



## **Install hardware**

### **Cluster and storage switches**

NetApp  
April 05, 2024

# Table of Contents

- Install hardware ..... 1
  - Install the hardware for the BES-53248 cluster switch..... 1
  - Configure the BES-53248 cluster switch ..... 1

# Install hardware

## Install the hardware for the BES-53248 cluster switch

To install the BES-53248 hardware, refer to Broadcom's documentation.

### Steps

1. Review the [configuration requirements](#).
2. Follow the instructions in the [Broadcom-supported BES-53248 Cluster Switch Installation Guide](#).

### What's next?

[Configure the switch](#).

## Configure the BES-53248 cluster switch

Follow these steps to perform an initial setup of the BES-53248 cluster switch.

### Before you begin

- Hardware is installed, as described in [Install the hardware](#).
- You have reviewed the following:
  - [Configuration requirements](#)
  - [Components and part numbers](#)
  - [Documentation requirements](#)

### About the examples

The examples in the configuration procedures use the following switch and node nomenclature:

- The NetApp switch names are `cs1` and `cs2`. The upgrade starts on the second switch, `cs2`.
- The cluster LIF names are `node1_clus1` and `node1_clus2` for node1, and `node2_clus1` and `node2_clus2` for node2.
- The IPspace name is `Cluster`.
- The `cluster1::>` prompt indicates the name of the cluster.
- The cluster ports on each node are named `e0a` and `e0b`. See the [NetApp Hardware Universe](#) for the actual cluster ports supported on your platform.
- The Inter-Switch Links (ISLs) supported for the NetApp switches are ports 0/55 and 0/56.
- The node connections supported for the NetApp switches are ports 0/1 through 0/16 with default licensing.
- The examples use two nodes, but you can have up to 24 nodes in a cluster.

### Steps

1. Connect the serial port to a host or serial port.
2. Connect the management port (the RJ-45 wrench port on the left side of the switch) to the same network where your TFTP server is located.
3. At the console, set the host-side serial settings:

- 115200 baud
- 8 data bits
- 1 stop bit
- parity: none
- flow control: none

4. Log in to the switch as `admin` and press **Enter** when prompted for a password. The default switch name is **routing**. At the prompt, enter `enable`. This gives you access to Privileged EXEC mode for switch configuration.

**Show example**

```
User: admin
Password:
(Routing)> enable
Password:
(Routing) #
```

5. Change the switch name to **cs2**.

**Show example**

```
(Routing) # hostname cs2
(cs2) #
```

6. To set a static IP address, use the `serviceport protocol`, `network protocol`, and `serviceport ip` commands as shown in the example.

The serviceport is set to use DHCP by default. The IP address, subnet mask, and default gateway address are assigned automatically.

**Show example**

```
(cs2) # serviceport protocol none
(cs2) # network protocol none
(cs2) # serviceport ip ipaddr netmask gateway
```

7. Verify the results using the command:

```
show serviceport
```

### Show example

```
(cs2)# show serviceport
Interface Status..... Up
IP Address..... 172.19.2.2
Subnet Mask..... 255.255.255.0
Default Gateway..... 172.19.2.254
IPv6 Administrative Mode..... Enabled
IPv6 Prefix is .....
fe80::dac4:97ff:fe71:123c/64
IPv6 Default Router.....
fe80::20b:45ff:fea9:5dc0
Configured IPv4 Protocol..... DHCP
Configured IPv6 Protocol..... None
IPv6 AutoConfig Mode..... Disabled
Burned In MAC Address..... D8:C4:97:71:12:3C
```

### 8. Configure the domain and name server:

configure

### Show example

```
(cs2)# configure
(cs2) (Config)# ip domain name company.com
(cs2) (Config)# ip name server 10.10.99.1 10.10.99.2
(cs2) (Config)# exit
(cs2) (Config)#
```

### 9. Configure the NTP server.

#### a. Configure the time zone and time synchronization (SNTP):

sntp

### Show example

```
(cs2) #  
(cs2) (Config) # sntp client mode unicast  
(cs2) (Config) # sntp server 10.99.99.5  
(cs2) (Config) # clock timezone -7  
(cs2) (Config) # exit  
(cs2) (Config) #
```

For EFOS version 3.10.0.3 and later, use the command `ntp`.

`ntp`

### Show example

```
(cs2) configure  
(cs2) (Config) # ntp ?  
  
authenticate          Enables NTP authentication.  
authentication-key    Configure NTP authentication key.  
broadcast             Enables NTP broadcast mode.  
broadcastdelay        Configure NTP broadcast delay in  
microseconds.  
server               Configure NTP server.  
source-interface      Configure the NTP source-interface.  
trusted-key           Configure NTP authentication key number  
for trusted time source.  
vrf                  Configure the NTP VRF.  
  
(cs2) (Config) # ntp server ?  
  
ip-address|ipv6-address|hostname  Enter a valid IPv4/IPv6 address  
or hostname.  
  
(cs2) (Config) # ntp server 10.99.99.5
```

b. Configure the time manually:

`clock`

### Show example

```
(cs2)# config
(cs2) (Config)# no sntp client mode
(cs2) (Config)# clock summer-time recurring 1 sun mar 02:00 1 sun
nov 02:00 offset 60 zone EST
(cs2) (Config)# clock timezone -5 zone EST
(cs2) (Config)# clock set 07:00:00
(cs2) (Config)# *clock set 10/20/2020

(cs2) (Config)# show clock

07:00:11 EST(UTC-5:00) Oct 20 2020
No time source

(cs2) (Config)# exit

(cs2)# write memory

This operation may take a few minutes.
Management interfaces will not be available during this time.

Are you sure you want to save? (y/n) y

Config file 'startup-config' created successfully.

Configuration Saved!
```

### What's next?

[Install the EFOS software.](#)

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