



## **Sample custom reports**

### **Active IQ Unified Manager**

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# Table of Contents

- Sample custom reports ..... 1
  - Customizing cluster storage reports ..... 1
  - Customizing aggregate capacity reports ..... 4
  - Customizing volume capacity reports ..... 6
  - Customizing Qtree capacity reports ..... 9
  - Customizing NFS share reports ..... 10
  - Customizing storage VM reports ..... 11
  - Customizing volume relationship reports ..... 13
  - Customizing volume performance reports ..... 17

# Sample custom reports

These sample custom reports are commonly used to help you identify potential problems and respond to potential issues before problems occur.

The list of reports in this section is not exhaustive and will grow over time. You can suggest custom reports to add to this section by providing documentation feedback.



You must have the Application Administrator or Storage Administrator role to manage reports.

## Customizing cluster storage reports

The sample cluster storage reports in this section are just samples to help you understand how to create reports about cluster capacity to help you monitor your storage system resources.

### Creating a report to view capacity by cluster model

You can create a report to analyze storage capacity and utilization of clusters based on storage system model.

#### What you'll need

- You must have the Application Administrator or Storage Administrator role.

Use the following steps to create a custom view that displays capacity by cluster model, and then schedule a report to be generated for that view.

#### Steps

1. In the left navigation pane, click **Storage > Clusters**.
2. In the View menu, select **Capacity > All Clusters**.
3. Select **Show/Hide** to remove any columns, such as "Cluster FQDN" and "OS Version", that you do not want in the report.
4. Drag the "Total Raw Capacity", the "Model/Family", and the three aggregate columns near the "Cluster" column.
5. Click the top of the "Model/Family" column to sort the results by cluster type.
6. Save the view with a specific name that reflects what the view is showing, for example, "Capacity by Cluster Model".
7. Click the **Scheduled Reports** button on the inventory page.
8. Click **Add Schedule** to add a new row to the **Report Schedules** page so that you can define the schedule characteristics for the new report.
9. Enter a name for the report schedule and complete the other report fields, then click the check mark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you might want to add more capacity to certain clusters, or upgrade older cluster models.

## Creating a report to identify clusters with the most unallocated LUN capacity

You can create a report to find the clusters with the most unallocated LUN capacity, greater than .5 TB, to help identify where you can add additional workloads.

**What you'll need** \* You must have the Application Administrator or Storage Administrator role.

Use the following steps to create a custom view that displays clusters with the most unallocated LUN capacity, and then schedule a report to be generated for that view.

### Steps

1. In the left navigation pane, click **Storage > Clusters**.
2. In the View menu, select **Capacity > All Clusters**.
3. Select **Show/Hide** to remove any columns you do not want in the report.
4. Drag the "Unallocated LUN Capacity" column near the "HA Pair" column.
5. Click the filter icon, add the following filter, and then click **Apply Filter**:
  - Unallocated LUN capacity greater than 0.5 TB
6. Click the top of the "Unallocated LUN Capacity" column to sort the results by the greatest amount of unallocated LUN capacity.
7. Save the view with a specific name that reflects what the view is showing, for example "Most unallocated LUN capacity" and click the check mark (✓).
8. Click the **Scheduled Reports** button on the inventory page.
9. Click **Add Schedule** to add a new row to the Report Schedules page so that you can define the schedule characteristics for the new report.
10. Enter a name for the report schedule and complete the other report fields, then click the check mark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you might want to use the unallocated LUN capacity of the cluster.

## Creating a report to view HA pairs with the most available capacity

You can create a report to find the high availability (HA) pairs with the most capacity to provision new volumes and LUNs.

### What you'll need

- You must have the Application Administrator or Storage Administrator role.

Use the following steps to create a custom view that displays HA pairs sorted by the most available capacity to provision new volumes and LUNs, and then schedule a report to be generated for that view.

