



Cable the MetroCluster IP switches

ONTAP MetroCluster

NetApp
February 13, 2026

This PDF was generated from https://docs.netapp.com/us-en/ontap-metrocluster/install-ip/using_rcf_generator.html on February 13, 2026. Always check docs.netapp.com for the latest.

Table of Contents

- Cable the MetroCluster IP switches 1
 - How to use the port tables with multiple MetroCluster IP configurations 1
 - Cabling two MetroCluster configurations to the switches 1
 - Cabling eight-node MetroCluster configurations 1
 - Platform port assignments for Cisco 3132Q-V switches in a MetroCluster IP configuration 2
 - Choose the correct cabling table for your configuration. 2
 - Platform port assignments for Cisco 3232C or 36-port Cisco 9336C switches in a MetroCluster IP configuration. 5
 - Choose the correct cabling table for your configuration. 6
 - Platform port assignments for 12-port Cisco 9336C-FX2 switches in a MetroCluster IP configuration 16
 - Choose the correct cabling table for your configuration. 17
 - Platform port assignments for a 36-port Cisco 9336C-FX2 switch connecting NS224 storage in a MetroCluster IP configuration. 24
 - Choose the correct cabling table for your configuration. 24
 - Platform port assignments for Broadcom supported BES-53248 IP switches in a MetroCluster IP configuration. 39
 - Choose the correct cabling table for your configuration. 40
 - Platform port assignments for NVIDIA supported SN2100 IP switches in a MetroCluster IP configuration. . 46
 - Choose the correct cabling table for your configuration. 46

Cable the MetroCluster IP switches

How to use the port tables with multiple MetroCluster IP configurations

You must understand how to use the information in the port tables to correctly generate your RCF files.

Before you begin

Review these considerations before using the tables:

- The following tables show the port usage for site A. The same cabling is used for site B.
- You cannot configure the switches with ports of different speeds (for example, a mix of 100 Gbps ports and 40 Gbps ports).
- Keep track of the MetroCluster port group (MetroCluster 1, MetroCluster 2, etc.). You'll need this information when using the RcfFileGenerator tool as described later in this configuration procedure.
- You should cable all of the nodes in the same way. If there are different port combination options available to cable the nodes, all nodes should use the same port combinations. For example, e1a on node1 and e1a on node2 should be attached to one switch. Similarly, the second port from both nodes should be attached to the second switch.
- The [RcfFileGenerator for MetroCluster IP](#) also provides a per-port cabling overview for each switch. Use this cabling overview to verify your cabling.

Cabling two MetroCluster configurations to the switches

When cabling more than one MetroCluster configuration to a switch, you cable each MetroCluster according to the appropriate table. For example, if you are cabling a FAS2750 and an AFF A700 to the same switch, you cable the FAS2750 as per "MetroCluster 1" in Table 1, and the AFF A700 as per "MetroCluster 2" or "MetroCluster 3" in Table 2. You cannot physically cable both the FAS2750 and the AFF A700 as "MetroCluster 1".

Cabling eight-node MetroCluster configurations

For MetroCluster configuration running ONTAP 9.8 and earlier, some procedures that are performed to transition an upgrade require the addition of a second four-node DR group to the configuration to create a temporary eight-node configuration. Beginning with ONTAP 9.9.1, permanent eight-node MetroCluster configurations are supported.

About this task

For eight-node configurations, you use the same method as described above. Instead of a second MetroCluster, you are cabling an additional four-node DR group.

For example, your configuration includes the following:

- Cisco 3132Q-V switches
- MetroCluster 1: FAS2750 platforms
- MetroCluster 2: AFF A700 platforms (these platforms are being added as a second four-node DR group)

Steps

1. For MetroCluster 1, cable the Cisco 3132Q-V switches using the table for the FAS2750 platform and the rows for MetroCluster 1 interfaces.
2. For MetroCluster 2 (the second DR group), cable the Cisco 3132Q-V switches using the table for the AFF A700 platform and the rows for MetroCluster 2 interfaces.

Platform port assignments for Cisco 3132Q-V switches in a MetroCluster IP configuration

The port usage in a MetroCluster IP configuration depends on the switch model and platform type.

Review these guidelines before using the tables:

- If you configure the switch for MetroCluster FC to IP transition, port 5, port 6, port 13, or port 14 can be used to connect the local cluster interfaces of the MetroCluster FC node. Refer to the [RcfFileGenerator](#) and the generated cabling files for more details on cabling this configuration. For all other connections, you can use the port usage assignments listed in the tables.

Choose the correct cabling table for your configuration

Use the following table to determine which cabling table you should follow.

If your system is...	Use this cabling table...
FAS2750, AFF A220	Cisco 3132Q-V platform port assignments (group 1)
FAS9000, AFF A700	Cisco 3132Q-V platform port assignments (group 2)
AFF A800, ASAA800	Cisco 3132Q-V platform port assignments (group 3)

Cisco 3132Q-V platform port assignments (group 1)

Review the platform port assignments to cable a FAS2750 or AFF A220 system to a Cisco 3132Q-V switch:

Switch Port	Port use	FAS2750 AFF A220	
		IP_Switch_x_1	IP_Switch_x_2
1 - 6	Unused	disabled	
7	ISL, Local Cluster native speed / 40G / 100G	ISL, Local Cluster	
8			
9/1	MetroCluster 1, Shared Cluster and MetroCluster interface	e0a	e0b
9/2-4		disabled	
10/1		e0a	e0b
10/2-4		disabled	
11/1	MetroCluster 2, Shared Cluster and MetroCluster interface	e0a	e0b
11/2-4		disabled	
12/1		e0a	e0b
12/2-4		disabled	
13/1	MetroCluster 3, Shared Cluster and MetroCluster interface	e0a	e0b
13/2-4		disabled	
14/1		e0a	e0b
14/2-4		disabled	
15	ISL, MetroCluster native speed 40G	ISL, MetroCluster	
16			
17			
18			
19			
20			
21/1-4	ISL, MetroCluster breakout mode 10G	ISL, MetroCluster	
22/1-4			
23/1-4			
24/1-4			
25 - 32	Unused	disabled	

Cisco 3132Q-V platform port assignments (group 2)

Review the platform port assignments to cable a FAS9000 or AFF A700 system to a Cisco 3132Q-V switch:

Switch Port	Port use	FAS9000 AFF A700	
		IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e4a	e4e / e8a
2			
3	MetroCluster 2, Local Cluster interface	e4a	e4e / e8a
4			
5	MetroCluster 3, Local Cluster interface	e4a	e4e / e8a
6			
7	ISL, Local Cluster native speed 40G	ISL, Local Cluster	
8			
9	MetroCluster 1, MetroCluster interface	e5a	e5b
10			
11	MetroCluster 2, MetroCluster interface	e5a	e5b
12			
13	MetroCluster 3, MetroCluster interface	e5a	e5b
14			
15	ISL, MetroCluster native speed 40G	ISL, MetroCluster	
16			
17			
18			
19			
20			
21/1-4	ISL, MetroCluster breakout mode 10G	ISL, MetroCluster	
22/1-4			
23/1-4			
24/1-4			
25 - 32	Unused	disabled	

Cisco 3132Q-V platform port assignments (group 3)

Review the platform port assignments to cable an AFF A800 or ASA A800 system to a Cisco 3132Q-V switch:

Switch Port	Port use	AFF A800 ASA A800	
		IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e0a	e1a
2			
3	MetroCluster 2, Local Cluster interface	e0a	e1a
4			
5	MetroCluster 3, Local Cluster interface	e0a	e1a
6			
7	ISL, Local Cluster native speed 40G	ISL, Local Cluster	
8			
9	MetroCluster 1, MetroCluster interface	e0b	e1b
10			
11	MetroCluster 2, MetroCluster interface	e0b	e1b
12			
13	MetroCluster 3, MetroCluster interface	e0b	e1b
14			
15	ISL, MetroCluster native speed 40G	ISL, MetroCluster	
16			
17			
18			
19			
20			
21/1-4	ISL, MetroCluster breakout mode 10G	ISL, MetroCluster	
22/1-4			
23/1-4			
24/1-4			
25 - 32	Unused	disabled	

Platform port assignments for Cisco 3232C or 36-port Cisco 9336C switches in a MetroCluster IP configuration

The port usage in a MetroCluster IP configuration depends on the switch model and platform type.

Review the following considerations before using the configuration tables:

- The tables in this section are for Cisco 3232C switches or 36-port Cisco 9336C-FX2 switches that aren't connecting NS224 storage.

If you have a 12-port Cisco 9336C-FX2 switch, use the tables in [Platform port assignments for 12-port Cisco 9336C-FX2 switches](#).

If you have a 36-port Cisco 9336C-FX2 switch and at least one MetroCluster configuration or DR group is connecting NS224 shelves to the MetroCluster switch, use the tables in [Platform port assignments for a 36-port Cisco 9336C-FX2 switch connecting NS224 storage](#).

- The following tables show the port usage for site A. The same cabling is used for site B.
- You cannot configure the switches with ports of different speeds (for example, a mix of 100 Gbps ports and 40 Gbps ports).
- If you are configuring a single MetroCluster with the switches, use the **MetroCluster 1** port group.

Keep track of the MetroCluster port group (MetroCluster 1, MetroCluster 2, MetroCluster 3, or MetroCluster 4). You will need it when using the RcfFileGenerator tool as described later in this configuration procedure.

- The RcfFileGenerator for MetroCluster IP also provides a per-port cabling overview for each switch.

Use this cabling overview to verify your cabling.

- RCF file version v2.10 or later is required for 25G breakout mode for MetroCluster ISLs.
- ONTAP 9.13.1 or later and RCF file version 2.00 are required to use a platform other than FAS8200 or AFF A300 in the "MetroCluster 4" group.



The RCF file version is different to the version of the RCFfilegenerator tool used to generate the file. For example, you can generate an RCF file version 2.00 using RCFfilegenerator v1.6c.

Choose the correct cabling table for your configuration

Use the following table to determine which cabling table you should follow.

If your system is...	Use this cabling table...
AFF A150, ASA A150 FAS2750, AFF A220 FAS500f, AFF C250, ASA C250 AFF A250, ASA A250	Cisco 3232C or Cisco 9336C-FX2 platform port assignments (group 1)
AFF A20	Cisco 3232C or Cisco 9336C-FX2 platform port assignments (group 2)
AFF A30, AFF C30 FAS50 AFF C60	The table you follow depends on whether you are using a 25G (group 3a) or 100G (group 3b) Ethernet card. <ul style="list-style-type: none"> • Cisco 3232C or Cisco 9336C-FX2 platform port assignments (group 3a - 25G) • Cisco 3232C or Cisco 9336C-FX2 platform port assignments (group 3b - 100G)
FAS8200, AFF A300	Cisco 3232C or Cisco 9336C-FX2 platform port assignments (group 4)
AFF A320 FAS8300, AFF C400, ASA C400, FAS8700 AFF A400, ASA A400	Cisco 3232C or Cisco 9336C-FX2 platform port assignments (group 5)

If your system is...	Use this cabling table...
AFF A50	Cisco 3232C or Cisco 9336C-FX2 platform port assignments (group 6)
FAS9000, AFF A700 AFF C800, ASA C800, AFF A800, ASA A800 FAS9500, AFF A900, ASA A900	Cisco 3232C or Cisco 9336C-FX2 platform port assignments (group 7)
FAS70, AFF A70 AFF C80 FAS90, AFF A90 AFF A1K	Cisco 3232C or Cisco 9336C-FX2 platform port assignments (group 8)

Cisco 3232C or Cisco 9336C-FX2 platform port assignments (group 1)

Review the platform port assignments to cable an AFF A150, ASA A150, FAS2750, AFF A220, FAS500f, AFF C250, ASA C250, AFF A250, or ASA A250 system to a Cisco 3232C or 9336C-FX2 switch:

