Required cluster configuration information

Cluster and storage switches

NetApp
October 03, 2022

This PDF was generated from https://docs.netapp.com/us-en/ontap-systems-switches/switch-cisco-9336c-fx2/setup-install-cshm-file.html on October 03, 2022. Always check docs.netapp.com for the latest.

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Required cluster configuration information

To configure your cluster, you need the appropriate number and type of cables and cable connectors for your switches. Depending on the type of switch you are initially configuring, you need to connect to the switch console port with the included console cable; you also need to provide specific network information.

Required network information for all switches

You need the following network information for all switch configurations:

- IP subnet for management network traffic
- Host names and IP addresses for each of the storage system controllers and all applicable switches
- Most storage system controllers are managed through the e0M interface by connecting to the Ethernet service port (wrench icon). On AFF A800 and AFF A700 systems, the e0M interface uses a dedicated Ethernet port.

Refer to the Hardware Universe for latest information.

Required network information for Cisco Nexus 9336C-FX2, 92300YC, 3232C, 3132Q-V, and 5596UP/5596T switches

For the Cisco Nexus 9336C-FX2, 92300YC, 3232C, 3132Q-V, and 5596UP/5596T switches, you need to provide applicable responses to the following initial setup questions when you first boot the switch. Your site's security policy defines the responses and services to enable.

- Abort Auto Provisioning and continue with normal setup? (yes/no)

  Respond with **yes**. The default is no.

- Do you want to enforce secure password standard? (yes/no)

  Respond with **yes**. The default is yes.

- Enter the password for admin:

  The default password is "admin"; you must create a new, strong password. A weak password can be rejected.

- Would you like to enter the basic configuration dialog? (yes/no)

  Respond with **yes** at the initial configuration of the switch.

- Create another login account? (yes/no)

  Your answer depends on your site's policies on alternate administrators. The default is **no**.

- Configure read-only SNMP community string? (yes/no)

  Respond with **no**. The default is no.

- Configure read-write SNMP community string? (yes/no)

Respond with **no**. The default is no.

- Enter the switch name.

  The switch name is limited to 63 alphanumeric characters.

- Continue with Out-of-band (mgmt0) management configuration? (yes/no)

  Respond with **yes** (the default) at that prompt. At the mgmt0 IPv4 address: prompt, enter your IP address: ip_address.

- Configure the default-gateway? (yes/no)

  Respond with **yes**. At the IPv4 address of the default-gateway: prompt, enter your default_gateway.

- Configure advanced IP options? (yes/no)

  Respond with **no**. The default is no.

- Enable the telnet service? (yes/no)

  Respond with **no**. The default is no.

- Enabled SSH service? (yes/no)

  Respond with **yes**. The default is yes.

  SSH is recommended when using Cluster Switch Health Monitor (CSHM) for its log collection features. SSHv2 is also recommended for enhanced security.

- Enter the type of SSH key you want to generate (dsa/rsa/rsa1). The default is **rsa**.
- Enter the number of key bits (1024-2048).
- Configure the NTP server? (yes/no)

  Respond with **no**. The default is no.

- Configure default interface layer (L3/L2):

  Respond with **L2**. The default is L2.

- Configure default switch port interface state (shut/noshut):

  Respond with **noshut**. The default is noshut.

- Configure CoPP system profile (strict/moderate/lenient/dense):

  Respond with **strict**. The default is strict.

- Would you like to edit the configuration? (yes/no)

  You should see the new configuration at this point. Review and make any necessary changes to the configuration you just entered. Respond with **no** at the prompt if you are satisfied with the configuration. Respond with **yes** if you want to edit your configuration settings.

- Use this configuration and save it? (yes/no)

  Respond with **yes** to save the configuration. This automatically updates the kickstart and system images.

  > If you do not save the configuration at this stage, none of the changes will be in effect the next time you reboot the switch.

  For more information about the initial configuration of your switch, see the following guides:

  Cisco Nexus 9336C-FX2 Installation and Upgrade Guides

  Cisco Nexus 92300YC Installation and Upgrade Guides

  Cisco Nexus 5000 Series Hardware Installation Guide

  Cisco Nexus 3000 Series Hardware Installation Guide

Install the Cluster Switch Health Monitor (CSHM) configuration file for 92300YC switches

You can use this procedure to install the applicable configuration file for cluster switch health monitoring of Nexus 92300YC cluster switches. In ONTAP releases 9.5P7 and earlier and 9.6P2 and earlier, you must download the cluster switch health monitor configuration file separately. In ONTAP releases 9.5P8 and later, 9.6P3 and later, and 9.7 and later, the cluster switch health monitor configuration file is bundled with ONTAP.

Before you setup the switch health monitor for 92300YC cluster switches, you must ensure that the ONTAP cluster is up and running.

> It is advisable to enable SSH in order to use all features available in CSHM.

1. Download the cluster switch health monitor configuration zip file based on the corresponding ONTAP release version. This file is available from the NetApp Software download page.
   a. On the Software download page, select **Switch Health Monitor Configuration Files**
   b. Select Platform = **ONTAP** and click **Go!**
   c. On the Switch Health Monitor Configuration Files for ONTAP page, click **View & Download**
   d. On the Switch Health Monitor Configuration Files for ONTAP - Description page, click **Download** for the applicable cluster switch model, for example: **Cisco Nexus 92300YC**
   e. On the End User License Agreement page, click **Accept**
   f. On the Switch Health Monitor Configuration Files for ONTAP - Download page, select the applicable configuration file, for example, **Cisco_Nexus_92300YC.zip**
2. Upload the applicable zip file to your internal web server where the IP address is X.X.X.X.

   For an internal web server IP address of 192.168.2.20 and assuming a /usr/download directory exists, you can upload your zip file to your web server using scp:

```
% scp Cisco_Nexus_92300YC.zip
admin@192.168.2.20:/usr/download/Cisco_Nexus_92300YC.zip
```

3. Access the advanced mode setting from one of the ONTAP systems in the cluster, using the command set-privilege advanced:

```
cluster1::> set -privilege advanced
```

4. Run the switch health monitor configure command system cluster-switch configure-health-monitor -node * -package-url X.X.X.X/location_to_download_zip_file:

```
cluster1::> system cluster-switch configure-health-monitor -node *
-package-url 192.168.2.20/usr/download/Cisco_Nexus_92300YC.zip
```

5. Verify that the command output contains the text string "downloaded package processed successfully". If an error occurs, contact NetApp support.
6. Run the command system cluster-switch show on the ONTAP system and ensure that the cluster switches are discovered with the monitored field set to "True".

```
cluster1::> system cluster-switch show
```

If at any time you revert to an earlier version of ONTAP, you will need to install the CSHM configuration file again to enable switch health monitoring of 92300YC cluster switches.

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