### Steps

1. In the left navigation pane, click **Storage > Clusters**.
2. In the View menu, select **Capacity > All Clusters**.
3. Select **Show/Hide** to remove any columns you do not want in the report.
4. Drag the “Aggregate Unused Capacity” column near the “HA Pair” column.
5. Click the filter icon, add the following filter, and then click **Apply Filter**:
  - Aggregate Unused Capacity greater than 0.5 TB
6. Click the top of the “Aggregate Unused Capacity” column to sort the results by the greatest amount of unused aggregate capacity.
7. Save the view with a specific name that reflects what the view is showing, for example, “Least used aggregate capacity”, and click the check mark (✓).
8. Click the **Scheduled Reports** button on the inventory page.
9. Click **Add Schedule** to add a new row to the Report Schedules page so that you can define the schedule characteristics for the new report.
10. Enter a name for the report schedule and complete the other report fields, then click the check mark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you might want to balance HA pairs based on aggregate capacity.

## Creating a report to view nodes running older versions of ONTAP

You can create a report to display the version of ONTAP software that is installed on all cluster nodes so that you can see which nodes you should upgrade.

### What you'll need

- You must have the Application Administrator or Storage Administrator role.

Use the following steps to create a custom view that displays nodes running older versions of ONTAP, and then schedule a report to be generated for that view.

### Steps

1. In the left navigation pane, click **Storage > Nodes**.
2. Select **Show/Hide** to remove any columns that you do not want in the report.
3. Drag the “OS Version” column near the “Node” column.
4. Click the top of the “OS Version” column to sort the results by oldest version of ONTAP.
5. Save the view with a specific name that reflects what the view is showing, for example, “Nodes by ONTAP version”.
6. Click the **Scheduled Reports** button on the inventory page.
7. Click **Add Schedule** to add a new row to the Report Schedules page so that you can define the schedule characteristics for the new report.
8. Enter a name for the report schedule and complete the other report fields, then click the check mark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you might want to upgrade nodes running older versions of ONTAP.

## Customizing aggregate capacity reports

These sample custom reports are used to help you identify and respond to potential problems related to aggregate storage capacity.

The reports in this section are just samples to help you understand how to create reports about aggregate capacity to help you monitor your storage system resources.

### Creating a report to view aggregates reaching full capacity

You can create a report to find the aggregates that are reaching full capacity so that you can add more capacity or move workloads to other aggregates.

#### What you'll need

- You must have the Application Administrator or Storage Administrator role.

Use the following steps to create a custom view that displays aggregates reaching full capacity, then schedule a report to be generated for that view.

#### Steps

1. In the left navigation pane, click **Storage > Aggregates**.
2. In the View menu, select **Capacity > All Aggregates**.
3. Select **Show/Hide** to remove any columns you do not want in the report.
4. Click the filter icon, add the following filter, and then click **Apply Filter**:
  - Days to Full less than 45 Days
5. Click the top of the "Days to Full" column to sort the results by the least number of days remaining to reach full capacity.
6. Save the view with a specific name that reflects what the view is showing, for example, "Days to full aggregate capacity", and click the check mark (✓).
7. Click the **Scheduled Reports** button on the inventory page.
8. Click **Add Schedule** to add a new row to the **Report Schedules** page so that you can define the schedule characteristics for the new report.
9. Enter a name for the report schedule and complete the other report fields, then click the check mark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you might want to increase storage on aggregates reaching full capacity. Additionally, you might want to increase the Days Until Full capacity threshold to more than the default 7 days so that you receive events that provide more time to react to space getting low on aggregates.

## Creating a report to view aggregates that are 80% or more full

You can create a report to highlight the aggregates that are 80% or more full.

### What you'll need

- You must have the Application Administrator or Storage Administrator role.

Use the following steps to create a custom view that displays aggregates that are 80% or more full, then schedule a report to be generated for that view.

### Steps

1. In the left navigation pane, click **Storage > Aggregates**.
2. In the View menu, select **Capacity > All Aggregates**.
3. Select **Show/Hide** to remove any columns you do not want in the report.
4. Drag the "Available Data %" and the "Used Data %" columns near the "Aggregate" column.
5. Click the filter icon, add the following filters, and then click **Apply Filter**:
  - Used Data % is greater than 80%
6. Click the top of the "Used Data %" column to sort the results by capacity percent.
7. Save the view with a specific name that reflects what the view is showing, for example, "Aggregates nearing full", and click the check mark (✓) .
8. Click the **Scheduled Reports** button on the inventory page.
9. Click **Add Schedule** to add a new row to the Report Schedules page so that you can define the schedule characteristics for the new report.
10. Enter a name for the report schedule and complete the other report fields, then click the check mark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you might want to move some data from certain aggregates.

