



Hewlett Packard
Enterprise

HPE Composable Fabric 5.0
Support Matrix

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About

The HPE Composable Fabric support matrix defines Composable Fabric software and hardware compatibility and requirements, as well as cable and transceiver support.

Related Documentation

In addition to this document, refer to the following documentation:

- *HPE Composable Fabric 5.0 Release Notes*
- *HPE Composable Fabric Manager 5.0 Installation Guide*
- *HPE Composable Fabric Module 5.0 Administrator Guide using Linux and CLI.*
- *HPE Composable Fabric 5.0 FM 3180 Fabric Module Installation Guide*
- *HPE Composable Fabric 5.0 FM 3032Q Fabric Module Installation Guide*
- *HPE Composable Fabric 5.0 FM 2072 Fabric Module Installation Guide*
- *HPE Composable Fabric Manager Online Help* which is available while logged into the HPE Composable Fabric Manager UI

Contacting HPE Networking Support

You can open a support case by contacting the HPE Advanced Support Center at 1-800-633-3600. Note that customers will be asked to provide their Support Agreement ID (SAID) so that the support agent can provide the full level of support to which the customer is entitled and see the details of the equipment covered. Alternatively, the customer could provide the serial number of the device under support.

You can also open a support case electronically through the HPE Support Center:

www.hpe.com/support/hpesc

Note: To log a case directly in HPE Support Center you will need both an HPE Passport account and a valid Service Agreement ID (SAID). In May 2019, legacy Plexxi customers will receive HPE SAID numbers for their existing Plexxi service agreements (see the “Support Service Contract Migration” section in this document).

Composable Fabric Manager and Fabric Module Software Compatibility

The following table outlines compatibility between the HPE Composable Fabric Manager and Composable Fabric module software versions.

		Composable Fabric Module software
		5.0.x
Composable Fabric Manager	5.0.x	✓

Composable Fabric Manager Upgrade Compatibility

The following table specifies approved Composable Fabric Manager upgrade paths.

Composable Fabric Manager		To
		5.0.x
From	5.0.x	✓

Composable Fabric Module Software Upgrade Compatibility

The following table specifies approved Composable Fabric module software upgrade paths.

Composable Fabric Module		To
		5.0.x
From	5.0.x	✓

Composable Fabric Manager and VMware ESX Hypervisor Compatibility

The following table defines versions of VMware ESX on which Composable Fabric Manager can be installed and run.

Composable Fabric Manager		VMware ESX			
		5.5	6.0	6.5	6.7
From	5.0.x	✗	✓	✓	✓

Composable Fabric Manager and VMware vSphere Client Compatibility

The following table defines versions of VMware ESX on which Composable Fabric Manager can be installed and run.

The following table outlines compatibility between Composable Fabric Manager and VMware vSphere Client software versions.

		VMware vSphere Web Client			
		5.5	6.0	6.5	6.7
Composable Fabric Manager	5.0.x	✘	✔	✔	✔

Composable Fabric Manager Plugin and VMware vSphere Client Compatibility

The following table defines versions of VMware ESX on which the Composable Fabric Manager UI plugin can be run.

		VMware vSphere Web Client			
		5.5	6.0	6.5	6.7
Composable Fabric Manager Plugin	5.0.x	✘	✔	✔	✘

Composable Fabric Manager and HPE SimpliVity Compatibility

Composable Fabric Manager release 5.0.x supports the following HPE SimpliVity versions:

- SimpliVity 3.7.4 through 3.7.6

Composable Fabric Manager UI Browser Compatibility

Composable Fabric Manager release 5.0 supports recent versions of the following browsers:

- Google Chrome
- Firefox
- Safari

Composable Fabric Manager Host/Server Requirements

Installing Composable Fabric Manager 5.0 has the following host (VM or bare metal) minimums:

- Minimum two 2-GHz or greater virtual CPUs
- Minimum 8 GB of memory
- Minimum 50 GB of thick-provisioned disk space

HPE OneView Composable Fabric Resource Claiming

In HPE Composable Fabric release 5.0, HPE OneView can claim ownership of the following Composable Fabric resources.

- Fabric module ports
- LAGs
- Port security
- VLAN Groups
- Fabrics
- Fabric modules
- Affinities

Composable Fabric 5.0 Support

Configuration

One Composable Fabric

One Virtual Private Cloud (VPC)

See the next section for Composable Fabric module support and Composable Fabric speed support.

Composable Fabric Module Support

HPE Composable Fabric 5.0 supports all Composable Fabric modules shown in the following table.

Note: Plexxi is the product name prior to HPE acquiring the Plexxi company.

