Dell PowerFlex Appliance and PowerFlex Rack

PowerFlex Manager 4.x Compatibility Matrix

D&LL Technologies

Notes, cautions, and warnings

(i) **NOTE:** A NOTE indicates important information that helps you make better use of your product.

⚠ **CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.**

⚠ **WARNING: A WARNING indicates a potential for property damage, personal injury, or death.**

Contents

Introduction

The compatibility matrix provides PowerFlex Manager compatibility information for PowerFlex appliance and PowerFlex rack.

For additional PowerFlex rack documentation, go to PowerFlex rack technical documentation.

For additional PowerFlex appliance documentation, go to PowerFlex appliance technical documentation.

The target audience for this document includes system administrators responsible for managing PowerFlex appliance and PowerFlex rack, sales engineers, and advanced service specialists.

Revision history

Date	Document revision	Description of changes
January 2024	2.2	Updated the compatible networking switch for PowerFlex appliance
November 2023	2.1	Added support for: ● PowerFlex 4.5.1 ● Embedded operating system 15 SP4
September 2023	2.0	Added support for: ● PowerFlex 4.5 ● CloudLink 7.1.8
March 2023	1.3	Editorial updates
	1.2	Updated the compatible networking switches for PowerFlex appliance
January 2023	1.1	Added support for: ● Broadcom 57414 ● PowerFlex 4.0.1 ● CloudLink 7.1.5
August 2022	1.0	Initial release

Compatibility matrix for PowerFlex appliance

PowerFlex Manager 4.5.1

This section provides the PowerFlex Manager 4.5.1 compatibility details for PowerFlex appliance components.

Component	Compatibility
Nodes	PowerFlex R650/R750 (hyperconverged, storage-only, and compute-only)
	PowerFlex R6525/R7525 (compute-only)
	PowerFlex R640/R740xd (hyperconverged, storage-only, and compute-only)
	PowerFlex R840 (hyperconverged and compute-only)
	PowerFlex R650 (management controller)
	PowerFlex R650 (PowerFlex file)
	PowerFlex R650 (VMware NSX Edge node)
Operating system/hypervisor	VMware ESXi-7.0U3 (management controller)
	VMware-VCSA-all-7.0 3 (management controller)
	VMware-ESXi-7.0U3 (hyperconverged and compute-only)
	Embedded operating system 15 SP4 (storage-only)
	PowerFlex Manager support for PowerFlex appliance with operating systems that are provided by customer is limited to installation only and no update.
Adapters	Mellanox ConnectX-5 OCP/PCIe
	Mellanox ConnectX-6 DX
	Intel X710/I350 rNDC
	Mellanox ConnectX-4 rNDC
	Mellanox ConnectX-4/ConnectX-5
	Broadcom 57414 V1 2x25 OCP
	Broadcom 57414 V2 2x25
	Broadcom 57414 V1 2x25
Networking	Deployment requires a pair of the following switches: ● Cisco Nexus 93180YC-FX (access or management-aggregation) ● Cisco Nexus 93180YC-FX3 (access or management-aggregation) ● Cisco Nexus 93240YC-FX2 (access or leaf) ● Cisco Nexus 92348GC-X (management) ● Cisco Nexus 9336C-FX2 (aggregation or spine) ● Cisco Nexus 9364C-GX2 (spine or leaf) ● Dell PowerSwitch S4148F-ON (access) ● Dell PowerSwitch S5224F-ON (access) ● Dell PowerSwitch S5248F-ON (access) ● Dell PowerSwitch S5296F-ON (access) ● Dell PowerSwitch 4148T (management)

Component	Compatibility
	● Dell PowerSwitch S5232F-ON (Aggregation) After deploying, you PowerFlex Manager can monitor and update the following access Dell switches: ● Dell PowerSwitch S4148F-ON** ● Dell PowerSwitch S5224F-ON ● Dell PowerSwitch S5248F-ON ● Dell PowerSwitch S5296F-ON **Clusters of 10 or fewer nodes.
Storage	PowerFlex 4.5.1
Security	CloudLink 7.1.7
Compliance	Intelligent Catalog 45.373.01

PowerFlex Manager 4.5.x

This section provides the PowerFlex Manager 4.5.x compatibility details for PowerFlex appliance components.