## Creating a report to view aggregates that are overcommitted

You can create a report to analyze storage capacity and use of aggregates, and to view aggregates that are overcommitted.

### What you'll need

- You must have the Application Administrator or Storage Administrator role.

Use the following steps to create a custom view that displays aggregates that are exceeding the overcommitted threshold, then schedule a report to be generated for that view.

### Steps

1. In the left navigation pane, click **Storage > Aggregates**.
2. In the View menu, select **Capacity > All Aggregates**.

3. Select **Show/Hide** to remove any columns that you do not want in the report.
4. Drag the “Overcommitted Capacity %” column near the “Aggregate” column.
5. Click the filter icon, add the following filters, and then click **Apply Filter**:
  - Overcommitted Capacity % is greater than 100%
6. Click the top of the “Overcommitted Capacity %” column to sort the results by capacity percent.
7. Save the view with a specific name that reflects what the view is showing, for example, “Aggregates overcommitted”, and click the check mark (✓).
8. Click the **Scheduled Reports** button on the inventory page.
9. Click **Add Schedule** to add a new row to the Report Schedules page so that you can define the schedule characteristics for the new report.
10. Enter a name for the report schedule and complete the other report fields, then click the check mark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you might want to add some more capacity to aggregates, or move some data from certain aggregates.

## Customizing volume capacity reports

These sample custom reports are used to help you identify and respond to potential problems related to volume capacity and performance.

### Creating a report to identify volumes nearing full capacity that have Snapshot Autodelete turned off

You can create a report that contains the list of volumes that are approaching full capacity with the Snapshot Autodelete feature disabled. The results can help identify volumes where you might want to configure Snapshot Autodelete.

#### What you'll need

- You must have the Application Administrator or Storage Administrator role.

Follow the steps below to create a custom view that displays the required columns in the correct order, and then schedule a report to be generated for that view.

#### Steps

1. In the left navigation pane, click **Storage > Volumes**.
2. In the View menu, select **Capacity > All Volumes**.
3. Select **Show/Hide** to remove any columns you do not want in the report.
4. Drag and drop the “Snapshot Autodelete” and “Days To Full” columns near the “Available Data Capacity” column.
5. Click the filter icon, add the following two filters, and then click **Apply Filter**:
  - Days To Full less than 30 days



- Snapshot Autodelete is Disabled

- Click the top of the **Days To Full** column so that the volumes with the fewest remaining days appear at the top of the list.
- Save the view with a specific name that reflects what the view is showing, for example “Vols near capacity”.
- Click the **Scheduled Reports** button on the inventory page.
- Enter a name for the report schedule and complete the other report fields, then click the check mark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you might want to enable Snapshot Autodelete on the volumes or find a way to increase the available space.

## Creating a report to identify space used by volumes with thin provisioning disabled

When a volume is not thin provisioned it takes up the full amount of space on the disk as defined when the volume was created. Identifying volumes that have thin provisioning disabled helps you decide whether you want to enable thin-provisioning on certain volumes.

### What you'll need

- You must have the Application Administrator or Storage Administrator role.

Follow the steps below to create a custom view that displays the required columns in the correct order, and then schedule a report to be generated for that view.

### Steps

- In the left navigation pane, click **Storage > Volumes**.
- In the View menu, select **Capacity > All Volumes**.
- Select **Show/Hide** to remove any columns you do not want in the report.
- Drag and drop the “Used Data %” and the “Thin Provisioned” columns near the “Available Data Capacity” column.
- Click the filter icon, add the following filter, **Thin provisioned** is **No**, and then click **Apply Filter**.
- Click the top of the “Used Data %” column to sort the results so that the volumes with the highest percentage appear at the top of the list.
- Save the view with a name to reflect what the view is showing, for example “Vols no thin provisioning”.
- Click the **Scheduled Reports** button on the inventory page.
- Click **Add Schedule** to add a new row to the **Report Schedules** page so you can define the schedule characteristics for the new report.
- Enter a name for the report schedule and complete the other report fields, then click the checkmark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you might want to enable thin provisioning on certain volumes.