Switch Port	Port use	AFF A150 ASA A150 FAS2750 AFF A220		FAS500f AFF C250 ASA C250 AFF A250 ASA A250	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1 - 6	Unused	disabled		disabled	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster	
8					
9/1	MetroCluster 1, Shared Cluster and MetroCluster interface	e0a	e0b	e0c	e0d
9/2-4		disabled		disabled	
10/1		e0a	e0b	e0c	e0d
10/2-4		disabled		disabled	
11/1	MetroCluster 2, Shared Cluster and MetroCluster interface	e0a	e0b	e0c	e0d
11/2-4		disabled		disabled	
12/1		e0a	e0b	e0c	e0d
12/2-4		disabled		disabled	
13/1	MetroCluster 3, Shared Cluster and MetroCluster interface	e0a	e0b	e0c	e0d
13/2-4		disabled		disabled	
14/1		e0a	e0b	e0c	e0d
14/2-4		disabled		disabled	
15	ISL, MetroCluster native speed 40G / 100G	ISL, MetroCluster		ISL, MetroCluster	
16					
17					
18					
19					
20					
21/1-4	ISL, MetroCluster breakout mode 10G / 25G	ISL, MetroCluster		ISL, MetroCluster	
22/1-4					
23/1-4					
24/1-4					
25/1	MetroCluster 1, Shared Cluster and MetroCluster interface	e0a	e0b	e0c	e0d
25/2-4		disabled		disabled	
26/1		e0a	e0b	e0c	e0d
26/2-4		disabled		disabled	
27 - 32	Unused	disabled		disabled	
33 - 36	Unused (Cisco 9336C-FX2 only)	disabled		disabled	

Cisco 3232C or Cisco 9336C-FX2 platform port assignments (group 2)

Review the platform port assignments to cable an AFF A20 system to a Cisco 3232C or 9336C-FX2 switch:

Switch Port	Port use	AFF A20	
		IP_Switch_x_1	IP_Switch_x_2
1/1	MetroCluster 1, Local Cluster interface	e2a	e4a
1/2-4		disabled	
2/1		e2a	e4a
2/2-4		disabled	
3/1	MetroCluster 2, Local Cluster interface	e2a	e4a
3/2-4		disabled	
4/1		e2a	e4a
4/2-4		disabled	
5/1	MetroCluster 3, Local Cluster interface	e2a	e4a
5/2-4		disabled	
6/1		e2a	e4a
6/2-4		disabled	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster	
8			
9/1	MetroCluster 1, MetroCluster interface	e2b	e4b
9/2-4		disabled	
10/1		e2b	e4b
10/2-4		disabled	
11/1	MetroCluster 2, MetroCluster interface	e2b	e4b
11/2-4		disabled	
12/1		e2b	e4b
12/2-4		disabled	
13/1	MetroCluster 3, MetroCluster interface	e2b	e4b
13/2-4		disabled	
14/1		e2b	e4b
14/2-4		disabled	
15	ISL, MetroCluster native speed 40G / 100G	ISL, MetroCluster	
16			
17			
18			
19			
20			
21/1-4	ISL, MetroCluster breakout mode 10G / 25G	ISL, MetroCluster	
22/1-4			
23/1-4			
24/1-4			
25/1	MetroCluster 4, MetroCluster interface	e2b	e4b
25/2-4		disabled	
26/1		e2b	e4b
26/2-4		disabled	
27 - 28	Unused	disabled	
29/1	MetroCluster 4, Local Cluster interface	e2a	e4a
29/2-4		disabled	
30/1		e2a	e4a
30/2-4		disabled	
25 - 32	Unused	disabled	
33 - 36	Unused (Cisco 9336C-FX2 only)	disabled	

Cisco 3232C or Cisco 9336C-FX2 platform port assignments (group 3a)

Review the platform port assignments to cable an AFF A30, AFF C30, AFF C60, or FAS50 system to a Cisco 3232C or 9336C-FX2 switch using a four-port 25G Ethernet card.



This configuration requires a four-port 25G Ethernet card in slot 4 to connect the local cluster and HA interfaces.

Switch Port	Port use	AFF C30 (25G Cluster/HA) AFF A30 (25G Cluster/HA)		FAS50 (25G Cluster/HA)		AFF C60 (25G Cluster/HA)	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1/1	MetroCluster 1, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
1/2-4		disabled		disabled		disabled	
2/1		e4a	e4b	e4a	e4b	e4a	e4b
2/2-4		disabled		disabled		disabled	
3/1	MetroCluster 2, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
3/2-4		disabled		disabled		disabled	
4/1		e4a	e4b	e4a	e4b	e4a	e4b
4/2-4		disabled		disabled		disabled	
5/1	MetroCluster 3, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
5/2-4		disabled		disabled		disabled	
6/1		e4a	e4b	e4a	e4b	e4a	e4b
6/2-4		disabled		disabled		disabled	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	
8							
9	MetroCluster 1, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
10		e2a	e2b	e2a	e2b	e2a	e2b
11	MetroCluster 2, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
12		e2a	e2b	e2a	e2b	e2a	e2b
13	MetroCluster 3, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
14		e2a	e2b	e2a	e2b	e2a	e2b
15	ISL, MetroCluster native speed 40G / 100G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
16							
17							
18							
19							
20							
21/1-4	ISL, MetroCluster breakout mode 10G / 25G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
22/1-4							
23/1-4							
24/1-4							
25	MetroCluster 4, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
26		e2a	e2b	e2a	e2b	e2a	e2b
27 - 28	Unused	disabled		disabled		disabled	
29/1	MetroCluster 4, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
29/2-4		disabled		disabled		disabled	
30/1		e4a	e4b	e4a	e4b	e4a	e4b
30/2-4		disabled		disabled		disabled	
25 - 32	Unused	disabled		disabled		disabled	
33 - 36	Unused (Cisco 9336C-FX2 only)	disabled		disabled		disabled	

Cisco 3232C or Cisco 9336C-FX2 platform port assignments (group 3b)

Review the platform port assignments to cable an AFF A30, AFF C30, AFF C60, or FAS50 system to a Cisco 3232C or 9336C-FX2 switch using a two-port 100G Ethernet card.



This configuration requires a two-port 100G Ethernet card in slot 4 to connect the local cluster and HA interfaces.

Switch Port	Port use	AFF C30 (100G Cluster/HA) AFF A30 (100G Cluster/HA)		FAS50 (100G Cluster/HA)		AFF C60 (100G Cluster/HA)	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
2		e4a	e4b	e4a	e4b	e4a	e4b
3	MetroCluster 2, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
4		e4a	e4b	e4a	e4b	e4a	e4b
5	MetroCluster 3, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
6		e4a	e4b	e4a	e4b	e4a	e4b
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	
8							
9	MetroCluster 1, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
10		e2a	e2b	e2a	e2b	e2a	e2b
11	MetroCluster 2, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
12		e2a	e2b	e2a	e2b	e2a	e2b
13	MetroCluster 3, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
14		e2a	e2b	e2a	e2b	e2a	e2b
15	ISL, MetroCluster native speed 40G / 100G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
16							
17							
18							
19							
20							
21/1-4	ISL, MetroCluster breakout mode 10G / 25G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
22/1-4							
23/1-4							
24/1-4							
25	MetroCluster 4, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
26		e2a	e2b	e2a	e2b	e2a	e2b
27 - 28	Unused	disabled		disabled		disabled	
29	MetroCluster 4, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
30		e4a	e4b	e4a	e4b	e4a	e4b
25 - 32	Unused	disabled		disabled		disabled	
33 - 36	Unused (Cisco 9336C-FX2 only)	disabled		disabled		disabled	

Cisco 3232C or Cisco 9336C-FX2 platform port assignments (group 4)

Review the platform port assignments to cable a FAS8200 or AFF A300 system to a Cisco 3232C or 9336C-FX2 switch:

Switch Port	Port use	FAS8200 AFF A300	
		IP_Switch_x_1	IP_Switch_x_2
1/1	MetroCluster 1, Local Cluster interface	e0a	e0b
1/2-4		disabled	
2/1		e0a	e0b
2/2-4		disabled	
3/1	MetroCluster 2, Local Cluster interface	e0a	e0b
3/2-4		disabled	
4/1		e0a	e0b
4/2-4		disabled	
5/1	MetroCluster 3, Local Cluster interface	e0a	e0b
5/2-4		disabled	
6/1		e0a	e0b
6/2-4		disabled	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster	
8			
9/1	MetroCluster 1, MetroCluster interface	e1a	e1b
9/2-4		disabled	
10/1		e1a	e1b
10/2-4		disabled	
11/1	MetroCluster 2, MetroCluster interface	e1a	e1b
11/2-4		disabled	
12/1		e1a	e1b
12/2-4		disabled	
13/1	MetroCluster 3, MetroCluster interface	e1a	e1b
13/2-4		disabled	
14/1		e1a	e1b
14/2-4		disabled	
15	ISL, MetroCluster native speed 40G / 100G	ISL, MetroCluster	
16			
17			
18			
19			
20			
21/1-4	ISL, MetroCluster breakout mode 10G / 25G	ISL, MetroCluster	
22/1-4			
23/1-4			
24/1-4			
25/1	MetroCluster 4, MetroCluster interface	e1a	e1b
25/2-4		disabled	
26/1		e1a	e1b
26/2-4		disabled	
27 - 28	Unused	disabled	
29/1	MetroCluster 4, Local Cluster interface	e0a	e0b
29/2-4		disabled	
30/1		e0a	e0b
30/2-4		disabled	
25 - 32	Unused	disabled	
33 - 36	Unused (Cisco 9336C-FX2 only)	disabled	

If you are upgrading from older RCF files, the cabling configuration might be using ports in the "MetroCluster 4" group (ports 25/26 and 29/30).

Cisco 3232C or Cisco 9336C-FX2 platform port assignments (group 5)

Review the platform port assignments to cable an AFF A320, FAS8300, AFF C400, ASA C400, FAS8700, AFF A400, or ASA A400 system to a Cisco 3232C or 9336C-FX2 switch:

Switch Port	Port use	AFF A320		FAS8300 AFF C400 ASA C400 FAS8700		AFF A400 ASA A400	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e0a	e0d	e0c	e0d	e3a	e3b
2							
3	MetroCluster 2, Local Cluster interface	e0a	e0d	e0c	e0d	e3a	e3b
4							
5	MetroCluster 3, Local Cluster interface	e0a	e0d	e0c	e0d	e3a	e3b
6							
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	
8							
9	MetroCluster 1, MetroCluster interface	e0g	e0h	e1a	e1b	e1a	e1b
10							
11	MetroCluster 2, MetroCluster interface	e0g	e0h	e1a	e1b	e1a	e1b
12							
13	MetroCluster 3, MetroCluster interface	e0g	e0h	e1a	e1b	e1a	e1b
14							
15	ISL, MetroCluster native speed 40G / 100G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
16							
17							
18							
19							
20							
21/1-4	ISL, MetroCluster breakout mode 10G / 25G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
22/1-4							
23/1-4							
24/1-4							
25	MetroCluster 4, MetroCluster interface	e0g	e0h	e1a	e1b	e1a	e1b
26							
27 - 28	Unused	disabled		disabled		disabled	
29	MetroCluster 4, Local Cluster interface	e0a	e0d	e0c	e0d	e3a	e3b
30							
31 - 32	Unused	disabled		disabled		disabled	
33 - 34	Unused (Cisco 9336C-FX2 only)	disabled		disabled		disabled	



Using ports in the "MetroCluster 4" group requires ONTAP 9.13.1 or later.

