



# Work with the management node UI

## HCI

NetApp  
March 16, 2022

This PDF was generated from [https://docs.netapp.com/us-en/hci/docs/task\\_mnode\\_work\\_overview\\_UI.html](https://docs.netapp.com/us-en/hci/docs/task_mnode_work_overview_UI.html) on March 16, 2022. Always check docs.netapp.com for the latest.

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# Work with the management node UI

## Management node UI overview

With the management node UI (<https://<mNodeIP>:442>), you can make changes to network and cluster settings, run system tests, or use system utilities.

Tasks you can perform with the management node UI:

- [Configure alert monitoring on NetApp HCI](#)
- [Modify and test the management node network, cluster, and system settings](#)
- [Run system utilities from the management node](#)


### Find more information

- [Access the management node](#)
- [NetApp Element Plug-in for vCenter Server](#)
- [NetApp HCI Resources Page](#)

## Configure alert monitoring on NetApp HCI

You can configure settings to monitor alerts on your NetApp HCI system.

NetApp HCI alert monitoring forwards NetApp HCI storage cluster system alerts to vCenter Server, enabling you to view all alerts for NetApp HCI from the vSphere Web Client interface.





These tools are not configured or used for storage-only clusters, such as SolidFire all-flash storage. Running the tools for these clusters results in the following 405 error, which is expected given the configuration: `webUIParseError : Invalid response from server. 405`

1. Open the per-node management node UI ([https://\[IP address\]:442](https://[IP address]:442)).
2. Click the **Alert Monitor** tab.
3. Configure the alert monitoring options.

### Alert monitoring options

| options                 | Description   |
|-------------------------|---|
| Run Alert Monitor Tests | <p>Runs the monitor system tests to check for the following:</p> <ul style="list-style-type: none"><li>• NetApp HCI and VMware vCenter connectivity</li><li>• Pairing of NetApp HCI and VMware vCenter through datastore information supplied by the QoSSIOC service</li><li>• Current NetApp HCI alarm and vCenter alarm lists</li></ul> |

| options                      | Description  |
|------------------------------|--|
| Collect Alerts               | Enables or disables the forwarding of NetApp HCI storage alarms to vCenter. You can select the target storage cluster from the drop-down list. The default setting for this option is <code>Enabled</code> .   |
| Collect Best Practice Alerts | Enables or disables the forwarding of NetApp HCI storage Best Practice alerts to vCenter. Best Practice alerts are faults that are triggered by a sub-optimal system configuration. The default setting for this option is <code>Disabled</code> . When disabled, NetApp HCI storage Best Practice alerts do not appear in vCenter.  |
| Send Support Data To AIQ     | <p>Controls the flow of support and monitoring data from VMware vCenter to NetApp SolidFire Active IQ.</p> <p>Options are the following:</p> <ul style="list-style-type: none"> <li>• <code>Enabled</code>: All vCenter alarms, NetApp HCI storage alarms, and support data are sent to NetApp SolidFire Active IQ. This enables NetApp to proactively support and monitor the NetApp HCI installation, so that possible problems can be detected and resolved before affecting the system.</li> <li>• <code>Disabled</code>: No vCenter alarms, NetApp HCI storage alarms, or support data are sent to NetApp SolidFire Active IQ.</li> </ul> <div>  <p>If you turned off the <b>Send data to AIQ</b> option using NetApp Deployment Engine, you need to <a href="#">enable telemetry</a> again using the management node REST API to configure the service from this page.</p> </div> |

| options                       | Description   |
|-------------------------------|---|
| Send Compute Node Data To AIQ | <p>Controls the flow of support and monitoring data from the compute nodes to NetApp SolidFire Active IQ.</p> <p>Options are the following:</p> <ul style="list-style-type: none"> <li>• Enabled: Support and monitoring data about the compute nodes is transmitted to NetApp SolidFire Active IQ to enable proactive support for the compute node hardware.</li> <li>• Disabled: Support and monitoring data about the compute nodes is not transmitted to NetApp SolidFire Active IQ.</li> </ul> <div>  <p>If you turned off the <b>Send data to AIQ</b> option using NetApp Deployment Engine, you need to <a href="#">enable telemetry</a> again using the management node REST API to configure the service from this page.</p> </div> |

## Find more Information

- [NetApp Element Plug-in for vCenter Server](#)
- [NetApp HCI Resources Page](#)

## Modify and test the management node network, cluster, and system settings

You can modify and test the management node network, cluster, and system settings.

- [Update management node network settings](#)
- [Update management node cluster settings](#)
- [Test the management node settings](#)

## Update management node network settings

On the Network Settings tab of the per-node management node UI, you can modify the management node network interface fields.

1. Open the per-node management node UI.
2. Click the **Network Settings** tab.
3. View or enter the following information:
  - a. **Method:** Choose one of the following methods to configure the interface:
    - `loopback`: Use to define the IPv4 loopback interface.
    - `manual`: Use to define interfaces for which no configuration is done by default.