## Creating a report to identify volumes on FabricPool aggregates that should move data to the cloud tier

You can create a report that contains the list of volumes that currently reside on FabricPool aggregates, that have a cloud recommendation of Tier, and that have a large amount of cold data. This report can help you decide if you should change the tiering policy for certain volumes to “auto” or “all” to offload more cold (inactive) data to the cloud tier.

### What you’ll need

- You must have the Application Administrator or Storage Administrator role.
- You must have configured FabricPool aggregates and have volumes on those aggregates.

Follow the steps below to create a custom view that displays the required columns in the correct order, and then schedule a report to be generated for that view.

### Steps

1. In the left navigation pane, click **Storage > Volumes**.
2. In the View menu, select **Performance > All Volumes**.
3. In the column chooser, make sure that the “Disk Type” column appears in the view.

Add or remove other columns to create a view that is important for your report.

4. Drag and drop the “Disk Type” column near the “Cloud Recommendation” column.
5. Click the filter icon, add the following three filters, and then click **Apply Filter**:
  - Disk Type contains fabricpool
  - Cloud Recommendation contains tier
  - Cold Data greater than 10 GB

The screenshot shows a filter configuration dialog box. At the top left is a blue square icon with a white filter symbol. Below it is a table with three filter rows. Each row has a column selector, an operator dropdown, a value input field, and a trash icon. The first row is 'Disk Types' contains 'fabricpool'. The second row is 'Cloud Recommendation' contains 'tier'. The third row is 'Cold Data' greater than '10' GB. Below the table is a '+ Add Filter' button. At the bottom are 'Reset', 'Cancel', and 'Apply Filter' buttons.

Disk Types	contains	fabricpool	
Cloud Recommendation	contains	tier	
Cold Data	greater than	10	GB

+ Add Filter

Reset Cancel Apply Filter

6. Click the top of the Cold Data column so that the volumes with the most cold data appear at the top of the view.

7. Save the view with a name to reflect what the view is showing, for example “Vols change tiering policy”.

Volumes - Performance / Vols change tiering policy 

Last updated: Feb 8, 2019, 12:26 PM 

Latency, IOPS, MBps are based on hourly samples averaged over the previous 72 hours.

View

Vols change tiering policy

Search Volumes

3

Assign Performance Threshold Policy

Clear Performance Threshold Policy

Schedule Report

Volume	Cold Data	Tiering Policy	Disk Types	Cloud Recommendation	Free Capacity	Total Capacity
nfs_vol4	38 GB	Snapshot Only	SSD (FabricPool)	Tier	2.62 TB	3 TB
kjagnfsdst	28 GB	Snapshot Only	SSD (FabricPool)	Tier	121 GB	150 GB

8. Click the **Scheduled Reports** button on the inventory page.
9. Click **Add Schedule** to add a new row to the Report Schedules page so that you can define the schedule characteristics for the new report.
10. Enter a name for the report schedule and complete the other report fields, then click the check mark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you might want to use System Manager or the ONTAP CLI to change the tiering policy to “auto” or “all” for certain volumes to offload more cold data to the cloud tier.

## Customizing Qtree capacity reports

These sample custom reports are used to help you identify and respond to potential problems related to Qtree capacity.

### Creating a report to view qtrees that are nearly full

You can create a report to analyze storage capacity and utilization of qtrees, and to view qtrees that are nearly full.

#### What you'll need

- You must have the Application Administrator or Storage Administrator role.

Use the following steps to create a custom view that displays qtrees that are nearly full, and then schedule a report to be generated for that view.

#### Steps

1. In the left navigation pane, click **Storage > Qtrees**.
2. Select **Show/Hide** to remove any columns you do not want in the report.
3. Drag the “Disk Used %” column near the “Qtrees” column.