Cisco 3232C or Cisco 9336C-FX2 platform port assignments (group 6)

Review the platform port assignments to cable an AFF A50 system to a Cisco 3232C or 9336C-FX2 switch:

Switch Port	Port use	AFF A50	
		IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e4a	e4b
2		e4a	e4b
3	MetroCluster 2, Local Cluster interface	e4a	e4b
4		e4a	e4b
5	MetroCluster 3, Local Cluster interface	e4a	e4b
6		e4a	e4b
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster	
8			
9	MetroCluster 1, MetroCluster interface	e2a	e2b
10		e2a	e2b
11	MetroCluster 2, MetroCluster interface	e2a	e2b
12		e2a	e2b
13	MetroCluster 3, MetroCluster interface	e2a	e2b
14		e2a	e2b
15	ISL, MetroCluster native speed 40G / 100G	ISL, MetroCluster	
16			
17			
18			
19			
20			
21/1-4	ISL, MetroCluster breakout mode 10G / 25G	ISL, MetroCluster	
22/1-4			
23/1-4			
24/1-4			
25	MetroCluster 4, MetroCluster interface	e2a	e2b
26		e2a	e2b
27 - 28	Unused	disabled	
29	MetroCluster 4, Local Cluster interface	e4a	e4b
30		e4a	e4b
25 - 32	Unused	disabled	
33 - 36	Unused (Cisco 9336C-FX2 only)	disabled	

Cisco 3232C or Cisco 9336C-FX2 platform port assignments (group 7)

Review the platform port assignments to cable a FAS9000, AFF A700, AFF C800, ASA C800, AFF A800, ASA A800, FAS9500, AFF A900, or ASA A900 system to a Cisco 3232C or 9336C-FX2 switch:

Switch Port	Port use	FAS9000 AFF A700		AFF C800 ASA C800 AFF A800 ASA A800		FAS9500 AFF A900 ASA A900	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e4a	e4e / e8a	e0a	e1a	e4a	e4b(e) / e8a Note 1
2							
3							
4	MetroCluster 2, Local Cluster interface	e4a	e4e / e8a	e0a	e1a	e4a	e4b(e) / e8a Note 1
5	MetroCluster 3, Local Cluster interface	e4a	e4e / e8a	e0a	e1a	e4a	e4b(e) / e8a Note 1
6							
7							
8	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	
9	MetroCluster 1, MetroCluster interface	e5a	e5b	e0b	e1b	e5b	e7b
10							
11	MetroCluster 2, MetroCluster interface	e5a	e5b	e0b	e1b	e5b	e7b
12							
13	MetroCluster 3, MetroCluster interface	e5a	e5b	e0b	e1b	e5b	e7b
14							
15	ISL, MetroCluster native speed 40G / 100G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
16							
17							
18							
19							
20							
21/1-4	ISL, MetroCluster breakout mode 10G / 25G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
22/1-4							
23/1-4							
24/1-4							
25	MetroCluster 4, MetroCluster interface	e5a	e5b	e0b	e1b	e5b	e7b
26							
27 - 28	Unused	disabled		disabled		disabled	
29	MetroCluster 4, Local Cluster interface	e4a	e4e / e8a	e0a	e1a	e4a	e4b(e) / e8a Note 1
30							
31 - 32	Unused	disabled		disabled		disabled	
33 - 34	Unused (Cisco 9336C-FX2 only)	disabled		disabled		disabled	

Note 1: Use either ports e4a and e4e or e4a and e8a if you are using an X91440A adapter (40Gbps). Use either ports e4a and e4b or e4a and e8a if you are using an X91153A adapter (100Gbps).



Using ports in the "MetroCluster 4" group requires ONTAP 9.13.1 or later.

Cisco 3232C or Cisco 9336C-FX2 platform port assignments (group 8)

Review the platform port assignments to cable an AFF A70, FAS70, AFF C80, FAS90, AFF A90, or AFF A1K system to a Cisco 3232C or 9336C-FX2 switch:

Switch Port	Port use	FAS70 AFF A70		AFF C80		FAS90 AFF A90		AFF A1K	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e1a	e7a	e1a	e7a	e1a	e7a	e1a	e7a
2									
3									
4									
5	MetroCluster 2, Local Cluster interface	e1a	e7a	e1a	e7a	e1a	e7a	e1a	e7a
6									
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	
8									
9	MetroCluster 1, MetroCluster interface	e2a	e2b	e2a	e2b	e2b	e3b	e2b	e3b
10									
11									
12									
13	MetroCluster 2, MetroCluster interface	e2a	e2b	e2a	e2b	e2b	e3b	e2b	e3b
14									
15	MetroCluster 3, MetroCluster interface	e2a	e2b	e2a	e2b	e2b	e3b	e2b	e3b
16									
17	ISL, MetroCluster native speed 40G / 100G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
18									
19									
20									
21/1-4	ISL, MetroCluster breakout mode 10G / 25G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
22/1-4									
23/1-4									
24/1-4									
25	MetroCluster 4, MetroCluster interface	e2a	e2b	e2a	e2b	e2b	e3b	e2b	e3b
26									
27 - 28	Unused	disabled		disabled		disabled		disabled	
29	MetroCluster 4, Local Cluster interface	e1a	e7a	e1a	e7a	e1a	e7a	e1a	e7a
30									
31 - 32	Unused	disabled		disabled		disabled		disabled	
33 - 36	Unused (Cisco 9336C-FX2 only)	disabled		disabled		disabled		disabled	

Platform port assignments for 12-port Cisco 9336C-FX2 switches in a MetroCluster IP configuration

The port usage in a MetroCluster IP configuration depends on the switch model and platform type.

Review the following considerations before using the configuration tables:

- The tables in this section are for 12-port Cisco 9336C-FX2 switches.

If you have a 36-port Cisco 9336C-FX2 switch that isn't connecting NS224 shelves, use the tables in [Platform port assignments for Cisco 3232C or 36-port Cisco 9336C-FX2 switches](#).

If you have a 36-port Cisco 9336C-FX2 switch and at least one MetroCluster configuration or DR group is connecting NS224 shelves to the MetroCluster switch, use the tables in [Platform port assignments for a 36-port Cisco 9336C-FX2 switch connecting NS224 storage](#).



The 12-port Cisco 9336C-FX2 switch doesn't support connecting NS224 shelves to the MetroCluster switch.

- The following tables show the port usage for site A. The same cabling is used for site B.
- You cannot configure the switches with ports of different speeds (for example, a mix of 100 Gbps ports and 40 Gbps ports).
- If you are configuring a single MetroCluster with the switches, use the **MetroCluster 1** port group.

Keep track of the MetroCluster port group (MetroCluster 1, MetroCluster 2). You'll need it when using the RcfFileGenerator tool as described later in this configuration procedure.

- The RcfFileGenerator for MetroCluster IP also provides a per-port cabling overview for each switch.

Choose the correct cabling table for your configuration

Use the following table to determine which cabling table you should follow.

If your system is...	Use this cabling table...
AFF A150, ASAA150 FAS500f AFF C250, ASA C250 AFF A250, ASAA250	Cisco 9336C-FX2 12-port platform port assignments (group 1)
AFF A20	Cisco 9336C-FX2 12-port platform port assignments (group 2)
AFF A30, AFF C30 FAS50 AFF C60	The table you follow depends on whether you are using a 25G (group 3a) or 100G (group 3b) Ethernet card. <ul style="list-style-type: none"> • Cisco 9336C-FX2 12-port platform port assignments (group 3a - 25G) • Cisco 9336C-FX2 12-port platform port assignments (group 3b - 100G)
FAS8300, AFF C400, ASA C400, FAS8700 AFF A400, ASAA400	Cisco 9336C-FX2 12-port platform port assignments (group 4)
AFF A50	Cisco 9336C-FX2 12-port platform port assignments (group 5)
AFF C800, ASA C800, AFF A800, ASAA800 FAS9500, AFF A900, ASA A900	Cisco 9336C-FX2 12-port platform port assignments (group 6)
FAS70, AFF A70 AFF C80 FAS90, AFF A90 AFF A1K	Cisco 9336C-FX2 12-port platform port assignments (group 7)

Cisco 9336C-FX2 12-port platform port assignments (group 1)

Review the platform port assignments to cable an AFF A150, ASAA150, FAS500f, AFF C250, ASA C250, AFF A250, or ASAA250 system to a 12-port Cisco 9336C-FX2 switch:

Switch Port	Port use	AFF A150 ASA A150		FAS500f AFF C250 ASA C250 AFF A250 ASA A250	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1-4	Unused	disabled		disabled	
5-6	Ports disallowed to use	blocked		blocked	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster	
8					
9/1	MetroCluster 1, Shared Cluster and MetroCluster interface	e0a	e0b	e0c	e0d
9/2-4		disabled		disabled	
10/1		e0a	e0b	e0c	e0d
10/2-4		disabled		disabled	
11/1	MetroCluster 2, Shared Cluster and MetroCluster interface	e0a	e0b	e0c	e0d
11/2-4		disabled		disabled	
12/1		e0a	e0b	e0c	e0d
12/2-4		disabled		disabled	
13-18	Ports disallowed to use	blocked		blocked	
19	ISL, MetroCluster native speed 40G / 100G (note 1)	ISL, MetroCluster		ISL, MetroCluster	
20					
21/1-4	ISL, MetroCluster breakout mode 10G / 25G (note 1)	ISL, MetroCluster		ISL, MetroCluster	
22/1-4					
23-36	Ports disallowed to use	blocked		blocked	

Note 1: You can only configure ports 19 and 20 **or** ports 21 and 22. If you use ports 19 and 20 first, then ports 21 and 22 are blocked. If you use ports 21 and 22 first, then ports 19 and 20 are blocked.

Cisco 9336C-FX2 12-port platform port assignments (group 2)

Review the platform port assignments to cable an AFF A20 system to a 12-port Cisco 9336C-FX2 switch:

Switch Port	Port use	AFF A20	
		IP_Switch_x_1	IP_Switch_x_2
1/1	MetroCluster 1, Local Cluster interface	e2a	e4a
1/2-4		disabled	
2/1		e2a	e4a
2/2-4		disabled	
3/1	MetroCluster 2, Local Cluster interface	e2a	e4a
3/2-4		disabled	
4/1		e2a	e4a
4/2-4		disabled	
5-6	Ports disallowed to use	blocked	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster	
8			
9/1	MetroCluster 1, MetroCluster interface	e2b	e4b
9/2-4		disabled	
10/1		e2b	e4b
10/2-4		disabled	
11/1	MetroCluster 2, MetroCluster interface	e2b	e4b
11/2-4		disabled	
12/1		e2b	e4b
12/2-4		disabled	
13-18	Ports disallowed to use	blocked	
19	ISL, MetroCluster native speed 40G / 100G (note 1)	ISL, MetroCluster	
20			
21/1-4	ISL, MetroCluster breakout mode 10G / 25G (note 1)	ISL, MetroCluster	
22/1-4			
23-36	Ports disallowed to use	blocked	

Note 1: You can only configure ports 19 and 20 **or** ports 21 and 22. If you use ports 19 and 20 first, then ports 21 and 22 are blocked. If you use ports 21 and 22 first, then ports 19 and 20 are blocked.

Cisco 9336C-FX2 12-port platform port assignments (group 3a)

Review the platform port assignments to cable an AFF A30, AFF C30, AFF C60, or FAS50 system to a 12-port Cisco 9336C-FX2 switch using a four-port 25G Ethernet card.



This configuration requires a four-port 25G Ethernet card in slot 4 to connect the local cluster and HA interfaces.

Switch Port	Port use	AFF C30 (25G Cluster/HA) AFF A30 (25G Cluster/HA)		FAS50 (25G Cluster/HA)		AFF C60 (25G Cluster/HA)	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1/1	MetroCluster 1, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
1/2-4		disabled		disabled		disabled	
2/1		e4a	e4b	e4a	e4b	e4a	e4b
2/2-4		disabled		disabled		disabled	
3/1	MetroCluster 2, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
3/2-4		disabled		disabled		disabled	
4/1		e4a	e4b	e4a	e4b	e4a	e4b
4/2-4		disabled		disabled		disabled	
5-6	Ports disallowed to use	blocked		blocked		blocked	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	
8							
9	MetroCluster 1, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
10		e2a	e2b	e2a	e2b	e2a	e2b
11		e2a	e2b	e2a	e2b	e2a	e2b
12		e2a	e2b	e2a	e2b	e2a	e2b
13-18	Ports disallowed to use	blocked		blocked		blocked	
19	ISL, MetroCluster native speed 40G / 100G (note 1)	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
20							
21/1-4	ISL, MetroCluster breakout mode 10G / 25G (note 1)	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
22/1-4							
23-36	Ports disallowed to use	blocked		blocked		blocked	

Note 1: You can only configure ports 19 and 20 **or** ports 21 and 22. If you use ports 19 and 20 first, then ports 21 and 22 are blocked. If you use ports 21 and 22 first, then ports 19 and 20 are blocked.

Cisco 9336C-FX2 12-port platform port assignments (group 3b)

Review the platform port assignments to cable an AFF A30, AFF C30, AFF C60, or FAS50 system to a 12-port Cisco 9336C-FX2 switch using a two-port 100G Ethernet card.



This configuration requires a two-port 100G Ethernet card in slot 4 to connect the local cluster and HA interfaces.