- **dhcp:** Use to obtain an IP address via DHCP.
  - **static:** Use to define Ethernet interfaces with statically allocated IPv4 addresses.
- b. **Link Speed:** The speed negotiated by the virtual NIC.
  - c. **IPv4 Address:** The IPv4 address for the eth0 network.
  - d. **IPv4 Subnet Mask:** Address subdivisions of the IPv4 network.
  - e. **IPv4 Gateway Address:** Router network address to send packets out of the local network.
  - f. **IPv6 Address:** The IPv6 address for the eth0 network.
  - g. **IPv6 Gateway Address:** Router network address to send packets out of the local network.



The IPv6 options are not supported for 11.3 or later versions of the management node.

- h. **MTU:** Largest packet size that a network protocol can transmit. Must be greater than or equal to 1500. If you add a second storage NIC, the value should be 9000.
- i. **DNS Servers:** Network interface used for cluster communication.
- j. **Search Domains:** Search for additional MAC addresses available to the system.
- k. **Status:** Possible values:
  - UpAndRunning
  - Down
  - Up
- l. **Routes:** Static routes to specific hosts or networks via the associated interface the routes are configured to use.

## Update management node cluster settings

On the Cluster Settings tab of the per-node UI for the management node, you can modify cluster interface fields when a node is in Available, Pending, PendingActive, and Active states.

1. Open the per-node management node UI.
2. Click the **Cluster Settings** tab.
3. View or enter the following information:
  - **Role:** Role the management node has in the cluster. Possible value: `Management`.
  - **Version:** Element software version running on the cluster.
  - **Default Interface:** Default network interface used for management node communication with the cluster running Element software.

## Test the management node settings

After you change management and network settings for the management node and commit the changes, you can run tests to validate the changes you made.

1. Open the per-node management node UI.
2. In the management node UI, click **System Tests**.

3. Complete any of the following:

- a. To verify that the network settings you configured are valid for the system, click **Test Network Config**.
- b. To test network connectivity to all nodes in the cluster on both 1G and 10G interfaces using ICMP packets, click **Test Ping**.

4. View or enter the following:

- **Hosts:** Specify a comma-separated list of addresses or host names of devices to ping.
- **Attempts:** Specify the number of times the system should repeat the test ping. Default: 5.
- **Packet Size:** Specify the number of bytes to send in the ICMP packet that is sent to each IP. The number of bytes must be less than the maximum MTU specified in the network configuration.
- **Timeout mSec:** Specify the number of milliseconds to wait for each individual ping response. Default: 500 ms.
- **Total Timeout Sec:** Specify the time in seconds the ping should wait for a system response before issuing the next ping attempt or ending the process. Default: 5.
- **Prohibit Fragmentation:** Enable the DF (do not fragment) flag for the ICMP packets.

## Find more Information

- [NetApp Element Plug-in for vCenter Server](#)
- [NetApp HCI Resources Page](#)

## Run system utilities from the management node

You can use the per-node UI for the management node to create or delete cluster support bundles, reset node configuration settings, or restart networking.

### Steps

1. Open the per-node management node UI using the management node admin credentials.
2. Click **System Utilities**.
3. Click the button for the utility that you want to run:
  - a. **Control Power:** Reboots, power cycles, or shuts down the node. Specify any of the following options.



This operation causes temporary loss of networking connectivity.

- **Action:** Options include `Restart` and `Halt` (power off).
  - **Wakeup Delay:** Any additional time before the node comes back online.
- b. **Create Cluster Support Bundle:** Creates the cluster support bundle to assist NetApp Support diagnostic evaluations of one or more nodes in a cluster. Specify the following options:
    - **Bundle Name:** Unique name for each support bundle created. If no name is provided, then "supportbundle" and the node name are used as the file name.
    - **Mvip:** The MVIP of the cluster. Bundles are gathered from all nodes in the cluster. This parameter is required if the `Nodes` parameter is not specified.
    - **Nodes:** The IP addresses of the nodes from which to gather bundles. Use either `Nodes` or `Mvip`, but not both, to specify the nodes from which to gather bundles. This parameter is required if `Mvip` is not specified.

- **Username:** The cluster admin user name.
  - **Password:** The cluster admin password.
  - **Allow Incomplete:** Allows the script to continue to run if bundles cannot be gathered from one or more of the nodes.
  - **Extra Args:** This parameter is fed to the `sf_make_support_bundle` script. This parameter should be used only at the request of NetApp Support.
- c. **Delete All Support Bundles:** Deletes any current support bundles on the management node.
- d. **Reset Node:** Resets the management node to a new install image. This changes all settings except the network configuration to the default state. Specify the following options:
- **Build:** The URL to a remote Element software image to which the node will be reset.
  - **Options:** Specifications for running the reset operations. Details are be provided by NetApp Support, if required.



This operation causes temporary loss of networking connectivity.

- e. **Restart Networking:** Restarts all networking services on the management node.



This operation causes temporary loss of networking connectivity.

## Find more Information

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