4. Click the filter icon, add the following filters, and then click **Apply Filter**:
  - Disk Used % is greater than 75%
5. Click the top of the “Disk Used %” column to sort the results by capacity percent.
6. Save the view with a specific name that reflects what the view is showing, for example, “Qtrees nearing full”, and click the check mark (✓).
7. Click the **Scheduled Reports** button on the inventory page.
8. Click **Add Schedule** to add a new row to the **Report Schedules** page so you can define the schedule characteristics for the new report.
9. Enter a name for the report schedule and complete the other report fields, then click the check mark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you might want to adjust the disk hard and soft limits (if set), or balance data across the qtrees.

## Customizing NFS share reports

You can customize NFS share reports to analyze information about NFS export policies and rules for volumes on your storage systems. For example, you can customize reports to display volumes with inaccessible mount paths and volumes with the default export policy.

### Creating a report to view volumes that have an inaccessible mount path

You can create a report to find volumes that have an inaccessible mount path.

#### What you'll need

- You must have the Application Administrator or Storage Administrator role.

Use the following steps to create a custom view for volumes that have an inaccessible mount path, and then schedule a report to be generated for that view.

#### Steps

1. In the left navigation pane, click **Storage > NFS Shares**.
2. Select **Show/Hide** to remove any columns that you do not want in the report.
3. Click the filter icon, add the following filter, and then click **Apply Filter**:
  - Mount Path Active is No
4. Save the view with a specific name that reflects what the view is showing, for example “Volumes with an inaccessible mount path” and click the check mark (✓).
5. Click the **Scheduled Reports** button on the inventory page.
6. Click **Add Schedule** to add a new row to the Report Schedules page so you can define the schedule characteristics for the new report.
7. Enter a name for the report schedule and complete the other report fields, then click the check mark (✓) at

the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you might want to correct the inaccessible mount paths.

## Creating a report to view volumes that are using the default export policy

You can create a report to find volumes that are using the default export policy.

### What you'll need

- You must have the Application Administrator or Storage Administrator role.

Use the following steps to create a custom view for volumes that are using the default export policy, and then schedule a report to be generated for that view.

### Steps

1. In the left navigation pane, click **Storage > NFS Shares**.
2. Select **Show/Hide** to remove any columns that you do not want in the report.
3. Drag the "Export Policy" column near the "Volume" column.
4. Click the filter icon, add the following filter, and then click **Apply Filter**:
  - Export Policy contains default
5. Save the view with a specific name that reflects what the view is showing, for example "Volumes with a default export policy" and click the check mark (✓).
6. Click the **Scheduled Reports** button on the inventory page.
7. Click **Add Schedule** to add a new row to the Report Schedules page so you can define the schedule characteristics for the new report.
8. Enter a name for the report schedule and complete the other report fields, then click the check mark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you might want to configure a custom export policy.

## Customizing storage VM reports

You can create storage VM reports to analyze volume information and to view overall health and storage availability. For example, you can create reports to display SVMs reaching the maximum volume count and to analyze stopped SVMs.

### Creating a report to view storage VMs reaching the maximum volume limit

You can create a report to find SVMs that are reaching the maximum volume limit.

### What you'll need

- You must have the Application Administrator or Storage Administrator role.

Use the following steps to create a custom view that displays storage VMs that are reaching the maximum volume limit, and then schedule a report to be generated for that view.

### Steps

1. In the left navigation pane, click **Storage > Storage VMs**.
2. Select **Show/Hide** to remove any columns you do not want in the report.
3. Drag the “Volume Count” and “Maximum Allowed Volumes” columns near the “Storage VM” column.
4. Click the top of the “Maximum Allowed Volumes” column to sort the results by the highest number of volumes.
5. Save the view with a specific name that reflects what the view is showing, for example “SVMs reaching max volumes” and click the check mark (✓).
6. Click the **Scheduled Reports** button on the inventory page.
7. Click **Add Schedule** to add a new row to the **Report Schedules** page so that you can define the schedule characteristics for the new report.
8. Enter a name for the report schedule and complete the other report fields, then click the check mark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you might want to balance the volumes assigned to storage VMs or, if possible, use ONTAP System Manager to change the maximum allowed volumes.

## Creating a report to view stopped storage VMs

You can create a report to display a list of all stopped SVMs.

### What you’ll need

- You must have the Application Administrator or Storage Administrator role.