Component	Compatibility
Nodes	PowerFlex R650/R750 (hyperconverged, storage-only, and compute-only) PowerFlex R6525/R7525 (compute-only) PowerFlex R640/R740xd (hyperconverged, storage-only, and compute-only) PowerFlex R840 (hyperconverged and compute-only) PowerFlex R650 (management controller) PowerFlex R650 (PowerFlex file) PowerFlex R650 (VMware NSX Edge node)
Operating system/hypervisor	VMware ESXi-7.0U3 (management controller) VMware-VCSA-all-7.0 3 (management controller) VMware-ESXi-7.0U3 (hyperconverged and compute-only) Embedded operating system 15 SP3 (storage-only) PowerFlex Manager support for PowerFlex appliance with operating systems that are provided by customer is limited to installation only and no update.
Adapters	Mellanox ConnectX-5 OCP/PCIe Mellanox ConnectX-6 DX Intel X710/I350 rNDC Mellanox ConnectX-4 rNDC Mellanox ConnectX-4/ConnectX-5 Broadcom 57414 V1 2x25 OCP Broadcom 57414 V2 2x25 Broadcom 57414 V1 2x25
Networking	Deployment requires a pair of the following switches: ● Cisco Nexus 93180YC-FX (access or management-aggregation) ● Cisco Nexus 93180YC-FX3 (access or management-aggregation) ● Cisco Nexus 93240YC-FX2 (access or leaf)

Component	Compatibility
	- Cisco Nexus 92348GC-X (management) - Cisco Nexus 9336C-FX2 (aggregation or spine) - Cisco Nexus 9364C-GX2 (spine or leaf) - Dell PowerSwitch S4148F-ON (access) - Dell PowerSwitch S5224F-ON (access) - Dell PowerSwitch S5248F-ON (access) - Dell PowerSwitch S5296F-ON (access) - Dell PowerSwitch 4148T (management) - Dell PowerSwitch S5232F-ON (Aggregation) After deploying, you PowerFlex Manager can monitor and update the following access Dell switches: - Dell PowerSwitch S4148F-ON** - Dell PowerSwitch S5224F-ON - Dell PowerSwitch S5248F-ON - Dell PowerSwitch S5296F-ON **Clusters of 10 or fewer nodes.
Storage	PowerFlex 4.5.0
Security	CloudLink 7.1.8
Compliance	Intelligent Catalog 45.373.00

PowerFlex Manager 4.0.x

This section provides the PowerFlex Manager 4.0.x compatibility details for PowerFlex appliance components.

Component	Compatibility
Nodes	PowerFlex R650/R750 (hyperconverged, storage-only, and compute-only) PowerFlex R6525 (compute-only) PowerFlex R640/R740xd (hyperconverged, storage-only, and compute-only) PowerFlex R840 (hyperconverged and compute-only) PowerFlex R650 (management controller) PowerFlex R650 (PowerFlex file) PowerFlex R650 (VMware NSX-T Edge)
Operating system/hypervisor	VMware ESXi-7.0U3G (management controller) VMware-VCSA-all-7.0 3h (management controller) VMware-ESXi-7.0U3G (hyperconverged and compute-only) Embedded operating system 15 SP3 (storage-only) Embedded operating system 15 SP3 (compute-only) PowerFlex Manager support for PowerFlex appliance with operating systems that are provided by customer is limited to installation only and no update.
Adapters	Mellanox ConnectX-5 OCP/PCIe Mellanox ConnectX-6 DX Intel X710/I350 rNDC Mellanox ConnectX-4 rNDC Mellanox ConnectX-4/ConnectX-5

Component	Compatibility
	Broadcom 57414 V1 2x25 OCP
	Broadcom 57414 V2 2x25
	Broadcom 57414 V1 2x25
Networking	Deployment requires a pair of the following switches: ● Cisco Nexus 93180YC-FX (access or management-aggregation) ● Cisco Nexus 93180YC-FX3 (access or management-aggregation) ● Cisco Nexus 93240YC-FX2 (access or leaf) ● Cisco Nexus 92348GC-X (management) ● Cisco Nexus 9336C-FX2 (aggregation or spine) ● Cisco Nexus 9364C-GX2 (spine or leaf) ● Dell PowerSwitch S4148F-ON (access) ● Dell PowerSwitch S5224F-ON (access) ● Dell PowerSwitch S5248F-ON (access) ● Dell PowerSwitch S5296F-ON (access) ● Dell PowerSwitch 4148T (management) ● Dell PowerSwitch S5232F-ON (Aggregation) After deploying, PowerFlex Manager can monitor and update the following access Dell switches: ● Dell PowerSwitch S4148F-ON** ● Dell PowerSwitch S5224F-ON ● Dell PowerSwitch S5248F-ON ● Dell PowerSwitch S5296F-ON **Clusters of 10 or fewer nodes.
Storage	PowerFlex 4.0.1
Security	CloudLink 7.1.5
Compliance	Intelligent Catalog 40.371.00

