

# VMware vSphere 8.x on Dell PowerEdge Systems

## Quick Boot Compatibility Guide

## Notes, cautions, and warnings

 **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.

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# Overview

The vSphere quick boot feature enables a faster upgrade process for an ESXi server. The quick boot feature in vSphere 6.7 was first enabled on a selected list of PowerEdge servers. The same support is now expanded to vSphere 8.x. This compatibility guide provides an overview of configuration requirements to enable vSphere quick boot on the Dell PowerEdge servers.

The quick boot requires a combination of platform, I/O devices, device driver, and its corresponding firmware. This compatibility guide also outlines the support for quick boot, I/O devices and firmware for various generations of PowerEdge servers required to support the vSphere 8.x quick boot feature. The platform and I/O device details listed are in addition to the baseline hardware and driver verification performed by ESXi as part of the quick boot compatibility check.

To verify if a server configuration meets the quick boot baseline requirements of ESXi, run the following command from the ESXi console:

```
/usr/lib/vmware/loadesx/bin/loadESXCheckCompat.py
```

Depending on the server generation model, ensure that your server profile meets the driver and firmware requirements.

For more information about quick boot and support for vSphere 8.x, see the [Understanding ESXi Quick Boot Compatibility \(52477\)](#) article or [Quick Boot on Dell PowerEdge servers](#) whitepaper.

## Topics:

- [VMware vSphere 8.x Quickboot Compatibility matrix](#)
- [yx5x I/O devices supported for quick boot](#)
- [yx4x I/O devices supported for quick boot](#)

## VMware vSphere 8.x Quickboot Compatibility matrix

**Table 1. VMware vSphere 8.x Quickboot Compatibility matrix**

PowerEdge servers	Minimum BIOS version
PowerEdge C6420	2.8.2
PowerEdge C6520	1.3.8
PowerEdge C6525	2.0.3
PowerEdge FC640	2.8.2
PowerEdge M640	2.8.2
PowerEdge Mx740c	2.8.2
PowerEdge Mx750c	1.3.8
PowerEdge Mx840c	2.8.2
PowerEdge R450	1.2.1
PowerEdge R540	2.8.2
PowerEdge R550	1.2.1
PowerEdge R640	2.5.4
PowerEdge R650	1.3.8
PowerEdge R650xs	1.2.1
PowerEdge R6515	2.0.3
PowerEdge R6525	2.0.3

**Table 1. VMware vSphere 8.x Quickboot Compatibility matrix (continued)**

PowerEdge servers	Minimum BIOS version
PowerEdge R740	2.5.4
PowerEdge R740xd	2.5.4
PowerEdge R750	1.3.8
PowerEdge R750xa	1.3.8
PowerEdge R750xs	1.2.1
PowerEdge R7515	2.0.3
PowerEdge R7525	2.0.3
PowerEdge R840	2.8.2
PowerEdge R940	2.8.2
PowerEdge R940xa	2.8.2

## yx5x I/O devices supported for quick boot

**Table 2. yx5x I/O devices supported for quick boot**

Type	Vendor	Model	Driver	Minimum driver version	Minimum firmware version
RAID Controller	Dell	PERC H755 Front	lsi_mr3	7.716.03.00-1vmw	51.14.0-3900
		PERC H755 MX	lsi_mr3	7.716.03.00-1vmw	52.14.0-3901
		PERC H350 Adapter	lsi_mr3	7.718.02.00-1vmw	52.19.1-4171
		PERC H750 Adapter	lsi_mr3	7.718.02.00-1vmw	52.16.1-4074
HBA Controller	Dell	Dell HBA355i Front	lsi_msgpt35	17.00.02.00-1vmw	15.15.13.00
		Dell HBA350 MX	lsi_msgpt35	17.00.02.00-1vmw	15.15.06.00
		Dell HBA355e Adapter	lsi_msgpt35	17.00.02.00-1vmw	15.15.15.00
Network Controller	Qlogic	Marvell FastLinQ 41132 Dual Port 10GbE BASE-T, OCP NIC 3.0	qedentv	3.40.5.53-20vmw	15.20.16
		Marvell FastLinQ 41132 Dual Port 10GbE SFP+, OCP NIC 3.0	qedentv	3.40.5.53-20vmw	15.20.16
		Marvell FastLinQ 41232 Dual Port 10/25GbE SFP28, OCP NIC 3.0	qedentv	3.40.5.53-20vmw	15.20.16
		QLogic 10GE 2P QL41162HxRJ-DE Adapter	qedentv	3.40.5.53-20vmw	15.20.16
	Broadcomm	QLogic 25GE 2P QL41262HxCU-DE Adapter	qedentv	3.40.5.53-20vmw	15.20.16
		QLogic 4x10GE QL41164HxRJ CNA	qedentv	3.40.5.53-20vmw	15.20.16
		QL41262HMKR-DE 25 Gigabit Ethernet	qlnativefc	4.1.14.0-5vmw	15.20.14
		Broadcom BCM57412 10G SFP Dual Port PCIE adapter	bnxtnet	216.0.50.0-34vmw	21.80.16.92
		Broadcom BCM57414 25G SFP Dual Port PCIE adapter	bnxtnet	216.0.50.0-34vmw	21.80.16.92
		Broadcom BCM57416 10G BT Dual Port PCIE adapter	bnxtnet	216.0.50.0-34vmw	21.80.16.92