Use the following the steps to create a custom view that displays stopped storage VMs, and then schedule a report to be generated for that view.

### Steps

1. In the left navigation pane, click **Storage > Storage VMs**.
2. In the View menu, select **Health > All Storage VMs**.
3. Select **Show/Hide** to remove any columns that you do not want in the report.
4. Drag the “State” column near the “Storage VM” column.
5. Click the filter icon, add the following filter, and then click **Apply Filter**:
  - State is Stopped
6. Save the view with a specific name that reflects what the view is showing, for example “Stopped SVMs” and click the check mark (✓).
7. Click the **Scheduled Reports** button on the inventory page.

8. Click **Add Schedule** to add a new row to the **Report Schedules** page so that you can define the schedule characteristics for the new report.
9. Enter a name for the report schedule and complete the other report fields, then click the check mark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you might want to investigate why the SVM is stopped to see if you should restart the stopped SVMs.

## Customizing volume relationship reports

The Volume Relationships Inventory report enables you to analyze the storage inventory details in a cluster, understand the degree of protection that is required for volumes, and filter the volume details based on source of failure, pattern, and schedules.

### Creating a report to group volume relationships by source of failure

You can create a report that groups volumes by the reason the relationship is in an unhealthy state.

#### What you'll need

- You must have the Application Administrator or Storage Administrator role.

Use the following steps to create a custom view that groups volumes by source of failure, and then schedule a report to be generated for that view.

#### Steps

1. In the left navigation pane, click **Storage > Volumes**.
2. In the View menu, select **Relationship > All Relationships**.
3. Select **Show/Hide** to make sure the "Relationship Health" and "Unhealthy Reason" columns appear in the view.

Add or remove other columns to create a view that is important for your report.

4. Drag the "Relationship Health" and "Unhealthy Reason" columns near the "State" column.
5. Click the filter icon, add the following filter, and then click **Apply Filter**:
  - Relationship health is bad
6. Click the top of the "Unhealthy Reason" column to group the volume relationships by source of failure.
7. Save the view with a specific name that reflects what the view is showing, for example, "Vol relationships by failure".
8. Click the **Scheduled Reports** button on the inventory page.
9. Enter a name for the report schedule and complete the other report fields, then click the check mark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the

recipients listed using the specified frequency.

Based on the results shown in the report, you can investigate the source and impact of each type of failure.

## Creating a report to group volume relationships by issue

You can create a report that groups volume relationships by issue.

### What you'll need

- You must have the Application Administrator or Storage Administrator role.

Use the following steps to create a custom view that groups volume relationships by issue, and then schedule a report to be generated for that view.

### Steps

1. In the left navigation pane, click **Storage > Volumes**.
2. In the View menu, select **Relationship > All Relationships**.
3. Select **Show/Hide** to remove any columns you do not want in the report.
4. Drag the "Unhealthy Reason" column near the "State" column.
5. Click the top of the "Unhealthy Reason" column to group the volumes by issue.
6. Save the view with a specific name that reflects what the view is showing, for example, "Vol relationships by issue".
7. Click the **Scheduled Reports** button on the inventory page.
8. Enter a name for the report schedule and complete the other report fields, then click the check mark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you can investigate the source and impact of each type of issue.

## Creating a report to view volume transfer trends at specific time intervals

You can create a report that displays volume transfer trends at specific time intervals.

### What you'll need

- You must have the Application Administrator or Storage Administrator role.

Use the following steps to create a custom view for volumes at specific time intervals, and then schedule a report to be generated for that view.

### Steps

1. In the left navigation pane, click **Storage > Volumes**.
2. In the View menu, select **Relationship > Last 1 month Transfer Status**.
3. Select **Show/Hide** to remove any columns you do not want in the report.
4. Drag the Transfer Duration column near the "Operational Result" column.



5. Click the filter icon, add the following filter, and then click **Apply Filter**:
  - Transfer End Time in the last 7 Days
6. Click the top of the “Transfer Duration” column to sort the volumes by time interval.
7. Save the view with a specific name that reflects what the view is showing, for example “Volumes by duration”.
8. Click the **Scheduled Reports** button on the inventory page.
9. Enter a name for the report schedule, set the frequency as **Weekly**, and complete the other report fields, then click the check mark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you can investigate the transfer time intervals.