Compatibility matrix for PowerFlex rack

PowerFlex Manager 4.5.1

This section provides the PowerFlex Manager 4.5.1 compatibility details for PowerFlex rack components.

Component	Managed mode	Lifecycle mode	Alerting mode
Nodes	PowerFlex R650/R750 (hyperconverged, storage-only, and compute-only) PowerFlex R6525/R7525 (compute-only) PowerFlex R640/R740xd (hyperconverged, storage-only, and compute-only) PowerFlex R840 (hyperconverged and compute-only) PowerFlex R650 (management controller) PowerFlex R650 (PowerFlex file) PowerFlex R650 (VMware NSX Edge node)	PowerFlex R650/R750 (hyperconverged, storage-only, and compute-only) PowerFlex R6525/R7525 (compute-only) PowerFlex R640/R740xd (hyperconverged, storage-only, and compute-only) PowerFlex R840 (hyperconverged and compute-only) PowerFlex R650 (management controller) PowerFlex R650 (PowerFlex file) PowerFlex R650 (VMware NSX Edge node)	PowerFlex R650/R750 (hyperconverged, storage-only, and compute-only) PowerFlex R6525/R7525 (compute-only) PowerFlex R640/R740xd (hyperconverged, storage-only, and compute-only) PowerFlex R840 (hyperconverged and compute-only) PowerFlex R650 (management controller) PowerFlex R650 (PowerFlex file) PowerFlex R650 (VMware NSX Edge node)
Operating system/ hypervisor	VMware ESXi-7.0U3 (management controller) VMware-VCSA-all-7.0 3 (management controller) VMware-ESXi-7.0U3 (hyperconverged and compute-only) Embedded operating system 15 SP3) (storage-only and compute-only) PowerFlex Manager support for PowerFlex rack with operating systems that are provided by customer is limited to installation only and no update.	VMware ESXi-7.0U3 (management controller) VMware-VCSA-all-7.0 3 (management controller) VMware-ESXi-7.0U3 (hyperconverged and compute-only) Embedded operating system 15 SP3) (storage-only and compute-only) PowerFlex Manager support for PowerFlex rack with operating systems that are provided by customer is limited to installation only and no update.	Not applicable
Adapters	Mellanox ConnectX-5 OCP/PCIe Mellanox ConnectX-6 DX Intel X710/I350 rNDC Mellanox ConnectX-4 rNDC Mellanox ConnectX-4/ConnectX-5 Broadcom 57414 V1 2x25 OCP Broadcom 57414 V2 2x25	Lifecycle mode when a supported adapter cannot be identified.	Not applicable

Component	Managed mode	Lifecycle mode	Alerting mode
	Broadcom 57414 V1 2x25		
Networking	Managed mode requires a pair of the following server facing Dell and Cisco switches: The following switches are shipped and supported: ● Cisco Nexus 92348GC-X ● Cisco Nexus 93180YC-FX3 ● Cisco Nexus 9336C-FX2 ● Cisco Nexus 93240YC-FX2 ● Cisco Nexus 9364C-GX ● Dell PowerSwitch 4148T ● Dell S5232F-ON ● Dell S4148F-ON ● Dell S5248F-ON The following switches are supported but no longer shipped: ● Cisco Nexus 31108TC-V ● Cisco Nexus 3172TQ ● Cisco Nexus 93180YC-EX ● Cisco Nexus 93180YC-FX ● Cisco Nexus 9236C ● Cisco Nexus 3132 ● Cisco Nexus 3164 ● Cisco Nexus 9364C PowerFlex Manager can monitor and update the accessible switches in managed mode.	Lifecycle mode when a supported switch cannot be identified or cannot be granted with write access, provided the network configuration does not modify the node configuration. PowerFlex Manager can update only components with write access.	Not applicable
Storage	PowerFlex 4.5.1	PowerFlex 4.5.1	Not applicable
Security	CloudLink 7.1.7	CloudLink 7.1.7	Not applicable
Compliance	RCM 3.7.3.1	RCM 3.7.3.1	Not applicable

PowerFlex Manager 4.5.x

This section provides the PowerFlex Manager 4.5.x compatibility details for PowerFlex rack components.

