Get started

Install and maintain

NetApp
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Get started

What's new for AFF, ASA and FAS systems

Learn about the new features for AFF, ASA and FAS systems.

New platform support

Platforms (with links to data sheets)	Available beginning
ASA C250	ONTAP 9.13.1P1
ASA C400	ONTAP 9.13.1P1
ASA C800	ONTAP 9.13.P11
FAS2820	ONTAP 9.13.1
ASA A150	ONTAP 9.13.1
ASA A250	ONTAP 9.13.1
ASA A400	ONTAP 9.13.1
ASA A900	ONTAP 9.13.1
• AFF C250 • AFF C400 • AFF C800	ONTAP 9.12.1P1 ONTAP 9.13.1 GA and later ONTAP releases These platforms are not supported with ONTAP 9.13.1 RC1.
AFF A150 Do not attempt to install or boot your AFF A150 storage system with an unsupported version of ONTAP. If you attempt to install or boot your system with an unsupported version of ONTAP, ONTAP will allow it (ONTAP will not block the attempt). The consequence is that your AFF A150 storage system will come up as a FAS2750 storage system.	ONTAP 9.13.1 and later ONTAP releases ONTAP 9.12.1P1 ONTAP 9.11.1P8 ONTAP 9.10.1P12

Platforms (with links to data sheets)	Available beginning
FAS9500	ONTAP 9.11.1 ONTAP 9.10.1P3
AFF A900	ONTAP 9.10.1
AFF A250/AFF ASA A250	ONTAP 9.8
FAS500f	ONTAP 9.8
AFF ASA A800	ONTAP 9.8
FAS8300	ONTAP 9.7
FAS8700	ONTAP 9.7
AFF A400	ONTAP 9.7
AFF ASA A220	ONTAP 9.7
AFF ASA A700	ONTAP 9.7
AFF C190	ONTAP 9.6
AFF A320	ONTAP 9.6

New switch support

Switches	Description	Available beginning
NVIDIA IP SN2100 switch	The NVIDIA IP SN2100 storage switch is supported in MetroCluster IP configurations that use the A900/FAS9500 platforms.	ONTAP 9.12.1
NVIDIA IP SN2100 switch (X190006)	The NVIDIA IP SN2100 storage switch is supported in MetroCluster IP configurations that use the following platforms: • FAS500f/AFF A250 • FAS8300/AFF A400 • FAS8700 • FAS9000/AFF A700 • AFF A800	ONTAP 9.10.1P3

Switches	Description	Available beginning
36-port 100 GbE Cisco switch (X190200)	Supports a shared Infrastructure (Cluster, HA, and switch-attached storage) on the same pair of Cisco Nexus 9336C-FX2 switches, including support for MetroCluster IP configurations.	ONTAP 9.9.1
36-port 100 GbE Cisco switch (X190200 and X190210)	Cisco Nexus 9336C-FX2 cluster interconnect switch and storage switch support for AFF/FAS controllers, as well as for front-end data connectivity.	ONTAP 9.8
Broadcom BES-53248 switch (X190005 and X190005R)	Broadcom BES-53248 cluster interconnect switch support for AFF/FAS controllers with 40/100GbE ports.	ONTAP 9.8
36-port 100 GbE Cisco switch (X190200) 32-port 100 GbE Cisco switch (X190100 and X190100R)	Cisco Nexus 100 GbE switch can be used as a dedicated storage switch to connect NS224 NVMe drive shelves to the following platforms: • AFF A800/AFF ASA A800 • AFF A700/AFF ASA A700 • AFF A400/AFF ASA A400 • AFF A320	ONTAP 9.8
Broadcom BES-53248 switch (X190005 and X190005R)	Broadcom BES-53248 cluster interconnect switch support for AFF/FAS controllers with 10/25GbE ports.	ONTAP 9.5P8

New adapter support

Adapter part number	Description	Category	Available beginning
X91148A	2-port 100GbE RoCE QSFP28	• Storage • Networking • HA/MetroCluster	ONTAP 9.8
X91122A	2-port 25GbE RoCE QSFP28	• Networking • HA/MetroCluster	ONTAP 9.8
X9170A	NVMe SSD Module (1 TB)	Core dump device	ONTAP 9.8

New shelf support

Shelves	Available beginning
NS224	ONTAP 9.6

New hardware updates

Functionality	Description and where to learn more	Available beginning
Expanded platform support for NS224 drive shelves	The following platforms support NS224 drive shelves: • AFF A800/AFF ASA A800 • AFF A700/AFF ASA A700 • AFF A250/AFF ASA A250 • FAS500f	ONTAP 9.8
Hot-adding 12Gb SAS shelves to 6Gb SAS storage stacks	A single speed transition from 6Gb to 12Gb in a SAS storage stack is now supported. This enables storage expansion of existing 6Gb stacks with 12Gb shelves. Hot-adding shelves with IOM12 modules to a stack of shelves with IOM6 modules	ONTAP 9.7P4 ONTAP 9.6P9 ONTAP 9.5P14

Get up and running with AFF, ASA and FAS storage systems

To get up and running with AFF, ASA and FAS systems, you install hardware components, configure your switches, and configure your storage in ONTAP.

If your system is in a MetroCluster configuration, go to the MetroCluster doc site and follow the install instructions applicable to your MetroCluster configuration type.

Use the following workflow to deploy your storage system when it is not set up in a MetroCluster configuration.

Install controllers

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

AFF A-Series systems

- AFF A150
- AFF A200

- AFF A250
- AFF A400
- AFF A700
- AFF A800
- AFF A900

AFF C-Series systems

- AFF C190
- AFF C250
- AFF C400
- AFF C800

ASA A-Series systems

- ASA A150
- ASA A250
- ASA A400
- ASA A800
- ASA A900

ASA C-Series systems

- ASA C250
- ASA C400
- ASA C800

FAS systems

- FAS500f
- FAS2700
- FAS2800
- FAS8300
- FAS8700
- FAS9000
- FAS9500

2 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

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 platform model to complete your system setup.

AFF systems

- AFF A150
- AFF A200
- AFF A250
- AFF A400
- AFF A700
- AFF A800
- AFF A900

AFF C-Series systems

- AFF C190
- AFF C250
- AFF C400
- AFF C800

FAS systems

- FAS500f
- FAS2700
- FAS2800

- 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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