Switch Port	Port use	AFF C30 (100G Cluster/HA) AFF A30 (100G Cluster/HA)		FAS50 (100G Cluster/HA)		AFF C60 (100G Cluster/HA)	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
2		e4a	e4b	e4a	e4b	e4a	e4b
3	MetroCluster 2, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
4		e4a	e4b	e4a	e4b	e4a	e4b
5-6	Ports disallowed to use	blocked		blocked		blocked	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	
8							
9	MetroCluster 1, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
10		e2a	e2b	e2a	e2b	e2a	e2b
11		e2a	e2b	e2a	e2b	e2a	e2b
12		e2a	e2b	e2a	e2b	e2a	e2b
13-18	Ports disallowed to use	blocked		blocked		blocked	
19	ISL, MetroCluster native speed 40G / 100G (note 1)	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
20							
21/1-4	ISL, MetroCluster breakout mode 10G / 25G (note 1)	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
22/1-4							
23-36	Ports disallowed to use	blocked		blocked		blocked	

Note 1: You can only configure ports 19 and 20 **or** ports 21 and 22. If you use ports 19 and 20 first, then ports 21 and 22 are blocked. If you use ports 21 and 22 first, then ports 19 and 20 are blocked.

Cisco 9336C-FX2 12-port platform port assignments (group 4)

Review the platform port assignments to cable an FAS8300, AFF C400, ASA C400, FAS8700, AFF A400, or ASA A400 system to a 12-port Cisco 9336C-FX2 switch:

Switch Port	Port use	FAS8300 AFF C400 ASA C400 FAS8700		AFF A400 ASA A400	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e0c	e0d	e3a	e3b
2					
3	MetroCluster 2, Local Cluster interface	e0c	e0d	e3a	e3b
4					
5-6	Ports disallowed to use	blocked		blocked	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster	
8					
9	MetroCluster 1, MetroCluster interface	e1a	e1b	e1a	e1b
10					
11	MetroCluster 2, MetroCluster interface	e1a	e1b	e1a	e1b
12					
13-18	Ports disallowed to use	blocked		blocked	
19	ISL, MetroCluster native speed 40G / 100G (note 1)	ISL, MetroCluster		ISL, MetroCluster	
20					
21/1-4	ISL, MetroCluster breakout mode 10G / 25G (note 1)	ISL, MetroCluster		ISL, MetroCluster	
22/1-4					
23-36	Ports disallowed to use	blocked		blocked	

Note 1: You can only configure ports 19 and 20 **or** ports 21 and 22. If you use ports 19 and 20 first, then ports 21 and 22 are blocked. If you use ports 21 and 22 first, then ports 19 and 20 are blocked.

Cisco 9336C-FX2 12-port platform port assignments (group 5)

Review the platform port assignments to cable an AFF A50 system to a 12-port Cisco 9336C-FX2 switch:

Switch Port	Port use	AFF A50	
		IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e4a	e4b
2		e4a	e4b
3	MetroCluster 2, Local Cluster interface	e4a	e4b
4		e4a	e4b
5-6	Ports disallowed to use	blocked	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster	
8			
9	MetroCluster 1, MetroCluster interface	e2a	e2b
10		e2a	e2b
11	MetroCluster 2, MetroCluster interface	e2a	e2b
12		e2a	e2b
13-18	Ports disallowed to use	blocked	
19	ISL, MetroCluster native speed 40G / 100G (note 1)	ISL, MetroCluster	
20			
21/1-4	ISL, MetroCluster breakout mode 10G / 25G (note 1)	ISL, MetroCluster	
22/1-4			
23-36	Ports disallowed to use	blocked	

Note 1: You can only configure ports 19 and 20 **or** ports 21 and 22. If you use ports 19 and 20 first, then ports 21 and 22 are blocked. If you use ports 21 and 22 first, then ports 19 and 20 are blocked.

Cisco 9336C-FX2 12-port platform port assignments (group 6)

Review the platform port assignments to cable an AFF C800, ASA C800, AFF A800, ASA A800, FAS9500, AFF A900, or ASA A900 system to a 12-port Cisco 9336C-FX2 switch:

Switch Port	Port use	AFF C800 ASA C800 AFF A800 ASA A800		FAS9500 AFF A900 ASA A900	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e0a	e1a	e4a	e4b(e) / e8a (note 2)
2					
3	MetroCluster 2, Local Cluster interface	e0a	e1a	e4a	e4b(e) / e8a (note 2)
4					
5-6	Ports disallowed to use	blocked		blocked	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster	
8					
9	MetroCluster 1, MetroCluster interface	e0b	e1b	e5b	e7b
10					
11	MetroCluster 2, MetroCluster interface	e0b	e1b	e5b	e7b
12					
13-18	Ports disallowed to use	blocked		blocked	
19	ISL, MetroCluster native speed 40G / 100G (note 1)	ISL, MetroCluster		ISL, MetroCluster	
20					
21/1-4	ISL, MetroCluster breakout mode 10G / 25G (note 1)	ISL, MetroCluster		ISL, MetroCluster	
22/1-4					
23-36	Ports disallowed to use	blocked		blocked	

Note 1: You can only configure ports 19 and 20 **or** ports 21 and 22. If you use ports 19 and 20 first, then ports 21 and 22 are blocked. If you use ports 21 and 22 first, then ports 19 and 20 are blocked.

Note 2: Use either ports e4a and e4e or e4a and e8a if you are using an X91440A adapter (40Gbps). Use either ports e4a and e4b or e4a and e8a if you are using an X91153A adapter (100Gbps).

Cisco 9336C-FX2 12-port platform port assignments (group 7)

Review the platform port assignments to cable an AFF A70, FAS70, AFF C80, FAS90, AFF A90, or AFF A1K system to a 12-port Cisco 9336C-FX2 switch:

Switch Port	Port use	FAS70 AFF A70		AFF C80		FAS90 AFF A90		AFF A1K	
		IP_Switch x 1	IP_Switch x 2	IP_Switch x 1	IP_Switch x 2	IP_Switch x 1	IP_Switch x 2	IP_Switch x 1	IP_Switch x 2
1	MetroCluster 1, Local Cluster interface	e1a	e7a	e1a	e7a	e1a	e7a	e1a	e7a
2									
3	MetroCluster 2, Local Cluster interface	e1a	e7a	e1a	e7a	e1a	e7a	e1a	e7a
4									
5-6	Ports disallowed to use	blocked		blocked		blocked		blocked	
7	ISL, Local Cluster	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	
8	native speed / 100G								
9	MetroCluster 1, MetroCluster interface	e2a	e2b	e2a	e2b	e2b	e3b	e2b	e3b
10									
11	MetroCluster 2, MetroCluster interface	e2a	e2b	e2a	e2b	e2b	e3b	e2b	e3b
12									
13-18	Ports disallowed to use	blocked		blocked		blocked		blocked	
19	ISL, MetroCluster	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
20	native speed 40G / 100G (note 1)								
21/1-4	ISL, MetroCluster	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
22/1-4	breakout mode 10G / 25G (note 1)								
23-36	Ports disallowed to use	blocked		blocked		blocked		blocked	

Note 1: You can only configure ports 19 and 20 **or** ports 21 and 22. If you use ports 19 and 20 first, then ports 21 and 22 are blocked. If you use ports 21 and 22 first, then ports 19 and 20 are blocked.

Platform port assignments for a 36-port Cisco 9336C-FX2 switch connecting NS224 storage in a MetroCluster IP configuration

The port usage in a MetroCluster IP configuration depends on the switch model and platform type.

Review the following considerations before using the configuration tables:

- The tables in this section are for 36-port Cisco 9336C-FX2 switches when at least one MetroCluster configuration or DR group is connecting NS224 shelves to the MetroCluster switch.

If you have a 36-port Cisco 9336C-FX2 switch and you don't plan to connect NS224 storage to the switch, use the tables in [Platform port assignments for Cisco 3232C or 36-port Cisco 9336C-FX2 switches](#).

If you have a 12-port Cisco 9336C-FX2 switch, use the tables in [Platform port assignments for 12-port Cisco 9336C-FX2 switches](#).



The 12-port Cisco 9336C-FX2 switch doesn't support connecting NS224 shelves to the MetroCluster switch.

- When you cable a Cisco 9336C-FX2 switch connecting NS224 storage, you can only have a maximum of two MetroCluster configurations or DR groups. At least one MetroCluster configuration or DR group must be connecting NS224 shelves to the MetroCluster switch. If one of your MetroCluster configurations or DR groups is a system that doesn't support NS224 shelves, it can only be connected as the second MetroCluster configuration or DR group.

If your second MetroCluster or DR group doesn't connect NS224 shelves to the MetroCluster switch, follow the [cabling tables for controllers not connecting switch-attached NS224 shelves](#).

- The RcfFileGenerator only shows eligible platforms when the first platform is selected.
- Connecting one eight-node or two four-node MetroCluster configurations requires ONTAP 9.14.1 or later.

Choose the correct cabling table for your configuration

Review the correct port assignments table for your configuration. There are two sets of cabling tables in this section:

- [Cabling tables for controllers connecting switch-attached NS224 shelves](#)
- [Cabling tables for controllers not connecting switch-attached NS224 shelves](#)

Controllers connecting switch-attached NS224 shelves

Determine which port assignments table you should follow for controllers connecting switch-attached NS224 shelves.

Platform	Use this cabling table...
AFF C30, AFF A30 AFF C60	The table you follow depends on whether you are using a 25G (group 1a) or 100G (group 1b) Ethernet card. <ul style="list-style-type: none"> • Cisco 9336C-FX2 switch connecting NS224 storage platform port assignments (group 1a - 25G) • Cisco 9336C-FX2 switch connecting NS224 storage platform port assignments (group 1b - 100G)
AFF A320 AFF C400, ASA C400 AFF A400, ASA A400	Cisco 9336C-FX2 switch connecting NS224 storage platform port assignments (group 2)
AFF A50	Cisco 9336C-FX2 switch connecting NS224 storage platform port assignments (group 3)
AFF A700 AFF C800, ASA C800, AFF A800 AFF A900, ASA A900	Cisco 9336C-FX2 switch connecting NS224 storage platform port assignments (group 4)
AFF A70 AFF C80 AFF A90 AFF A1K	Cisco 9336C-FX2 switch connecting NS224 storage platform port assignments (group 5)

Cisco 9336C-FX2 switch connecting NS224 storage platform port assignments (group 1a)

Review the platform port assignments to cable an AFF A30, AFF C30, or AFF C60 system that is connecting switch-attached NSS24 shelves to a Cisco 9336C-FX2 switch using a four-port 25G Ethernet card.



This configuration requires a four-port 25G Ethernet card in slot 4 to connect the local cluster and HA interfaces.

Controllers connecting switch-attached shelves					
Switch Port	Port Use	AFF C30 (25G Cluster/HA) AFF A30 (25G Cluster/HA)		AFF C60 (25G Cluster/HA)	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1/1	MetroCluster 1, Local Cluster interface	e4a	e4b	e4a	e4b
1/2-4		disabled		disabled	
2/1		e4a	e4b	e4a	e4b
2/2-4		disabled		disabled	
3/1	MetroCluster 2, Local Cluster interface	e4a	e4b	e4a	e4b
3/2-4		disabled		disabled	
4/1		e4a	e4b	e4a	e4b
4/2-4		disabled		disabled	
5	Storage shelf 1 (9)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
6		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster	
8					
9	MetroCluster 1,	e2a	e2b	e2a	e2b
10	MetroCluster interface	e2a	e2b	e2a	e2b
11	MetroCluster 2,	e2a	e2b	e2a	e2b
12	MetroCluster interface	e2a	e2b	e2a	e2b
13	ISL MetroCluster, native speed 40G / 100G breakout mode 10G / 25G	ISL, MetroCluster		ISL, MetroCluster	
14					
15					
16					
17	MetroCluster 1, Ethernet Storage Interface	e3a	e3b	e3a	e3b
18					
19	MetroCluster 2, Ethernet Storage Interface	e3a	e3b	e3a	e3b
20					
21	Storage shelf 2 (8)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
22		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
23	Storage shelf 3 (7)				
24					
25	Storage shelf 4 (6)				
26					
27	Storage shelf 5 (5)				
28					
29	Storage shelf 6 (4)				
30					
31	Storage shelf 7 (3)				
32					
33	Storage shelf 8 (2)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
34		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
35	Storage shelf 9 (1)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
36		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b

Cisco 9336C-FX2 switch connecting NS224 storage platform port assignments (group 1b)

Review the platform port assignments to cable an AFF A30, AFF C30, or AFF C60 system that is connecting switch-attached NSS24 shelves to a Cisco 9336C-FX2 switch using a two-port 100G Ethernet card.



