Infinite Volume is considered full. It also displays the corresponding space (in GB, MB, or TB) in the storage class. For example, if you have a storage class of size 10 GB and the Space Full threshold is 90%, then the following information is displayed: (9 GB of 10GB).

You can also use the slider to set the threshold value.

- **Snapshot Usage Limit**

Specifies the limit, in percentage, on the space reserved for Snapshot copies in the storage class.

Command buttons

The command buttons enable you to perform tasks for a selected volume.

- **Restore to Global Defaults**

Enables you to restore the threshold settings to the current values that are set at the global level.

- **Save**

Saves all the threshold settings.

- **Save and Close**

Saves all the threshold settings and then closes the Edit Storage Class Thresholds dialog box.

- **Cancel**

Cancels changes (if any) to the threshold settings and closes the Edit Storage Class Thresholds dialog box.

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