HPE Model	HPE Part #	HPE Description	Plexxi Model
FM 2072	R0Y48A	HPE Composable Fabric FM 2072 6-port QSFP and 48-port SFP+ Front-to-Back Module	2e
	R0Y49A	HPE Composable Fabric FM 2072 6-port QSFP and 48-port SFP+ Back-to-Front Module	
FM 3180	R1N25A	HPE Composable Fabric FM 3180 8-port QSFP28 and 48-port 10/25GbE Front-to-Back Module	N/A
	R1N26A	HPE Composable Fabric FM 3180 8-port QSFP28 and 48-port 10/25GbE Back-to-Front Module	
FM 3032Q	R1N27A	HPE Composable Fabric FM 3032Q 32-port QSFP28 1RU Front-to-Back Module	3eq
	R1N28A	HPE Composable Fabric FM 3032Q 32-port QSFP28 1RU Back to Front Module	
FM 1006	R1N31A	HPE Composable Fabric FM 1006 1RU Passive Module	Pod Switch Interconnect (PSI)
N/A	N/A		2
N/A	N/A		2s
N/A	N/A		2p
N/A	N/A		2sp

Fabric modules must be running Composable Fabric module software version 5.0 or newer.

A single direct-connect Composable Fabric cannot exceed 7 fabric modules.

FM 1006 passive interconnect modules can be used to connect the following fabric modules when deploying a Composable Fabric:

- HPE FM 3180, FM 3032Q and 3eq fabric modules running at 25 Gbps per port (100 Gbps per QSFP).
- HPE FM 3180, FM 3032Q, FM 2072, 2, 2s, 2p, 2sp and 3eq fabric modules running at 10 Gbps per port (40 Gbps per QSFP).

IMPORTANT: For Composable Fabric paths between fabric modules, you must make sure that all fabric modules use the same fabric port speed. This is especially true when a fabric contains fabric modules of different speed capacities, for example, FM 2072 which operates at 10 Gbps per port and FM 3180 which operates at 25 Gbps per port. In release 5.0, the installed transceiver determines the port speed. In a mixed environment, 40 Gb/s QSFP transceivers must be installed in QSFP switch ports capable of operating at 100 Gb/s.

Required Ports for Composable Fabric Management

The following ports must be open to manage and use HPE Composable Fabric:

Port	Protocol	Use	Description
22	TCP	Inbound, Outbound	Used for SSH and SFTP. SSH is required to communicate with CFM base OS and fabric modules. SFTP is required for actions such as firmware upgrades and support dumps.
53	UDP, TCP	Outbound	Used for DNS client queries.
80	TCP	Inbound	Used for the HTTP interface. This port redirects to port 443; This port is used by CFM integrations to communicate with VMware ESXi, HPE SimpliVity and other platforms.
123	UDP	Outbound	Used as an NTP client to synchronize the appliance time.
161	UDP	Inbound	Used for SNMP GET calls from external management devices into Fabric Modules.
162	UDP	Outbound	Used for sending SNMP traps from Fabric Modules.
443	TCP	Inbound	Used for the HTTPS access to user interface and APIs.
443	TCP	Outbound	Used for secure SSL access to the Fabric Modules. This port also used by CFM integrations to communicate with VMware ESXi, HPE SimpliVity and other platforms.
636	TCP	Outbound	Secure LDAP. Used for enterprise directory integration (Microsoft Active Directory, OpenLDAP)
3269	TCP	Outbound	Used for Microsoft Active directory LDAP global catalog port.
6343	UDP	Outbound	Used to transport sFlow monitoring information from Fabric Modules.

Supported Cables

25/100G AOC and DAC Cables – FM 3032Q, FM 3180, FM 2072, 3eq, 2e, 2, 2p, 2s, 2sp

HPE Part #	Description	Where Used
R1N32A	HPE 25Gb SFP28 to SFP28 3m Direct Attach Copper Cable	SFP ports
R1N33A	HPE 25Gb SFP28 to SFP28 5m Direct Attach Copper Cable	
R1N34A	HPE 100Gb QSFP28 to QSFP28 50cm Direct Attach Copper Cable	QSFP ports 25/100GbE or 10/40 GbE
R1N35A	HPE 100Gb QSFP28 to QSFP28 1m Direct Attach Copper Cable	Can use with FM 3032Q, FM 3180 (ports 49-50), 3eq, 2e, 2, 2p, 2s, 2sp.

25/100G DAC Breakout Cables – FM 3032Q, FM 3180, 3eq

These cables can be used in QSFP ports running 25/100 GbE Mode or 10/40 GbE mode.

HPE Part #	Description	Where Used
R1N63A	HPE QSFP28 to 4x25Gb SFP28 3m Direct Attach Copper Cable	FM 3032Q, FM 3180 (ports 49-50), 3eq QSFP ports 25/100GbE or 10/40 GbE

25/100G AOC Breakout Cables – FM 3032Q, FM 3180, 3eq

Use these cables in QSFP ports running 25/100 GbE mode. Do not use in QSFP ports running 10/40GbE mode.

HPE Part #	Description	Where Used
R1N50A	HPE QSFP28 to 4x25Gb SFP28 7m Active Optical Cable	FM 3032Q, FM 3180 (ports 49-50), 3eq
R1N51A	HPE QSFP28 to 4x25Gb SFP28 15m Active Optical Cable	QSFP ports 25/100GbE Not for use with 10/40 GbE mode

10/40G DAC Cables – FM 3032Q, FM 2072, 3eq, 2e, 2, 2p, 2s, 2sp

IMPORTANT: If you are connecting to a 3eq, use these cables in QSFP ports that are in 10/40 GbE Mode Only; do NOT use them with ports configured to use 25/100 GbE Mode.