This configuration requires a two-port 100G Ethernet card in slot 4 to connect the local cluster and HA interfaces.

Controllers connecting switch-attached shelves					
Switch Port	Port Use	AFF C30 (100G Cluster/HA) AFF A30 (100G Cluster/HA)		AFF C60 (100G Cluster/HA)	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e4a	e4b	e4a	e4b
2		e4a	e4b	e4a	e4b
3	MetroCluster 2, Local Cluster interface	e4a	e4b	e4a	e4b
4		e4a	e4b	e4a	e4b
5	Storage shelf 1 (9)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
6		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster	
8					
9	MetroCluster 1, MetroCluster interface	e2a	e2b	e2a	e2b
10		e2a	e2b	e2a	e2b
11	MetroCluster 2, MetroCluster interface	e2a	e2b	e2a	e2b
12		e2a	e2b	e2a	e2b
13	ISL MetroCluster, native speed 40G / 100G breakout mode 10G / 25G	ISL, MetroCluster		ISL, MetroCluster	
14					
15					
16					
17	MetroCluster 1, Ethernet Storage Interface	e3a	e3b	e3a	e3b
18		e3a	e3b	e3a	e3b
19	MetroCluster 2, Ethernet Storage Interface	e3a	e3b	e3a	e3b
20		e3a	e3b	e3a	e3b
21	Storage shelf 2 (8)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
22		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
23	Storage shelf 3 (7)				
24					
25	Storage shelf 4 (6)				
26					
27	Storage shelf 5 (5)				
28					
29	Storage shelf 6 (4)				
30					
31	Storage shelf 7 (3)				
32					
33	Storage shelf 8 (2)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
34		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
35	Storage shelf 9 (1)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
36		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b

Cisco 9336C-FX2 switch connecting NS224 storage platform port assignments (group 2)

Review the platform port assignments to cable an AFF A320, AFF C400, ASA C400, AFF A400, or ASA A400 system that is connecting switch-attached NSS24 shelves to a Cisco 9336C-FX2 switch:

Controllers connecting switch-attached shelves							
Switch Port	Port Use	AFF A320		AFF C400 ASA C400		AFF A400 ASA A400	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e0a	e0d	e0c	e0d	e3a	e3b
2							
3	MetroCluster 2, Local Cluster interface	e0a	e0d	e0c	e0d	e3a	e3b
4							
5	Storage shelf 1 (9)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
6		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	
8							
9	MetroCluster 1, MetroCluster interface	e0g	e0h	e1a	e1b	e1a	e1b
10							
11	MetroCluster 2, MetroCluster interface	e0g	e0h	e1a	e1b	e1a	e1b
12							
13	ISL MetroCluster, native speed 40G / 100G breakout mode 10G / 25G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
14							
15							
16							
17	MetroCluster 1, Ethernet Storage Interface	e0c	e0f	e4a	e4b / e5b	e0c	e0d / e5b
18							
19	MetroCluster 2, Ethernet Storage Interface	e0c	e0f	e4a	e4b / e5b	e0c	e0d / e5b
20							
21	Storage shelf 2 (8)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
22		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
23	Storage shelf 3 (7)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
24		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
25	Storage shelf 4 (6)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
26		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
27	Storage shelf 5 (5)	NSM-1, e0a	NSM-1, e0b				
28		NSM-2, e0a	NSM-2, e0b				
29	Storage shelf 6 (4)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
30		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
31	Storage shelf 7 (3)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
32		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
33	Storage shelf 8 (2)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
34		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
35	Storage shelf 9 (1)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
36		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b

Cisco 9336C-FX2 switch connecting NS224 storage platform port assignments (group 3)

Review the platform port assignments to cable an AFF A50 system that is connecting switch-attached NSS24 shelves to a Cisco 9336C-FX2 switch:

Controllers connecting switch-attached shelves			
Switch Port	Port Use	AFF A50	
		IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e4a	e4b
2		e4a	e4b
3	MetroCluster 2, Local Cluster interface	e4a	e4b
4		e4a	e4b
5	Storage shelf 1 (9)	NSM-1, e0a	NSM-1, e0b
6		NSM-2, e0a	NSM-2, e0b
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster	
8			
9	MetroCluster 1, MetroCluster interface	e2a	e2b
10		e2a	e2b
11	MetroCluster 2, MetroCluster interface	e2a	e2b
12		e2a	e2b
13	ISL MetroCluster, native speed 40G / 100G breakout mode 10G / 25G	ISL, MetroCluster	
14			
15			
16			
17	MetroCluster 1, Ethernet Storage Interface	e3a	e3b
18			
19	MetroCluster 2, Ethernet Storage Interface	e3a	e3b
20			
21	Storage shelf 2 (8)	NSM-1, e0a	NSM-1, e0b
22		NSM-2, e0a	NSM-2, e0b
23	Storage shelf 3 (7)	NSM-1, e0a	NSM-1, e0b
24		NSM-2, e0a	NSM-2, e0b
25	Storage shelf 4 (6)	NSM-1, e0a	NSM-1, e0b
26		NSM-2, e0a	NSM-2, e0b
27	Storage shelf 5 (5)		
28			
29	Storage shelf 6 (4)	NSM-1, e0a	NSM-1, e0b
30		NSM-2, e0a	NSM-2, e0b
31	Storage shelf 7 (3)	NSM-1, e0a	NSM-1, e0b
32		NSM-2, e0a	NSM-2, e0b
33	Storage shelf 8 (2)	NSM-1, e0a	NSM-1, e0b
34		NSM-2, e0a	NSM-2, e0b
35	Storage shelf 9 (1)	NSM-1, e0a	NSM-1, e0b
36		NSM-2, e0a	NSM-2, e0b

Cisco 9336C-FX2 switch connecting NS224 storage platform port assignments (group 4)

Review the platform port assignments to cable an AFF A700, AFF C800, ASA C800, AFF A800, AFF A900, or ASA A900 system that is connecting switch-attached NSS24 shelves to a Cisco 9336C-FX2 switch:

Controllers connecting switch-attached shelves							
Switch Port	Port Use	AFF A700		AFF C800 ASA C800 AFF A800		AFF A900 ASA A900	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e4a	e4e / e8a	e0a	e1a	e4a	e4b(e) / e8a Note 1
2							
3	MetroCluster 2, Local Cluster interface	e4a	e4e / e8a	e0a	e1a	e4a	e4b(e) / e8a Note 1
4							
5	Storage shelf 1 (9)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
6		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	
8							
9	MetroCluster 1, MetroCluster interface	e5a	e5b	e0b	e1b	e5b	e7b
10							
11	MetroCluster 2, MetroCluster interface	e5a	e5b	e0b	e1b	e5b	e7b
12							
13	ISL MetroCluster, native speed 40G / 100G breakout mode 10G / 25G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
14							
15							
16							
17	MetroCluster 1, Ethernet Storage Interface	e3a	e3b / e7b	e5a	e5b / e3b	e3a (option 1) e2a (option 2)	e3b (option 1) e10b (option 2)
18							
19	MetroCluster 2, Ethernet Storage Interface	e3a	e3b / e7b	e5a	e5b / e3b	e3a (option 1) e2a (option 2)	e3b (option 1) e10b (option 2)
20							
21	Storage shelf 2 (8)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
22		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
23	Storage shelf 3 (7)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
24		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
25	Storage shelf 4 (6)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
26		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
27	Storage shelf 5 (5)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
28		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
29	Storage shelf 6 (4)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
30		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
31	Storage shelf 7 (3)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
32		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
33	Storage shelf 8 (2)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
34		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b
35	Storage shelf 9 (1)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b
36		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b

Note 1: Use either ports e4a and e4e or e4a and e8a if you are using an X91440A adapter (40Gbps). Use either ports e4a and e4b or e4a and e8a if you are using an X91153A adapter (100Gbps).

Cisco 9336C-FX2 switch connecting NS224 storage platform port assignments (group 5)

Review the platform port assignments to cable an AFF A70, AFF C80, AFF A90, or AFF A1K system that is connecting switch-attached NSS24 shelves to a Cisco 9336C-FX2 switch:

Controllers connecting switch-attached shelves													
Switch Port	Port Use	AFF A70		AFF C80		AFF A90		AFF A1K					
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2				
1	MetroCluster 1, Local Cluster interface	e1a	e7a	e1a	e7a	e1a	e7a	e1a	e7a				
2													
3	MetroCluster 2, Local Cluster interface	e1a	e7a	e1a	e7a	e1a	e7a	e1a	e7a				
4													
5	Storage shelf 1 (9)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b				
6		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b				
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster					
8													
9	MetroCluster 1, MetroCluster interface	e2a	e2b	e2a	e2b	e2b	e3b	e2b	e3b				
10													
11	MetroCluster 2, MetroCluster interface	e2a	e2b	e2a	e2b	e2b	e3b	e2b	e3b				
12													
13	ISL MetroCluster, native speed 40G / 100G breakout mode 10G / 25G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster					
14													
15													
16													
17	MetroCluster 1, Ethernet Storage Interface	e8a (option 1) e11a (option 2) e8b (option 3)	e8b (option 1) e11b (option 2) e11a (option 3)	e8a (option 1) e11a (option 2) e8b (option 3)	e8b (option 1) e11b (option 2) e11a (option 3)	e8a (option 1) e11a (option 2) e8b (option 3)	e8b (option 1) e11b (option 2) e11a (option 3)	e8a (option 1) e9a (option 2) e10a (option 3) e11a (option 4) e8b (option 5) e10b (option 6)	e8b (option 1) e9b (option 2) e10b (option 3) e11b (option 4) e9a (option 5) e11a (option 6)				
18													
19	MetroCluster 2, Ethernet Storage Interface	e8a (option 1) e11a (option 2) e8b (option 3)	e8b (option 1) e11b (option 2) e11a (option 3)	e8a (option 1) e11a (option 2) e8b (option 3)	e8b (option 1) e11b (option 2) e11a (option 3)	e8a (option 1) e11a (option 2) e8b (option 3)	e8b (option 1) e11b (option 2) e11a (option 3)	e8a (option 1) e9a (option 2) e10a (option 3) e11a (option 4) e8b (option 5) e10b (option 6)	e8b (option 1) e9b (option 2) e10b (option 3) e11b (option 4) e9a (option 5) e11a (option 6)				
20													
21	Storage shelf 2 (8)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b				
22		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b				
23	Storage shelf 3 (7)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b				
24		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b				
25	Storage shelf 4 (6)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b				
26		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b				
27	Storage shelf 5 (5)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b				
28		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b				
29	Storage shelf 6 (4)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b				
30		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b				
31	Storage shelf 7 (3)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b				
32		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b				
33	Storage shelf 8 (2)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b				
34		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b				
35	Storage shelf 9 (1)	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b	NSM-1, e0a	NSM-1, e0b				
36		NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b	NSM-2, e0a	NSM-2, e0b				

Controllers not connecting switch-attached NS224 shelves

Determine which port assignments table you should follow for controllers that are not connecting switch-attached NS224 shelves.