Component	Managed mode	Lifecycle mode	Alerting mode
Nodes	PowerFlex R650/R750 (hyperconverged, storage-only, and compute-only)	PowerFlex R650/R750 (hyperconverged, storage-only, and compute-only)	PowerFlex R650/R750 (hyperconverged, storage-only, and compute-only)
	PowerFlex R6525/R7525 (compute-only)	PowerFlex R6525/R7525 (compute-only)	PowerFlex R6525/R7525 (compute-only)
	PowerFlex R640/R740xd (hyperconverged, storage-only, and compute-only)	PowerFlex R640/R740xd (hyperconverged, storage-only, and compute-only)	PowerFlex R640/R740xd (hyperconverged, storage-only, and compute-only)
	PowerFlex R840 (hyperconverged and compute-only)	PowerFlex R840 (hyperconverged and compute-only)	PowerFlex R840 (hyperconverged and compute-only)
	PowerFlex R650 (management controller)	PowerFlex R650 (management controller)	PowerFlex R650 (management controller)

Component	Managed mode	Lifecycle mode	Alerting mode
	PowerFlex R650 (PowerFlex file) PowerFlex R650 (VMware NSX Edge node)	PowerFlex R650 (PowerFlex file) PowerFlex R650 (VMware NSX Edge node)	PowerFlex R650 (PowerFlex file) PowerFlex R650 (VMware NSX Edge node)
Operating system/ hypervisor	VMware ESXi-7.0U3 (management controller) VMware-VCSA-all-7.0 3 (management controller) VMware-ESXi-7.0U3 (hyperconverged and compute-only) Embedded operating system 15 SP3) (storage-only and compute-only) PowerFlex Manager support for PowerFlex rack with operating systems that are provided by customer is limited to installation only and no update.	VMware ESXi-7.0U3 (management controller) VMware-VCSA-all-7.0 3 (management controller) VMware-ESXi-7.0U3 (hyperconverged and compute-only) Embedded operating system 15 SP3) (storage-only and compute-only) PowerFlex Manager support for PowerFlex rack with operating systems that are provided by customer is limited to installation only and no update.	Not applicable
Adapters	Mellanox ConnectX-5 OCP/PCIe Mellanox ConnectX-6 DX Intel X710/I350 rNDC Mellanox ConnectX-4 rNDC Mellanox ConnectX-4/ConnectX-5 Broadcom 57414 V1 2x25 OCP Broadcom 57414 V2 2x25 Broadcom 57414 V1 2x25	Lifecycle mode when a supported adapter cannot be identified.	Not applicable
Networking	Managed mode requires a pair of the following server facing Dell and Cisco switches: The following switches are shipped and supported: ● Cisco Nexus 92348GC-X ● Cisco Nexus 93180YC-FX3 ● Cisco Nexus 9336C-FX2 ● Cisco Nexus 93240YC-FX2 ● Cisco Nexus 9364C-GX ● Dell PowerSwitch 4148T ● Dell S5232F-ON ● Dell S4148F-ON ● Dell S5248F-ON The following switches are supported but no longer shipped: ● Cisco Nexus 31108TC-V ● Cisco Nexus 3172TQ ● Cisco Nexus 93180YC-EX ● Cisco Nexus 93180YC-FX ● Cisco Nexus 9236C ● Cisco Nexus 3132 ● Cisco Nexus 3164	Lifecycle mode when a supported switch cannot be identified or cannot be granted with write access, provided the network configuration does not modify the node configuration. PowerFlex Manager can update only components with write access.	Not applicable

Component	Managed mode	Lifecycle mode	Alerting mode
	• Cisco Nexus 9364C PowerFlex Manager can monitor and update the accessible switches in managed mode.		
Storage	PowerFlex 4.5	PowerFlex 4.5	Not applicable
Security	CloudLink 7.1.8	CloudLink 7.1.8	Not applicable
Compliance	RCM 3.7.3.0	RCM 3.7.3.0	Not applicable

PowerFlex Manager 4.0.x

This section provides the PowerFlex Manager 4.0.x compatibility details for PowerFlex rack components.