HPE Part #	Description	Where Used
R0Y58A	HPE 40Gb QSFP+ to QSFP+ 0.35m Direct Attach Copper Cable	QSFP ports 10/40 GbE FM 3032Q, FM 3180 (ports 49-50) or 3eq ports must be set to 10/40 GbE mode.
R0Y56A	HPE 40Gb QSFP+ to QSFP+ 1m Direct Attach Copper Cable	
R0Y57A	HPE 40Gb QSFP+ to QSFP+ 3m Direct Attach Copper Cable	
R0Y59A	HPE 40Gb QSFP+ to QSFP+ 5m Direct Attach Copper Cable	
R0Y52A	HPE 10Gb SFP+ to SFP+ 1m Direct Attach Copper Cable	Can be used in SFP ports running 10 GbE FM 3032Q, FM 3180 (ports 49-50) or 3eq ports must be set to 10GbE mode.
R0Y53A	HPE 10Gb SFP+ to SFP+ 3m Direct Attach Copper Cable	
R0Y54A	HPE 10Gb SFP+ to SFP+ 5m Direct Attach Copper Cable	
R0Y55A	HPE 10Gb SFP+ to SFP+ 7m Direct Attach Copper Cable IMPORTANT: Do not use this cable with Flexx ports on models 2, 2s and 2sp.	

10/40G AOC Cables – FM 3032Q, FM 2072, 3eq, 2e, 2, 2s, 2p, 2sp

IMPORTANT: If you are connecting to an FM 3032Q or 3eq, use these cables in QSFP ports that are in 10/40 GbE Mode Only; do NOT use them with ports configured to use 25/100 GbE Mode.

HPE Part #	Description	Where Used
R1N40A	HPE 40Gb QSFP+ to QSFP+ 15m Active Optical Cable	QSFP ports 10/40 GbE mode only FM 3032Q, FM 3180, 3eq QSFP ports must be set to 10/40 GbE mode.
R1N39A	HPE 40Gb QSFP+ to QSFP+ 7m Active Optical Cable	
R1N79A	HPE 10Gb SFP+ to SFP+ 5m Active Optical Cable	SFP+ ports 10 GbE mode only These cables can be used in FM 3032Q, FM 3180 or 3eq SFP+ ports running 10 GbE. FM 3032Q, FM 3180, 3eq SFP+ ports must be set to 10 GbE mode.

QSFP+ to SFP+ Adapters– FM 3032Q, FM 3180, FM 2072, 3eq, 2e, 2, 2p, 2s, 2sp

HPE Part #	Description	Where Used
R1P14A	HPE QSFP+ to SFP+ Adapter	QSFP ports
R1P15A	HPE QSFP28 to SFP28 Adapter	

Supported Transceivers

QSFP28 Transceivers 25/100 GbE – FM 3032Q, 3eq

IMPORTANT: Use these transceivers in QSFP ports that are in 25/100 GbE Mode Only; do NOT use them with ports configured to use 10/40 GbE Mode.

HPE Part #	Description	Where Used
R1N45A	HPE 100Gb QSFP28 MPO PSM4 1km Transceiver	FM 3032Q, 3eq QSFP28 ports 100 GbE
R1N46A	HPE 100Gb QSFP28 LC CWDM4 2km Transceiver	FM 3032Q, 3eq QSFP28 ports 100 GbE
R1N47A	HPE 100Gb QSFP28 MPO SR4 100m Transceiver	FM 3032Q, 3eq QSFP28 ports 25/100 GbE

QSFP Transceivers 10/40 GbE – FM 3032Q, FM 2072, 3eq, 2e, 2, 2s, 2p, 2sp

IMPORTANT: If you are connecting to a FM 3032Q or 3eq, use these transceivers in QSFP ports that are in 10/40 GbE Mode Only; do NOT use them with ports configured to use 25/100 GbE Mode.

HPE Part #	Description	Where Used
R1N49A	HPE 40Gb QSFP+ MPO SR4 100m Transceiver	QSFP ports 10/40 GbE

SFP Transceivers – FM 3032Q, FM 2072, 3eq, 2e, 2, 2s, 2p, 2sp

HPE Part #	Description	Where Used
R0Y63A	HPE 1GBASE-TX SFP RJ45 100m Transceiver	SFP port running 1 Gb/s. In FM 3032Q, 3eq, these can run in the single SFP+ port run at 1 Gb/s.
R1N97A	HPE 10Gb SFP+ LC LR 10km Transceiver	SFP port
R0Y65A	HPE 10GBASE-T SFP+ RJ45 30m Transceiver	These transceivers can be used in FM 3032Q, 3eq SFP port running 10 Gb/s.
R0Y62A	HPE 10Gb SFP+ LC SR 300m Transceiver	