Platform	Use this cabling table...
AFF A150, ASAA150 FAS2750, AFF A220	Cisco 9336C-FX2 switch not connecting NS224 storage platform port assignments (group 6)
AFF A20	Cisco 9336C-FX2 switch not connecting NS224 storage platform port assignments (group 7)
FAS500f AFF C250, ASA C250 AFF A250, ASA A250	Cisco 9336C-FX2 switch not connecting NS224 storage platform port assignments (group 8)

Platform	Use this cabling table...
AFF C30, AFF A30 FAS50 AFF C60	The table you follow depends on whether you are using a 25G (group 9a) or 100G (group 9b) Ethernet card. <ul style="list-style-type: none"> • Cisco 9336C-FX2 switch not connecting NS224 storage platform port assignments (group 9a) • Cisco 9336C-FX2 switch not connecting NS224 storage platform port assignments (group 9b)
FAS8200, AFF A300	Cisco 9336C-FX2 switch not connecting NS224 storage platform port assignments (group 10)
AFF A320 FAS8300, AFF C400, ASA C400, FAS8700 AFF A400, ASA A400	Cisco 9336C-FX2 switch not connecting NS224 storage platform port assignments (group 11)
AFF A50	Cisco 9336C-FX2 switch not connecting NS224 storage platform port assignments (group 12)
FAS9000, AFF A700 AFF C800, ASA C800, AFF A800, ASA A800 FAS9500, AFF A900, ASA A900	Cisco 9336C-FX2 switch not connecting NS224 storage platform port assignments (group 13)
FAS70, AFF A70 AFF C80 FAS90, AFF A90 AFF A1K	Cisco 9336C-FX2 switch not connecting NS224 storage platform port assignments (group 14)

Cisco 9336C-FX2 switch not connecting NS224 storage platform port assignments (group 6)

Review the platform port assignments to cable an AFF A150, ASA A150, FAS2750, or AFF A220 system that isn't connecting switch-attached NSS24 shelves to a Cisco 9336C-FX2 switch:

Controllers not connecting switch-attached shelves			
Switch Port	Port Use	AFF A150 ASA A150 FAS2750 AFF A220	
		IP_Switch_x_1	IP_Switch_x_2
1 - 6	Unused	disabled	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster	
8			
9/1	MetroCluster 1, Shared Cluster and MetroCluster interface	e0a	e0b
9/2-4		disabled	
10/1		e0a	e0b
10/2-4		disabled	
11/1	MetroCluster 2, Shared Cluster and MetroCluster interface	e0a	e0b
11/2-4		disabled	
12/1		e0a	e0b
12/2-4		disabled	
13	ISL MetroCluster, native speed 40G / 100G breakout mode 10G / 25G	ISL, MetroCluster	
14			
15			
16			
17-36	Unused	disabled	

Cisco 9336C-FX2 switch not connecting NS224 storage platform port assignments (group 7)

Review the platform port assignments to cable an AFF A20 system that isn't connecting switch-attached NSS24 shelves to a Cisco 9336C-FX2 switch:

Controllers not connecting switch-attached shelves			
Switch Port	Port Use	AFF A20	
		IP_Switch_x_1	IP_Switch_x_2
1/1	MetroCluster 1, Local Cluster interface	e2a	e4a
1/2-4		disabled	
2/1		e2a	e4a
2/2-4		disabled	
3/1	MetroCluster 2, Local Cluster interface	e2a	e4a
3/2-4		disabled	
4/1		e2a	e4a
4/2-4		disabled	
5-6	Unused	disabled	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster	
8			
9/1	MetroCluster 1, MetroCluster interface	e2b	e4b
9/2-4		disabled	
10/1		e2b	e4b
10/2-4		disabled	
11/1	MetroCluster 2, MetroCluster interface	e2b	e4b
11/2-4		disabled	
12/1		e2b	e4b
12/2-4		disabled	
13	ISL MetroCluster, native speed 40G / 100G breakout mode 10G / 25G	ISL, MetroCluster	
14			
15			
16			
17-36	Unused	disabled	

Cisco 9336C-FX2 switch not connecting NS224 storage platform port assignments (group 8)

Review the platform port assignments to cable a FAS500f, AFF C250, ASA C250, AFF A250, or ASA A250 system that isn't connecting switch-attached NSS24 shelves to a Cisco 9336C-FX2 switch:

Controllers not connecting switch-attached shelves			
Switch Port	Port Use	FAS500f AFF C250 ASA C250 AFF A250 ASA A250	
		IP_Switch_x_1	IP_Switch_x_2
1 - 6	Unused	disabled	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster	
8			
9/1	MetroCluster 1, Shared Cluster and MetroCluster interface	e0c	e0d
9/2-4		disabled	
10/1		e0c	e0d
10/2-4		disabled	
11/1	MetroCluster 2, Shared Cluster and MetroCluster interface	e0c	e0d
11/2-4		disabled	
12/1		e0c	e0d
12/2-4		disabled	
13	ISL MetroCluster, native speed 40G / 100G breakout mode 10G / 25G	ISL, MetroCluster	
14			
15			
16			
17-36	Unused	disabled	

Cisco 9336C-FX2 switch not connecting NS224 storage platform port assignments (group 9a)

Review the platform port assignments to cable an AFF A30, AFF C30, AFF C60, or FAS50 system that isn't connecting switch-attached NSS24 shelves to a Cisco 9336C-FX2 switch using a four-port 25G Ethernet card:



This configuration requires a four-port 25G Ethernet card in slot 4 to connect the local cluster and HA interfaces.

Controllers not connecting switch-attached shelves							
Switch Port	Port use	AFF C30 (25G Cluster/HA) AFF A30 (25G Cluster/HA)		FAS50 (25G Cluster/HA)		AFF C60 (25G Cluster/HA)	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1/1	MetroCluster 1, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
1/2-4		disabled		disabled		disabled	
2/1		e4a	e4b	e4a	e4b	e4a	e4b
2/2-4		disabled		disabled		disabled	
3/1	MetroCluster 2, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
3/2-4		disabled		disabled		disabled	
4/1		e4a	e4b	e4a	e4b	e4a	e4b
4/2-4		disabled		disabled		disabled	
5-6	Unused	disabled		disabled		disabled	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	
8							
9	MetroCluster 1, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
10	MetroCluster 2, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
11	MetroCluster 2, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
12	MetroCluster 2, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
13	ISL MetroCluster, native speed 40G / 100G breakout mode 10G / 25G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
14							
15							
16							
17-36	Unused	disabled		disabled		disabled	

Cisco 9336C-FX2 switch not connecting NS224 storage platform port assignments (group 9b)

Review the platform port assignments to cable an AFF A30, AFF C30, AFF C60, or FAS50 system that isn't connecting switch-attached NSS24 shelves to a Cisco 9336C-FX2 switch using a two-port 100G Ethernet card:



This configuration requires a two-port 100G Ethernet card in slot 4 to connect the local cluster and HA interfaces.

Controllers not connecting switch-attached shelves							
Switch Port	Port use	AFF C30 (100G Cluster/HA) AFF A30 (100G Cluster/HA)		FAS50 (100G Cluster/HA)		AFF C60 (100G Cluster/HA)	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
2		e4a	e4b	e4a	e4b	e4a	e4b
3	MetroCluster 2, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
4		e4a	e4b	e4a	e4b	e4a	e4b
5-6	Unused	disabled		disabled		disabled	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	
8							
9	MetroCluster 1, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
10	MetroCluster 2, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
11	MetroCluster 2, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
12	MetroCluster 2, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
13	ISL MetroCluster, native speed 40G / 100G breakout mode 10G / 25G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
14							
15							
16							
17-36	Unused	disabled		disabled		disabled	

Cisco 9336C-FX2 switch not connecting NS224 storage platform port assignments (group 10)

Review the platform port assignments to cable a FAS8200 or AFF A300 system that isn't connecting switch-attached NSS24 shelves to a Cisco 9336C-FX2 switch:

Controllers not connecting switch-attached shelves			
Switch Port	Port Use	FAS8200 AFF A300	
		IP_Switch_x_1	IP_Switch_x_2
1/1	MetroCluster 1, Local Cluster interface	e0a	e0b
1/2-4		disabled	
2/1		e0a	e0b
2/2-4		disabled	
3/1	MetroCluster 2, Local Cluster interface	e0a	e0b
3/2-4		disabled	
4/1		e0a	e0b
4/2-4		disabled	
5-6	Unused	disabled	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster	
8			
9/1	MetroCluster 1, MetroCluster interface	e1a	e1b
9/2-4		disabled	
10/1		e1a	e1b
10/2-4		disabled	
11/1	MetroCluster 2, MetroCluster interface	e1a	e1b
11/2-4		disabled	
12/1		e1a	e1b
12/2-4		disabled	
13	ISL MetroCluster, native speed 40G / 100G breakout mode 10G / 25G	ISL, MetroCluster	
14			
15			
16			
17-36	Unused	disabled	

Cisco 9336C-FX2 switch not connecting NS224 storage platform port assignments (group 11)

Review the platform port assignments to cable an AFF A320, FAS8300, AFF C400, ASA C400, FAS8700, AFF A400, or ASAA400 system that isn't connecting switch-attached NSS24 shelves to a Cisco 9336C-FX2 switch:

Controllers not connecting switch-attached shelves							
Switch Port	Port Use	AFF A320		FAS8300 AFF C400 ASA C400 FAS8700		AFF A400 ASA A400	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e0a	e0d	e0c	e0d	e3a	e3b
2							
3	MetroCluster 2, Local Cluster interface	e0a	e0d	e0c	e0d	e3a	e3b
4							
5-6	Unused	disabled		disabled		disabled	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	
8							
9	MetroCluster 1, MetroCluster interface	e0g	e0h	e1a	e1b	e1a	e1b
10							
11	MetroCluster 2, MetroCluster interface	e0g	e0h	e1a	e1b	e1a	e1b
12							
13	ISL MetroCluster, native speed 40G / 100G breakout mode 10G / 25G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
14							
15							
16							
17-36	Unused	disabled		disabled		disabled	

Cisco 9336C-FX2 switch not connecting NS224 storage platform port assignments (group 12)

Review the platform port assignments to cable an AFF A50 system that isn't connecting switch-attached NSS24 shelves to a Cisco 9336C-FX2 switch:

Controllers not connecting switch-attached shelves			
Switch Port	Port use	AFF A50	
		IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e4a	e4b
2		e4a	e4b
3	MetroCluster 2, Local Cluster interface	e4a	e4b
4		e4a	e4b
5-6	Unused	disabled	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster	
8			
9	MetroCluster 1, MetroCluster interface	e2a	e2b
10		e2a	e2b
11	MetroCluster 2, MetroCluster interface	e2a	e2b
12		e2a	e2b
13	ISL MetroCluster, native speed 40G / 100G breakout mode 10G / 25G	ISL, MetroCluster	
14			
15			
16			
17-36	Unused	disabled	

Cisco 9336C-FX2 switch not connecting NS224 storage platform port assignments (group 13)

Review the platform port assignments to cable a FAS9000, AFF A700, AFF C800, ASA C800, AFF A800, ASA A800, FAS9500, AFF A900, or ASA A900 system that isn't connecting switch-attached NSS24 shelves to a Cisco 9336C-FX2 switch:

Controllers not connecting switch-attached shelves							
Switch Port	Port Use	FAS9000 AFF A700		AFF C800 ASA C800 AFF A800 ASA A800		FAS9500 AFF A900 ASA A900	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e4a	e4e / e8a	e0a	e1a	e4a	e4b(e) / e8a Note 1
2							
3	MetroCluster 2, Local Cluster interface	e4a	e4e / e8a	e0a	e1a	e4a	e4b(e) / e8a Note 1
4							
5-6	Unused	disabled		disabled		disabled	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	
8							
9	MetroCluster 1, MetroCluster interface	e5a	e5b	e0b	e1b	e5b	e7b
10							
11	MetroCluster 2, MetroCluster interface	e5a	e5b	e0b	e1b	e5b	e7b
12							
13	ISL MetroCluster, native speed 40G / 100G breakout mode 10G / 25G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
14							
15							
16							
17-36	Unused	disabled		disabled		disabled	

Note 1: Use either ports e4a and e4e or e4a and e8a if you are using an X91440A adapter (40Gbps). Use either ports e4a and e4b or e4a and e8a if you are using an X91153A adapter (100Gbps).

Cisco 9336C-FX2 switch not connecting NS224 storage platform port assignments (group 14)

Review the platform port assignments to cable an AFF A70, FAS70, AFF C80, FAS90, AFF A90, or AFF A1K system that isn't connecting switch-attached NSS24 shelves to a Cisco 9336C-FX2 switch:

Controllers not connecting switch-attached shelves									
Switch Port	Port Use	FAS70 AFF A70		AFF C80		FAS90 AFF A90		AFF A1K	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e1a	e7a	e1a	e7a	e1a	e7a	e1a	e7a
2									
3	MetroCluster 2, Local Cluster interface	e1a	e7a	e1a	e7a	e1a	e7a	e1a	e7a
4									
5-6	Unused	disabled		disabled		disabled		disabled	
7	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	
8									
9	MetroCluster 1, MetroCluster interface	e2a	e2b	e2a	e2b	e2b	e3b	e2b	e3b
10									
11	MetroCluster 2, MetroCluster interface	e2a	e2b	e2a	e2b	e2b	e3b	e2b	e3b
12									
13	ISL MetroCluster, native speed 40G / 100G breakout mode 10G / 25G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
14									
15									
16									
17-36	Unused	disabled		disabled		disabled		disabled	

Platform port assignments for Broadcom supported BES-53248 IP switches in a MetroCluster IP configuration

The port usage in a MetroCluster IP configuration depends on the switch model and platform type.

