Monitor your NetApp HCI system

HCI

NetApp
July 15, 2020

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Monitor storage and compute resources with the HCC Dashboard

With the NetApp Hybrid Control (HCC) Dashboard, you can view all your storage and compute resources at a glance.

Only compute nodes that are managed and clusters with at least one managed node in H-series hardware appear on the Dashboard.

Steps

1. Open a web browser and browse to the IP address of the management node. For example:

   ```
   https://[management node IP address]
   ```

2. Log in to NetApp Hybrid Cloud Control by providing the NetApp HCI storage cluster administrator credentials.
3. View the Dashboard:
   - **Storage**: Displays the number of storage clusters, storage nodes, and total volumes.
   - **Compute**: Displays the number of compute clusters and total compute nodes.
   - **Storage Capacity**: Displays the total physical storage space available in your cluster on the **RAW** tab, and information about the provisioned storage on the **EFFECTIVE** tab.

To view cluster health, look at the SolidFire Active IQ Dashboard. See Monitor performance, capacity, and cluster health in SolidFire Active IQ.

Find more information

- NetApp HCI Documentation Center
- NetApp HCI Resources Page

View your inventory in the Nodes page

You can view both your storage and compute assets in your system and determine their IP addresses, names, and software versions.

You can view storage information for your two-, three-, and four-node systems and any NetApp HCI Witness Nodes associated with two-node or three-node clusters.

Witness Nodes manage quorum within the cluster; they are not used for storage. Witness Nodes are applicable only to NetApp HCI and not to all-flash storage environments.

For more information about Witness Nodes, see Nodes definitions.

Steps

1. Open a web browser and browse to the IP address of the management node. For example:

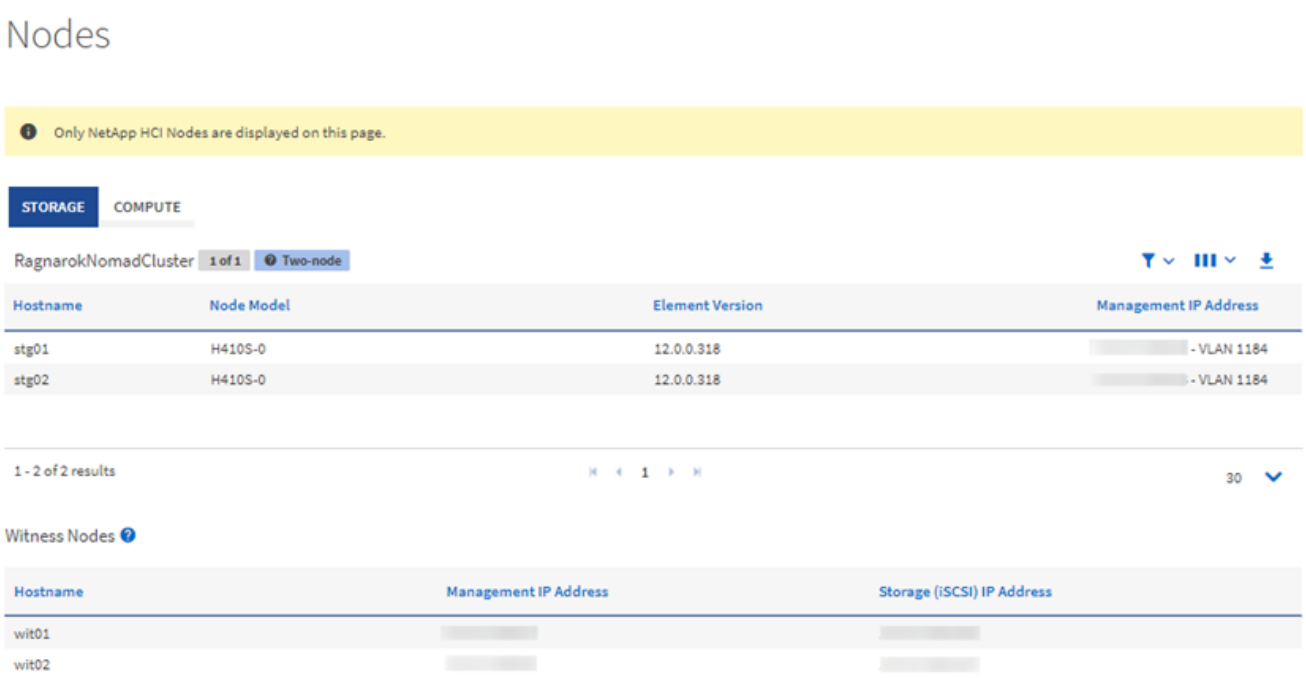
   ```
   https://[management node IP address]
   ```