Component	Managed mode	Lifecycle mode	Alerting mode
Nodes	PowerFlex R650/R750 (hyperconverged, storage-only, and compute-only) PowerFlex R6525 (compute-only) PowerFlex R640/R740xd (hyperconverged, storage-only, and compute-only) PowerFlex R840 (hyperconverged and compute-only) PowerFlex R650 (management controller) PowerFlex R650 (PowerFlex file) PowerFlex R650 (VMware NSX-T Edge)	PowerFlex R650/R750 (hyperconverged, storage-only, and compute-only) PowerFlex R6525 (compute-only) PowerFlex R640/R740xd (hyperconverged, storage-only, and compute-only) PowerFlex R840 (hyperconverged and compute-only) PowerFlex R650 (management controller) PowerFlex R650 (PowerFlex file) PowerFlex R650 (VMware NSX-T Edge)	PowerFlex R650/R750 (hyperconverged, storage-only, and compute-only) PowerFlex R6525 (compute-only) PowerFlex R640/R740xd (hyperconverged, storage-only, and compute-only) PowerFlex R840 (hyperconverged and compute-only) PowerFlex R650 (management controller) PowerFlex R650 (PowerFlex file) PowerFlex R650 (VMware NSX-T Edge)
Operating system/ hypervisor	VMware ESXi-7.0U3G (management controller) VMware-VCSA-all-7.0 3h (management controller) VMware-ESXi-7.0U3G (hyperconverged and compute-only) Embedded operating system 15 SP3) (storage-only and compute-only) PowerFlex Manager support for PowerFlex rack with operating systems that are provided by customer is limited to installation only and no update.	VMware ESXi-7.0U3G (management controller) VMware-VCSA-all-7.0 3h (management controller) VMware-ESXi-7.0U3G (hyperconverged and compute-only) Embedded operating system 15 SP3) (storage-only and compute-only) PowerFlex Manager support for PowerFlex rack with operating systems that are provided by customer is limited to installation only and no update.	Not applicable
Adapters	Mellanox ConnectX-5 OCP/PCIe Mellanox ConnectX-6 DX Intel X710/I350 rNDC Mellanox ConnectX-4 rNDC	Lifecycle mode when a supported adapter cannot be identified.	Not applicable

Component	Managed mode	Lifecycle mode	Alerting mode
	Mellanox ConnectX-4/ConnectX-5 Broadcom 57414 V1 2x25 OCP Broadcom 57414 V2 2x25 Broadcom 57414 V1 2x25		
Networking	Managed mode requires a pair of the following server facing Dell and Cisco switches: The following switches are shipped and supported: ● Cisco Nexus 92348GC-X ● Cisco Nexus 93180YC-FX3 ● Cisco Nexus 9336C-FX2 ● Cisco Nexus 93240YC-FX2 ● Cisco Nexus 9364C-GX ● Dell PowerSwitch 4148T ● Dell S5232F-ON ● Dell S4148F-ON ● Dell S5248F-ON The following switches are supported but no longer shipped: ● Cisco Nexus 31108TC-V ● Cisco Nexus 3172TQ ● Cisco Nexus 93180YC-EX ● Cisco Nexus 93180YC-FX ● Cisco Nexus 9236C ● Cisco Nexus 3132 ● Cisco Nexus 3164 ● Cisco Nexus 9364C PowerFlex Manager can monitor and update the accessible switches in managed mode.	Lifecycle mode when a supported switch cannot be identified or cannot be granted with write access, provided the network configuration does not modify the node configuration. PowerFlex Manager can update only components with write access.	Not applicable
Storage	PowerFlex 4.0.1	PowerFlex 4.0.1	Not applicable
Security	CloudLink 7.1.5	CloudLink 7.1.5	Not applicable
Compliance	RCM 3.7.1.0	RCM 3.7.1.0	Not applicable

+ Applicable only to the final digit in the version. See RCM Portal for more information.