Review the following considerations before using the configuration tables:

- You cannot use the switches with remote ISL ports of different speeds (for example, a 25 Gbps port connected to a 10 Gbps ISL port).

- If you configure the switch for MetroCluster FC to IP Transition, the following ports are used depending on the target platform that you choose:

Target platform	Port
FAS500f, AFF C250, ASA C250, AFF A250, ASAA250, FAS8300, AFF C400, ASA C400, AFF A400, ASAA400, or FAS8700 platforms	ports 1 - 6, 10Gbps
FAS8200 or AFF A300 platforms	ports 3 - 4 and 9 - 12, 10Gbps

- AFF A320 systems configured with Broadcom BES-53248 switches might not support all features.

Any configuration or feature that requires that the local cluster connections are connected to a switch is not supported. For example, the following configurations and procedures are not supported:

- Eight-node MetroCluster configurations
- Transitioning from MetroCluster FC to MetroCluster IP configurations
- Refreshing a four-node MetroCluster IP configuration (ONTAP 9.8 and later)

Choose the correct cabling table for your configuration

Use the following table to determine which cabling table you should follow.

If your system is...	Use this cabling table...
AFF A150, ASAA150 FAS2750 AFF A220	Broadcom BES-53248 platform port assignments (group 1)
FAS500f AFF C250, ASA C250 AFF A250, ASAA250	Broadcom BES-53248 platform port assignments (group 2)
AFF A20	Broadcom BES-53248 platform port assignments (group 3)
AFF C30, AFF A30 FAS50 AFF C60	Broadcom BES-53248 platform port assignments (group 4)
FAS8200, AFF A300	Broadcom BES-53248 platform port assignments (group 5)
AFF A320	Broadcom BES-53248 platform port assignments (group 6)

If your system is...	Use this cabling table...
FAS8300	Broadcom BES-53248 platform port assignments (group 7)
AFF C400, ASA C400	
AFF A400, ASA A400	
FAS8700	

Broadcom BES-53248 platform port assignments (group 1)

Review the platform port assignments to cable an AFF A150, ASA A150, FAS2750, or AFF A220 system to a Broadcom BES-53248 switch:

Physical Port	Port use	AFF A150 ASA A150 FAS2750 AFF A220	
		IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Shared Cluster and MetroCluster interface	e0a	e0b
2			
3	MetroCluster 2, Shared Cluster and MetroCluster interface	e0a	e0b
4			
5-8	Unused	disabled	
9	MetroCluster 3, Shared Cluster and MetroCluster interface	e0a	e0b
10			
11	MetroCluster 4, Shared Cluster and MetroCluster interface	e0a	e0b
12			
13	ISL, MetroCluster native speed 10G / 25G	ISL, MetroCluster	
14			
15			
16			
..	Ports not licensed (17 - 54)		
53	ISL, MetroCluster, native speed 40G / 100G (Note 1)	ISL, MetroCluster	
54			
55	ISL, Local Cluster native speed / 100G	ISL, Local Cluster	
56			

- **Note 1:** Using these ports requires an additional license.
- If both MetroCluster configurations are using the same the platform, NetApp recommends selecting group "MetroCluster 3" for one configuration and group "MetroCluster 4" for the other configuration. If the platforms are different, then you must select "MetroCluster 3" or "MetroCluster 4" for the first configuration, and "MetroCluster 1" or "MetroCluster 2" for the second configuration.

Broadcom BES-53248 platform port assignments (group 2)

Review the platform port assignments to cable a FAS500f, AFF C250, ASA C250, AFF A250, or ASA A250 system to a Broadcom BES-53248 switch:

Physical Port	Port use	FAS500f AFF C250 ASA C250 AFF A250 ASA A250	
		IP_Switch_x_1	IP_Switch_x_2
1 - 4	Unused	disabled	
5	MetroCluster 1, Shared Cluster and MetroCluster interface	e0c	e0d
6			
7	MetroCluster 2, Shared Cluster and MetroCluster interface	e0c	e0d
8			
9	MetroCluster 3, Shared Cluster and MetroCluster interface	e0c	e0d
10			
11	MetroCluster 4, Shared Cluster and MetroCluster interface	e0c	e0d
12			
13	ISL, MetroCluster native speed 10G / 25G	ISL, MetroCluster	
14			
15			
16			
..	Ports not licensed (17 - 54)		
53	ISL, MetroCluster, native speed 40G / 100G (Note 1)	ISL, MetroCluster	
54			
55	ISL, Local Cluster native speed / 100G	ISL, Local Cluster	
56			

- **Note 1:** Using these ports requires an additional license.
- If both MetroCluster configurations are using the same the platform, NetApp recommends selecting group "MetroCluster 3" for one configuration and group "MetroCluster 4" for the other configuration. If the platforms are different, then you must select "MetroCluster 3" or "MetroCluster 4" for the first configuration, and "MetroCluster 1" or "MetroCluster 2" for the second configuration.

Broadcom BES-53248 platform port assignments (group 3)

Review the platform port assignments to cable an AFF A20 system to a Broadcom BES-53248 switch:

Physical Port	Port use	AFF A20	
		IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e2a	e4a
2			
3	MetroCluster 2, Local Cluster interface	e2a	e4a
4			
5	MetroCluster 1, MetroCluster interface	e2b	e4b
6			
7	MetroCluster 2, MetroCluster interface	e2b	e4b
8			
9 - 12	Unused	disabled	
13	ISL, MetroCluster native speed 10G / 25G	ISL, MetroCluster	
14			
15			
16			
17	MetroCluster 3, Local Cluster interface (note 1)	e2a	e4a
18			
19	MetroCluster 3, MetroCluster interface (note 1)	e2b	e4b
20			
21	MetroCluster 4, Local Cluster interface (note 1)	e2a	e4a
22			
23	MetroCluster 4, MetroCluster interface (note 1)	e2b	e4b
24			
..	Ports not licensed (25 - 54)		
53	ISL, MetroCluster, native speed 40G / 100G (note 1)	ISL, MetroCluster	
54			
55	ISL, Local Cluster native speed / 100G	ISL, Local Cluster	
56			

- **Note 1:** Using these ports requires an additional license.

Broadcom BES-53248 platform port assignments (group 4)

Review the platform port assignments to cable an AFF A30, AFF C30, AFF C60, or FAS50 system to a Broadcom BES-53248 switch using a four-port 25G Ethernet card.



- This configuration requires a four-port 25G Ethernet card in slot 4 to connect the local cluster and HA interfaces.
- This configuration requires a QSFP-to-SFP+ adapter in the card on the controller to support a 25Gbps network speed.

Physical Port	Port use	AFF C30 (25G Cluster/HA) AFF A30 (25G Cluster/HA)		FAS50 (25G Cluster/HA)		AFF C60 (25G Cluster/HA)	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
2							
3	MetroCluster 2, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
4							
5	MetroCluster 1, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
6							
7	MetroCluster 2, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
8							
9 - 12	Unused	disabled		disabled		disabled	
13	ISL, MetroCluster native speed 10G / 25G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
14							
15							
16							
17	MetroCluster 3, Local Cluster interface (note 1)	e4a	e4b	e4a	e4b	e4a	e4b
18							
19	MetroCluster 3, MetroCluster interface (note 1)	e2a	e2b	e2a	e2b	e2a	e2b
20							
21	MetroCluster 4, Local Cluster interface (note 1)	e4a	e4b	e4a	e4b	e4a	e4b
22							
23	MetroCluster 4, MetroCluster interface (note 1)	e2a	e2b	e2a	e2b	e2a	e2b
24							
..	Ports not licensed (25 - 54)						
53	ISL, MetroCluster, native speed 40G / 100G (note 1)	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
54							
55	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	
56							

- **Note 1:** Using these ports requires an additional license.

Broadcom BES-53248 platform port assignments (group 5)

Review the platform port assignments to cable a FAS8200 or AFF A300 system to a Broadcom BES-53248 switch:

Physical Port	Port use	FAS8200 AFF A300	
		IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e0a	e0b
2			
3	MetroCluster 2, Local Cluster interface	e0a	e0b
4			
5	MetroCluster 1, MetroCluster interface	e1a	e1b
6			
7	MetroCluster 2, MetroCluster interface	e1a	e1b
8			
9 - 12	Unused	disabled	
13	ISL, MetroCluster native speed 10G / 25G	ISL, MetroCluster	
14			
15			
16			
..	Ports not licensed (17 - 54)		
53	ISL, MetroCluster, native speed 40G / 100G (note 1)	ISL, MetroCluster	
54			
55	ISL, Local Cluster native speed / 100G	ISL, Local Cluster	
56			

- **Note 1:** Using these ports requires an additional license.

Broadcom BES-53248 platform port assignments (group 6)

Review the platform port assignments to cable an AFF A320 system to a Broadcom BES-53248 switch:

Physical Port	Port use	AFF A320	
		IP_Switch_x_1	IP_Switch_x_2
1 - 12	Ports not used (Note 2)	disabled	
13	ISL, MetroCluster native speed 10G / 25G	ISL, MetroCluster	
14			
15			
16			
..	Ports not licensed (17 - 54)		
53	ISL, MetroCluster, native speed 40G / 100G (see Note 1)	ISL, MetroCluster	
54			
55	MetroCluster 1, MetroCluster interface (Note 2)	e0g	e0h
56			

- **Note 1:** Using these ports requires an additional license.
- **Note 2:** Only a single four-node MetroCluster using AFF A320 systems can be connected to the switch.

Features that require a switched cluster are not supported in this configuration. This includes the MetroCluster FC to IP transition and tech refresh procedures.

Broadcom BES-53248 platform port assignments (group 7)

Review the platform port assignments to cable a FAS8300, AFF C400, ASA C400, AFF A400, ASA A400, or FAS8700 system to a Broadcom BES-53248 switch:

Physical Port	Port use	FAS8300 AFF C400 ASA C400 FAS8700		AFF A400 ASA A400	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1 - 12	Ports not used (see Note 2)	disabled		disabled	
13	ISL, MetroCluster native speed 10G / 25G	ISL, MetroCluster		ISL, MetroCluster	
14					
15					
16					
..	Ports not licensed (17 - 48)				
49	MetroCluster 5, Local Cluster interface (Note 1)	e0c	e0d	e3a	e3b
50					
51	MetroCluster 5, MetroCluster interface (Note 1)	e1a	e1b	e1a	e1b
52					
53	ISL, MetroCluster, native speed 40G / 100G (Note 1)	ISL, MetroCluster		ISL, MetroCluster	
54					
55	ISL, Local Cluster native speed / 100G	ISL, Local Cluster		ISL, Local Cluster	
56					

- **Note 1:** Using these ports requires an additional license.

- **Note 2:** Only a single four-node MetroCluster using AFF A320 systems can be connected to the switch.

Features that require a switched cluster are not supported in this configuration. This includes the MetroCluster FC to IP transition and tech refresh procedures.

Platform port assignments for NVIDIA supported SN2100 IP switches in a MetroCluster IP configuration

The port usage in a MetroCluster IP configuration depends on the switch model and platform type.

Review the following considerations before using the configuration tables:

- Connecting an eight-node or two four-node MetroCluster configurations requires ONTAP 9.14.1 or later and RCF file version 2.00 or later.



The RCF file version is different to the version of the RCFfilegenerator tool used to generate the file. For example, you can generate an RCF file version 2.00 using RCFfilegenerator v1.6c.

- If you cable multiple MetroCluster configurations then follow the respective table. For example:
 - If you cable two four-node MetroCluster configurations of type AFF A700, then connect the first MetroCluster shown as "MetroCluster 1", and the second MetroCluster shown as "MetroCluster 2" in the AFF A700 table.



Ports 13 and 14 can be used in native speed mode supporting 40 Gbps and 100 Gbps, or in breakout mode to support 4 × 25 Gbps or 4 × 10 Gbps. If they use native speed mode they are represented as ports 13 and 14. If they use breakout mode, either 4 × 25 Gbps or 4 × 10 Gbps, then they are represented as ports 13s0-3 and 14s0-3.