2. Log in to NetApp Hybrid Cloud Control by providing the NetApp HCI storage cluster administrator credentials.
3. In the left navigation blue box, select the NetApp HCI installation.

   The Hybrid Cloud Control Dashboard appears.

4. In the left navigation, click **Nodes**.

   The Storage tab appears.



5. On the **Storage** tab of the Nodes page, review the following information:
   a. Two-node clusters: A “two-node” label appears on the Storage tab and the associated Witness Nodes are listed.
   b. Three-node clusters: The storage nodes and associated Witness Nodes are listed. Three-node clusters have a Witness Node deployed on standby to maintain high availability in the case of node failure.

c. Clusters with four nodes or more: Information for clusters with four or more nodes appears. Witness Nodes do not apply; the Witness Nodes table does not appear.

6. To view compute inventory information, click **Compute**.
7. Options:
   a. To filter the list of items in the results, click the **Filter** icon and select the filters. You can also enter text for the filter.
   b. To show or hide columns, click the **Show/Hide Columns** icon.
   c. To download the table, click the **Download** icon.

To view the number of storage and compute resources, look at the Hybrid Cloud Control (HCC) Dashboard. See Monitor storage and compute resources with the HCC Dashboard.

Find more information

- NetApp HCI Documentation Center
- NetApp HCI Resources Page

Monitor performance, capacity, and cluster health with SolidFire Active IQ

By using SolidFire Active IQ, you can monitor the events, performance, and capacity of your clusters. You can access SolidFire Active IQ from the NetApp Hybrid Control Dashboard.

Before you begin

- You must have a NetApp Support account to take advantage of this service.
- You must have authorization to use management node REST APIs.
- You have deployed a management node running version 12.0 or later.
- Your cluster version is running NetApp Element software 12.0 or later.
- You have Internet access. The Active IQ collector service cannot be used from dark sites.

About this task

You can obtain continually updated historical views of cluster-wide statistics. You can set up notifications to alert you about specified events, thresholds, or metrics on a cluster so that they can be addressed quickly.

By default, NetApp HCI sends performance and alert statistics to the NetApp SolidFire Active IQ service. As part of your normal support contract, NetApp Support monitors this data and alerts you to

potential system issues.

Steps

1. Open a web browser and browse to the IP address of the management node. For example:

   ```
   https://[management node IP address]
   ```

2. Log in to NetApp Hybrid Cloud Control by providing the NetApp HCI storage cluster administrator credentials.
3. From the Dashboard, click the menu on the upper right.
4. Select **View Active IQ**.

   The SolidFire Active IQ Dashboard appears.

5. To learn about SolidFire Active IQ, from the Dashboard, click the menu icon on the upper right and click **Documentation**.
6. From the SolidFire Active IQ interface, verify that the NetApp HCI compute and storage nodes are reporting telemetry correctly to Active IQ:
   a. If you have more than one NetApp HCI installation, click **Select a Cluster** and choose the cluster from the list.
   b. In the left navigation pane, click **Nodes**.
7. If a node or nodes are missing from the list, contact NetApp Support.

