



Get started

Install and maintain

NetApp
April 19, 2024

This PDF was generated from <https://docs.netapp.com/us-en/ontap-systems/whats-new.html> on April 19, 2024. Always check docs.netapp.com for the latest.

Table of Contents



- Get started 1
 - What’s new for AFF, ASA and FAS systems 1
 - Get up and running with AFF, ASA and FAS storage systems 4

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
<ul style="list-style-type: none">• AFF C250• AFF C400• AFF C800	<div>ONTAP 9.12.1P1</div> <div>ONTAP 9.13.1 GA and later ONTAP releases</div> <div> These platforms are not supported with ONTAP 9.13.1 RC1.</div>
<div> 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.</div> <div>AFF A150</div>	<div>ONTAP 9.13.1 and later ONTAP releases</div> <div>ONTAP 9.12.1P1</div> <div>ONTAP 9.11.1P8</div> <div>ONTAP 9.10.1P12</div>

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)	<p>The NVIDIA IP SN2100 storage switch is supported in MetroCluster IP configurations that use the following platforms:</p> <ul style="list-style-type: none"> • 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)	<p>Cisco Nexus 100 GbE switch can be used as a dedicated storage switch to connect NS224 NVMe drive shelves to the following platforms:</p> <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Storage • Networking • HA/MetroCluster 	ONTAP 9.8
X91122A	2-port 25GbE RoCE QSFP28	<ul style="list-style-type: none"> • 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: <ul style="list-style-type: none">• 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](#)



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](#)

3

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 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](#).

Copyright information

Copyright © 2024 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

Trademark information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.