Get started

Cluster and storage switches

NetApp
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Get started

What's new for switches

Learn about the new switches for FAS and AFF systems.

New switch support

Unresolved directive in whats-new.adoc - include::../_include/new-switch-support.adoc[]

Learn about Cluster, Storage, and Shared switches

NetApp offers cluster, storage, and shared switches that deliver internal communications with the ability to non-disruptively move data and network interfaces across the cluster.

The "front-end" switches provide connectivity to host storage, while the "back-end" cluster switches provide connections between two or more NetApp controllers.

Only NetApp-validated back-end switches (ordered from NetApp) are supported.

Cluster switches

Cluster switches allow you to build ONTAP clusters with more than two nodes. NetApp-supported cluster switches include:

- Broadcom BES-53248
- Cisco Nexus 9336C-FX2
- NVIDIA SN2100

Storage switches

Storage switches allow you to route data between servers and storage arrays in a Storage Area Network (SAN). NetApp-supported cluster switches include:

- Cisco Nexus 9336C-FX2
- NVIDIA SN2100

Shared switches

Shared switches allow you to combine cluster and storage functionality into a shared switch configuration, by supporting the use of shared cluster and storage RCFs. The NetApp-supported shared switch is:

- Cisco Nexus 9336C-FX2

End-of-availability

The following storage switches are no longer available for purchase, but are still supported:

- Cisco Nexus 3232C

- Cisco Nexus 3132Q-V
- Cisco Nexus 92300YC
- NetApp CN1610

Get up and running with Cluster, Storage, and Shared switches

To get up and running with cluster, storage, and shared switches, you install hardware components and configure your switch.

Deploying the switch involves the following workflow.

Install AFF/FAS controllers

Install your AFF/FAS controllers in the rack or cabinet. Access the install and setup instructions for your AFF/FAS platform model.

AFF systems

- AFF C190
- AFF A220
- AFF A250
- AFF A400
- AFF A700
- AFF A800
- AFF A900

FAS systems

- FAS500f
- FAS8300
- FAS8700
- FAS9000
- FAS9500

Install the switch hardware

Install your switches in the rack or cabinet. Access the following instructions for your switch model.

Cluster switches

- Install BES-53248 switch
- Install Cisco Nexus 9336C-FX2 switch
- Install NVIDIA SN2100 switch

Storage switches

- Install Cisco Nexus 9336C-FX2 switch
- Install NVIDIA SN2100 switch

Shared switches

- Install Cisco Nexus 9336C-FX2 switch

Cable the switches to the controllers

The AFF/FAS install and setup instructions include instructions for cabling the controller ports to the switch. However, if you need lists of supported cables and transceivers, and detailed information about the host ports for your switch, access the following instructions for your switch model.

Cluster switches

- Cable BES-53248 switch
- Cable Cisco Nexus 9336C-FX2 switch
- Cable NVIDIA SN2100 switch

Storage switches

- Cable Cisco Nexus 9336C-FX2 switch
- Cable NVIDIA SN2100 switch

Shared switches

- Cable Cisco Nexus 9336C-FX2 switch

4 Configure switch

Perform an initial setup of your switches. Access the following instructions for your switch model.

Cluster switches

- Configure BES-53248 switch
- Configure Cisco Nexus 9336C-FX2 switch
- Configure NVIDIA SN2100 switch

Storage switches

- Configure Cisco Nexus 9336C-FX2 switch
- Configure NVIDIA SN2100 switch

Shared switches

- Configure Cisco Nexus 9336C-FX2 switch

5 Install switch software

To install and configure the software on your switch, follow the software install workflow for your switch model.

Cluster switches

- Install software for BES-53248 switches
- Install software for Cisco Nexus 9336C-FX2 switch
- Install software for NVIDIA SN2100 switch

Storage switches

- Install software for Cisco Nexus 9336C-FX2 switch
- Install software for NVIDIA SN2100 switch

Shared switches

- Install software for Cisco Nexus 9336C-FX2 switch

6 Complete system setup

After you have configured your switches and installed the required software, access the install and setup instructions for your AFF/FAS platform model to complete your system setup.

AFF systems

- AFF C190
- AFF A220
- AFF A250
- AFF A400
- AFF A700
- AFF A800
- AFF A900

FAS systems

- FAS500f
- FAS8300
- FAS8700
- FAS9000
- FAS9500

7 Complete ONTAP configuration

After you have installed and set up your AFF/FAS controllers and switches, you must complete configuring your storage in ONTAP. Access the following instructions according to your deployment configuration.

- For ONTAP deployments, see Configure ONTAP.
- For ONTAP with MetroCluster deployments, see Configure Metrocluster with ONTAP.

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