To view the number of storage and compute resources, look at the Hybrid Cloud Control (HCC) Dashboard. See Monitor storage and compute resources with the HCC Dashboard.

Find more information

- NetApp SolidFire Active IQ Documentation
- NetApp HCI Documentation Center
- NetApp HCI Resources Page

Collect NetApp HCI logs

If you have trouble with your NetApp HCI installation, you can collect logs to send to NetApp Support to help with diagnosis. You can either use NetApp Hybrid Cloud Control or the REST API to collect logs.

- Use NetApp Hybrid Cloud Control to collect NetApp HCI logs

- Use the REST API to collect NetApp HCI logs

Use NetApp Hybrid Cloud Control to collect NetApp HCI logs

You can access the log collection area from the NetApp Hybrid Cloud Control Dashboard.

Steps

1. Open a web browser and browse to the IP address of the management node. For example:

   ```
   https://[management node IP address]
   ```

2. Log in to NetApp Hybrid Cloud Control by providing the NetApp HCI storage cluster administrator credentials.
3. From the Dashboard, click the menu on the upper right.
4. Select **Collect Logs**.

   The **Collect Logs** page appears. If you have collected logs before, you can download the existing log package, or begin a new log collection.

5. Select a date range in the **Date Range** drop-down menu to specify what dates the logs should include.

   If you specify a custom start date, you can select the date to begin the date range. Logs will be collected from that date up to the present time.

6. In the **Log Collection** section, select the types of log files the log package should include.

   For storage and compute logs, you can expand the list of storage or compute nodes and select individual nodes to collect logs from (or all nodes in the list).

7. Click **Collect Logs** to start log collection.

   Log collection runs in the background, and the page shows the progress.

   Depending on the logs you collect, the progress bar might remain at a certain percentage for several minutes, or progress very slowly at some points.

8. Click **Download Logs** to download the log package.

   The log package is in a compressed UNIX .tgz file format.

Use the REST API to collect NetApp HCI logs

You can use REST API to collect NetApp HCI logs.

Steps

1. Locate the storage cluster ID:
   a. Open the management node REST API UI on the management node:

      ```
      https://[management node IP]/logs/1
      ```

   b. Click **Authorize** and complete the following:
      i. Enter the cluster user name and password.
      ii. Enter the client ID as `mnode-client` if the value is not already populated.
      iii. Click **Authorize** to begin a session.
2. Collect logs from NetApp HCI:
   a. Click **POST /bundle**.
   b. Click **Try it out**.
   c. Change the values of the following parameters in the **Request body** field to true or false depending on which type of logs you need to collect:
      i. `computeLogs`
      ii. `mnodeLogs`
      iii. `storageCrashDumps`
      iv. `storageLogs`
   d. Click **Execute** to begin log collection.
      The response should return a response similar to the following:

      ```
      {
        "_links": {
          "self": "https://10.1.1.5/logs/1/bundle"
        },
        "taskId": "4157881b-z889-45ce-adb4-92b1843c53ee",
        "taskLink": "https://10.1.1.5/logs/1/bundle"
      }
      ```

3. Check on the status of the log collection task:
   a. Click **GET /bundle**.
   b. Click **Try it out**.
   c. Click **Execute** to return a status of the collection task.
   d. Scroll to the bottom of the response body.

      You should see a `percentComplete` attribute detailing the progress of the collection. If the

collection is complete, the `downloadLink` attribute contains the full download link including the file name of the log package.

e. Copy the file name at the end of the `downloadLink` attribute.

4. Download the collected log package:
   a. Click **GET /bundle/{filename}**.
   b. Click **Try it out**.
   c. Paste the file name you copied earlier into the `filename` parameter text field.
   d. Click **Execute**.

      After execution, a download link appears in the response body area.

   e. Click **Download file** and save the resulting file to your computer.

      The log package is in a compressed UNIX .tgz file format.

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