## Creating a report to view failed or successful volume transfer

You can create a report that displays the status of volume transfers. You can view both failed and successful volume transfers in this report.

### What you'll need

- You must have the Application Administrator or Storage Administrator role.

Use the following steps to create a custom view to show which transfers failed and which were successful, and then schedule a report to be generated for that view.

### Steps

1. In the left navigation pane, click **Storage > Volumes**.
2. In the View menu, select **Relationship > Last 1 month Transfer Status**.
3. Select **Show/Hide** to remove any columns that you do not want in the report.
4. Drag the “Operation Result” column near the “State” column.
5. Click the top of the “Operation Result” column to sort the volumes by the status.
6. Save the view with a specific name that reflects what the view is showing, for example “Volumes by transfer status”.
7. Click the **Scheduled Reports** button on the inventory page.
8. Enter a name for the report schedule and complete the other report fields, then click the check mark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you can investigate the transfer status.

## Creating a report to view volume transfers based on transfer size

You can create a report to view volume transfers based on transfer size.

## What you'll need

- You must have the Application Administrator or Storage Administrator role.

Use the following steps to create a custom view for volume transfers based on transfer size, and then schedule a report to be generated for that view.

### Steps

1. In the left navigation pane, click **Storage > Volumes**.
2. In the View menu, select **Relationship > Last 1 month Transfer Rate**.
3. Click the top of the "Total Transfer Size" column to sort the volume transfers by size.
4. Save the view with a specific name that reflects what the view is showing, for example "Volumes by transfer size".
5. Click the **Scheduled Reports** button on the inventory page.
6. Enter a name for the report schedule and complete the other report fields, then click the check mark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you can investigate the volume relationships by transfer size.

## Creating a report to view volume transfers grouped by day

You can create a report to view volume transfers grouped by day.

### What you'll need

- You must have the Application Administrator or Storage Administrator role.

Use the following steps to create a custom view for volume transfers grouped by day, and then schedule a report to be generated for that view.

### Steps

1. In the left navigation pane, click **Storage > Volumes**.
2. In the View menu, select **Relationship > Last 1 month Transfer Rate**.
3. Click the top of the "Day" column to sort the volume transfers by day.
4. Save the view with a specific name that reflects what the view is showing, for example "Volume transfers by day".
5. Click the **Scheduled Reports** button on the inventory page.
6. Enter a name for the report schedule and complete the other report fields, then click the check mark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you can investigate the volume transfers by day.

# Customizing volume performance reports

These sample custom reports are used to help you identify and respond to potential problems related to volume performance.

## Creating a report to view volumes with a high amount of cold data on an aggregate that is not FabricPool-enabled

You can create a report to display volumes with a high amount of cold data on a non-FabricPool aggregate. This can help you identify volumes that should be moved to a FabricPool aggregate.

### What you'll need

- You must have the Application Administrator or Storage Administrator role.

Use the following steps to create a custom view for volumes with a high amount of cold data on a non-FabricPool-enabled aggregate, and then schedule a report to be generated for that view.

### Steps

1. In the left navigation pane, click **Storage > Volumes**.
2. In the View menu, select **Performance > All Volumes**.
3. Select **Show/Hide** to make sure the “Disk Type” column appears in the view.

Add or remove other columns to create a view that is important for your report.

4. Drag the “Disk Type” column near the “Cold Data” column.
5. Click the filter icon, add the following filter, and then click **Apply Filter**:
  - Cold Data greater than 100 GB
  - Disk Type contains SSD
6. Click the top of the “Disk Type” column to sort the volumes by disk type so that the disk type SSD (FabricPool) is at the bottom.
7. Save the view with a specific name that reflects what the view is showing, for example “Cold data vols not FabricPool”.
8. Click the **Scheduled Reports** button on the inventory page.
9. Enter a name for the report schedule and complete the other report fields, then click the check mark (✓) at the end of the row.

The report is sent immediately as a test. After that, the report generates and is sent by email to the recipients listed using the specified frequency.

Based on the results shown in the report, you can find volumes that are good candidates to be moved to FabricPool aggregates.

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