<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage support connections</td>
<td>1</td>
</tr>
<tr>
<td>Start a remote NetApp Support session</td>
<td>1</td>
</tr>
<tr>
<td>Manage SSH functionality on the management node</td>
<td>1</td>
</tr>
</tbody>
</table>
Manage support connections

Start a remote NetApp Support session

If you require technical support for your NetApp HCI or SolidFire all-flash storage system, NetApp Support can connect remotely with your system. To start a session and gain remote access, NetApp Support can open a reverse Secure Shell (SSH) connection to your environment.

About this task

You can open a TCP port for an SSH reverse tunnel connection with NetApp Support. This connection enables NetApp Support to log in to your management node. If your management node is behind a proxy server, the following TCP ports are required in the sshd.config file:

<table>
<thead>
<tr>
<th>TCP port</th>
<th>Description</th>
<th>Connection direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>443</td>
<td>API calls/HTTPS for reverse port forwarding via open support tunnel to the web UI</td>
<td>Management node to storage nodes</td>
</tr>
<tr>
<td>22</td>
<td>SSH login access</td>
<td>Management node to storage nodes or from storage nodes to management node</td>
</tr>
</tbody>
</table>

By default, the capability for remote access is enabled on the management node. To disable remote access functionality, see Manage SSH functionality on the management node. You can enable remote access functionality again, if needed.

Steps

• Log in to your management node and open a terminal session.
• At a prompt, enter the following:

  rst -r sfsupport.solidfire.com -u element -p <port_number>

• To close the remote support tunnel, enter the following:

  rst --killall

Find more information

• NetApp Element Plug-in for vCenter Server
• NetApp HCI Resources Page

Manage SSH functionality on the management node

You can disable, re-enable, or determine the status of the SSH capability on the management node (mNode) using the REST API. SSH capability that provides NetApp Support remote support tunnel (RST) session access is enabled on the management
node by default.

What you’ll need

- **Cluster administrator permissions**: You have permissions as administrator on the storage cluster.
- **Element software**: Your cluster is running NetApp Element software 11.3 or later.
- **Management node**: You have deployed a management node running version 11.3 or later.
- **Management services updates**: You have updated your management services bundle to version 2.17.

Options

You can do any of the following tasks after you authenticate:

- Disable or enable the SSH capability on the management node
- Determine status of the SSH capability on the management node

**Disable or enable the SSH capability on the management node**

You can disable or re-enable SSH capability on the management node. SSH capability that provides NetApp Support remote support tunnel (RST) session access is enabled on the management node by default. Disabling SSH does not terminate or disconnect existing SSH client sessions to the management node. If you disable SSH and elect to re-enable it at a later time, you can do so using the same API.

**API command**

```
```

You can find the bearer ID used by the API by running a GET command and retrieving it from the curl response.

**REST API UI steps**

1. Access the REST API UI for the management node API service by entering the management node IP address followed by `/mnode/`:

   ```
   https://<managementNodeIP>/mnode/
   ```

2. Select **Authorize** and complete the following:
   a. Enter the cluster user name and password.
   b. Enter the client ID as `mnode-client`.
   c. Select **Authorize** to begin a session.
   d. Close the window.

3. From the REST API UI, select **PUT /settings/ssh**.
   a. Click **Try it out**.
   b. Set the **enabled** parameter to `false` to disable SSH or `true` to re-enable SSH capability that you
Determine status of the SSH capability on the management node

You can determine whether or not SSH capability is enabled on the management node using a management node service API. SSH is enabled by default on the management node.

API command

```bash
```

You can find the bearer ID used by the API by running a GET command and retrieving it from the curl response.

REST API UI steps

1. Access the REST API UI for the management node API service by entering the management node IP address followed by `/mnode/`:

   https://<managementNodeIP>/mnode/

2. Select Authorize and complete the following:
   a. Enter the cluster user name and password.
   b. Enter the client ID as `mnode-client`.
   c. Select Authorize to begin a session.
   d. Close the window.

3. From the REST API UI, select GET `/settings/ssh`.
   a. Click Try it out.
   b. Click Execute.

Find more information

- NetApp Element Plug-in for vCenter Server
- NetApp HCI Resources Page