The following sections describe the physical cabling outline. You can also refer to the [RcfFileGenerator](#) for detailed cabling information.

Choose the correct cabling table for your configuration

Use the following table to determine which cabling table you should follow.

If your system is...	Use this cabling table...
AFF A150, ASA A150 FAS500f AFF C250, ASA C250 AFF A250, ASA A250	NVIDIA SN2100 platform port assignments (group 1)
AFF A20	NVIDIA SN2100 platform port assignments (group 2)

If your system is...	Use this cabling table...
AFF C30, AFF A30 FAS50 AFF C60	The table you follow depends on whether you are using a 25G (group 3a) or 100G (group 3b) Ethernet card. <ul style="list-style-type: none"> • NVIDIA SN2100 platform port assignments (group 3a -25G) • NVIDIA SN2100 platform port assignments (group 3b -100G)
FAS8300 AFF C400, ASA C400 AFF A400, ASA A400 FAS8700 FAS9000, AFF A700	NVIDIA SN2100 platform port assignments (group 4)
AFF A50	NVIDIA SN2100 platform port assignments (group 5)
AFF C800, ASA C800 AFF A800, ASA A800 FAS9500 AFF A900, ASA A900	NVIDIA SN2100 platform port assignments (group 6)
FAS70, AFF A70 AFF C80 FAS90, AFF A90 AFF A1K	NVIDIA SN2100 platform port assignments (group 7)

NVIDIA SN2100 platform port assignments (group 1)

Review the platform port assignments to cable an AFF A150, ASA A150, FAS500f, AFF C250, ASA C250, AFF A250, or ASA A250 system to a NVIDIA SN2100 switch:

Switch Port	Port use	AFF A150 ASA A150		FAS500F AFF C250 ASA C250 AFF A250 ASA A250	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1 - 6	Unused	disabled		disabled	
7s0	MetroCluster 1, Shared Cluster and MetroCluster interface	e0c	e0d	e0c	e0d
7s1-3		disabled		disabled	
8s0		e0c	e0d	e0c	e0d
8s1-3		disabled		disabled	
9s0	MetroCluster 2, Shared Cluster and MetroCluster interface	e0c	e0d	e0c	e0d
9s1-3		disabled		disabled	
10s0		e0c	e0d	e0c	e0d
10s1-3		disabled		disabled	
11s0	MetroCluster 3, Shared Cluster and MetroCluster interface	e0c	e0d	e0c	e0d
11s1-3		disabled		disabled	
12s0		e0c	e0d	e0c	e0d
12s1-3		disabled		disabled	
13 / 13s0-3	MetroCluster ISL 40/100G or 4x25G or 4x10G	ISL, MetroCluster		ISL, MetroCluster	
14 / 14s0-3					
15	ISL, Local Cluster 100G	ISL, Local Cluster		ISL, Local Cluster	
16					

NVIDIA SN2100 platform port assignments (group 2)

Review the platform port assignments to cable an AFF A20 system to a NVIDIA SN2100 switch:

Switch Port	Port use	AFF A20	
		IP_Switch_x_1	IP_Switch_x_2
1s0	MetroCluster 1, Local Cluster interface	e2a	e4a
s1s1-3		disabled	
2s0		e2a	e4a
2s1-3		disabled	
3s0	MetroCluster 2, Local Cluster interface	e2a	e4a
3s1-3		disabled	
4s0		e2a	e4a
4s1-3		disabled	
5s0	MetroCluster 3, Local Cluster interface	e2a	e4a
5s1-3		disabled	
6s0		e2a	e4a
6s1-3		disabled	
7	MetroCluster 1, MetroCluster interface	e2b	e4b
8			
9	MetroCluster 2, MetroCluster interface	e2b	e4b
10			
11	MetroCluster 3, MetroCluster interface	e2b	e4b
12			
13 / 13s0-3	MetroCluster ISL 40/100G or 4x25G or 4x10G	ISL, MetroCluster	
14 / 14s0-3			
15	ISL, Local Cluster 100G	ISL, Local Cluster	
16			

NVIDIA SN2100 platform port assignments (group 3a)

Review the platform port assignments to cable an AFF A30, AFF C30, AFF C60, or FAS50 system to a NVIDIA SN2100 switch using a four-port 25G Ethernet card:



This configuration requires a four-port 25G Ethernet card in slot 4 to connect the local cluster and HA interfaces.

Switch Port	Port use	AFF C30 (25G Cluster/HA) AFF A30 (25G Cluster/HA)		FAS50 (25G Cluster/HA)		AFF C60 (25G Cluster/HA)	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1s0	MetroCluster 1, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
s1s1-3		disabled		disabled		disabled	
2s0		e4a	e4b	e4a	e4b	e4a	e4b
2s1-3		disabled		disabled		disabled	
3s0	MetroCluster 2, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
3s1-3		disabled		disabled		disabled	
4s0		e4a	e4b	e4a	e4b	e4a	e4b
4s1-3		disabled		disabled		disabled	
5s0	MetroCluster 3, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
5s1-3		disabled		disabled		disabled	
6s0		e4a	e4b	e4a	e4b	e4a	e4b
6s1-3		disabled		disabled		disabled	
7	MetroCluster 1, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
8		e2a	e2b	e2a	e2b	e2a	e2b
9	MetroCluster 2, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
10	MetroCluster 3, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
11	MetroCluster 3, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
12	MetroCluster 3, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
13 / 13s0-3	MetroCluster ISL 40/100G or 4x25G or 4x10G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
14 / 14s0-3		ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
15	ISL, Local Cluster 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	
16	ISL, Local Cluster 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	

NVIDIA SN2100 platform port assignments (group 3b)

Review the platform port assignments to cable an AFF A30, AFF C30, AFF C60, or FAS50 system to a NVIDIA SN2100 switch using a two-port 100G Ethernet card:



This configuration requires a two-port 100G Ethernet card in slot 4 to connect the local cluster and HA interfaces.

Switch Port	Port use	AFF C30 (100G Cluster/HA) AFF A30 (100G Cluster/HA)		FAS50 (100G Cluster/HA)		AFF C60 (100G Cluster/HA)	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
2		e4a	e4b	e4a	e4b	e4a	e4b
3	MetroCluster 2, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
4		e4a	e4b	e4a	e4b	e4a	e4b
5	MetroCluster 3, Local Cluster interface	e4a	e4b	e4a	e4b	e4a	e4b
6		e4a	e4b	e4a	e4b	e4a	e4b
7	MetroCluster 1, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
8		e2a	e2b	e2a	e2b	e2a	e2b
9	MetroCluster 2, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
10	MetroCluster 3, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
11	MetroCluster 3, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
12	MetroCluster 3, MetroCluster interface	e2a	e2b	e2a	e2b	e2a	e2b
13 / 13s0-3	MetroCluster ISL 40/100G or 4x25G or 4x10G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
14 / 14s0-3		ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
15	ISL, Local Cluster 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	
16	ISL, Local Cluster 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	

NVIDIA SN2100 platform port assignments (group 4)

Review the platform port assignments to cable a FAS8300, AFF C400, ASA C400, AFF A400, ASA A400, FAS8700, FAS9000, or AFF A700 system to a NVIDIA SN2100 switch:

Switch Port	Port use	FAS8300 AFF C400 ASA C400 FAS8700		AFF A400 ASA A400		FAS9000 AFF A700	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e0c	e0d	e3a	e3b	e4a	e4e / e8a Note 1
2							
3	MetroCluster 2, Local Cluster interface	e0c	e0d	e3a	e3b	e4a	e4e / e8a Note 1
4							
5	MetroCluster 3, Local Cluster interface	e0c	e0d	e3a	e3b	e4a	e4e / e8a Note 1
6							
7	MetroCluster 1, MetroCluster interface	e1a	e1b	e1a	e1b	e5a	e5b
8							
9	MetroCluster 2, MetroCluster interface	e1a	e1b	e1a	e1b	e5a	e5b
10							
11	MetroCluster 3, MetroCluster interface	e1a	e1b	e1a	e1b	e5a	e5b
12							
13 / 13s0-3	MetroCluster ISL 40/100G or 4x25G or 4x10G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
14 / 14s0-3							
15	ISL, Local Cluster 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	
16							

Note 1: Use either ports e4a and e4e or e4a and e8a if you are using an X91440A adapter (40Gbps). Use either ports e4a and e4b or e4a and e8a if you are using an X91153A adapter (100Gbps).

NVIDIA SN2100 platform port assignments (group 5)

Review the platform port assignments to cable an AFF A50 system to a NVIDIA SN2100 switch:

Switch Port	Port use	AFF A50	
		IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e4a	e4b
2			
3	MetroCluster 2, Local Cluster interface	e4a	e4b
4			
5	MetroCluster 3, Local Cluster interface	e4a	e4b
6			
7	MetroCluster 1, MetroCluster interface	e2a	e2b
8			
9	MetroCluster 2, MetroCluster interface	e2a	e2b
10			
11	MetroCluster 3, MetroCluster interface	e2a	e2b
12			
13 / 13s0-3	MetroCluster ISL 40/100G or 4x25G or 4x10G	ISL, MetroCluster	
14 / 14s0-3			
15	ISL, Local Cluster 100G	ISL, Local Cluster	
16			

NVIDIA SN2100 platform port assignments (group 6)

Review the platform port assignments to cable an AFF C800, ASA C800, AFF A800, ASA A800, FAS9500, AFF A900, or ASA A900 system to a NVIDIA SN2100 switch:

Switch Port	Port use	AFF C800 ASA C800 AFF A800 ASA A800		FAS9500 AFF A900 ASA A900	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e0a	e1a	e4a	e4b(e) / e8a Note 1
2					
3	MetroCluster 2, Local Cluster interface	e0a	e1a	e4a	e4b(e) / e8a Note 1
4					
5	MetroCluster 3, Local Cluster interface	e0a	e1a	e4a	e4b(e) / e8a Note 1
6					
7	MetroCluster 1, MetroCluster interface	e0b	e1b	e5b	e7b
8					
9	MetroCluster 2, MetroCluster interface	e0b	e1b	e5b	e7b
10					
11	MetroCluster 3, MetroCluster interface	e0b	e1b	e5b	e7b
12					
13 / 13s0-3	MetroCluster ISL 40/100G or 4x25G or 4x10G	ISL, MetroCluster		ISL, MetroCluster	
14 / 14s0-3					
15	ISL, Local Cluster 100G	ISL, Local Cluster		ISL, Local Cluster	
16					

Note 1: Use either ports e4a and e4e or e4a and e8a if you are using an X91440A adapter (40Gbps). Use either ports e4a and e4b or e4a and e8a if you are using an X91153A adapter (100Gbps).

NVIDIA SN2100 platform port assignments (group 7)

Review the platform port assignments to cable a FAS70, AFF A70, AFF C80, FAS90, AFF A90, or AFF A1K system to a NVIDIA SN2100 switch:

Switch Port	Port use	FAS70 AFF A70		AFF C80		FAS90 AFF A90		AFF A1K	
		IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2	IP_Switch_x_1	IP_Switch_x_2
1	MetroCluster 1, Local Cluster interface	e1a	e7a	e1a	e7a	e1a	e7a	e1a	e7a
2									
3	MetroCluster 2, Local Cluster interface	e1a	e7a	e1a	e7a	e1a	e7a	e1a	e7a
4									
5	MetroCluster 3, Local Cluster interface	e1a	e7a	e1a	e7a	e1a	e7a	e1a	e7a
6									
7	MetroCluster 1, MetroCluster interface	e2a	e2b	e2a	e3b	e2b	e3b	e2b	e3b
8									
9	MetroCluster 2, MetroCluster interface	e2a	e2b	e2a	e3b	e2b	e3b	e2b	e3b
10									
11	MetroCluster 3, MetroCluster interface	e2a	e2b	e2a	e3b	e2b	e3b	e2b	e3b
12									
13 / 13s0-3	MetroCluster ISL 40/100G or 4x25G or 4x10G	ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster		ISL, MetroCluster	
14 / 14s0-3									
15	ISL, Local Cluster 100G	ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster		ISL, Local Cluster	
16									

Copyright information

Copyright © 2026 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.