**Table 2. yx5x I/O devices supported for quick boot (continued)**

Type	Vendor	Model	Driver	Minimum driver version	Minimum firmware version
		Broadcom BCM57414 25G SFP Dual Port PCIe adapter	bnxtnet	216.0.50.0-34vmw	21.80.16.92
		Broadcom BCM57504 25G KR Quad Port Fab AB Mezz	bnxtnet	216.0.50.0-34vmw	21.80.16.92
	Intel	Intel(R) Ethernet 10G 2P X710-T2L-t Adapter	i40enu	1.8.1.136-1vmw	20.0.16
		Intel(R) Ethernet 10G 2P X710-T2L-t OCP	i40enu	1.8.1.136-1vmw	20.0.16
		Intel(R) Ethernet 10G 4P X710-T4L-t Adapter	i40enu	1.8.1.136-1vmw	20.0.16
		Intel(R) Ethernet 10G 4P X710-T4L-t OCP	i40enu	1.8.1.136-1vmw	20.0.16
		Intel(R) Ethernet 25G 2P E810-XXV Adapter	icen	1.0.0.10-1vmw	20.0.17
		Intel(R) Ethernet 25G 2P E810-XXV OCP	icen	1.0.0.10-1vmw	20.0.17
		Intel(R) Ethernet 1G 4P I350-t OCP	igbn	1.4.11.2-1vmw	20.0.16
		Intel(R) Ethernet 25G 2P XXV710 Mezz	i40enu	1.8.1.136-1vmw	20.0.16
	Mellanox	Mellanox ConnectX-5 Dual Port 25GbE SFP28 PCIe Adapter	nmlx5_core	4.19.16.10-1vmw	16.28.4512
		Mellanox ConnectX-6 Dx Dual Port 100 GbE QSFP56 PCIe Adapter	nmlx5_core	4.19.16.10-1vmw	22.28.45.12
		Mellanox ConnectX-6 Single Port HDR100 QSFP56 PCIe Adapter	nmlx5_core	4.19.16.10-1vmw	22.28.45.12
		Mellanox ConnectX-6 Dx Dual Port 100 GbE QSFP56 PCIe Adapter	nmlx5_core	4.19.16.10-1vmw	22.28.45.12
FC Controller	Emulex	Emulex LightPulse LPe35002-M2 2-Port 32 GB Fibre Channel Adapter	lpfc	12.8.298.3-1vmw	03.04.24
		Emulex LightPulse LPm32002-D 2-Port 32 GB Fibre Channel Adapter	lpfc	12.8.298.3-1vmw	12.8.379.7
	Qlogic	QME2742-DEL 32G FC	qlnativefc	4.1.14.0-5vmw	15.20.14
		Marvell QLogic 1x32Gb QLE2770 FC HBA	qlnativefc	4.1.14.0-5vmw	15.20.14
		Marvell QLogic 2x32Gb QLE2772 FC HBA	qlnativefc	4.1.14.0-5vmw	15.20.14
		QLE2690 Single Port 16Gb FC to PCIe Gen3 x8 Adapter	qlnativefc	4.1.14.0-5vmw	15.20.14
		QLE2692 Dual Port 16Gb FC to PCIe Gen3 x8 Adapter	qlnativefc	4.1.14.0-5vmw	15.20.14
AHCI Controller	Dell	BOSS-S2	vmw-ahci	2.0.9-1vmw	2.5.13.4008
		BOSS-S1 Modular	vmw-ahci	2.0.9-1vmw	2.6.13.3024
NVMe Controller	Samsung	Dell PowerEdge Express Flash Ent NVMe AGN MU AIC Gen4 1.6 TB	nvme_pcie	1.2.3.11-1vmw	2.0.2
		Dell PowerEdge Express Flash Ent NVMe AGN MU AIC Gen4 3.2 TB	nvme_pcie	1.2.3.11-1vmw	2.0.2
		Dell PowerEdge Express Flash Ent NVMe AGN MU AIC Gen4 6.4 TB	nvme_pcie	1.2.3.11-1vmw	2.0.2

**Table 2. yx5x I/O devices supported for quick boot (continued)**

Type	Vendor	Model	Driver	Minimum driver version	Minimum firmware version
		Dell PowerEdge Express Flash Ent NVMe v2 AGN MU U.2 Gen4 1.6 TB	nvme_pcie	1.2.3.11-1vmw	2.1.0
		Dell PowerEdge Express Flash Ent NVMe v2 AGN MU U.2 Gen4 12.8 TB	nvme_pcie	1.2.3.11-1vmw	2.1.0
		Dell PowerEdge Express Flash Ent NVMe v2 AGN MU U.2 Gen4 3.2TB	nvme_pcie	1.2.3.11-1vmw	2.1.0
		Dell PowerEdge Express Flash Ent NVMe v2 AGN MU U.2 Gen4 6.4 TB	nvme_pcie	1.2.3.11-1vmw	2.1.0
		Dell PowerEdge Express Flash Ent NVMe v2 AGN RI U.2 Gen4 1.92 TB	nvme_pcie	1.2.3.11-1vmw	2.1.0
		Dell PowerEdge Express Flash Ent NVMe v2 AGN RI U.2 Gen4 3.84 TB	nvme_pcie	1.2.3.11-1vmw	2.1.0
		Dell PowerEdge Express Flash Ent NVMe v2 AGN RI U.2 Gen4 7.68 TB	nvme_pcie	1.2.3.11-1vmw	2.1.0
		Dell PowerEdge Express Flash Ent NVMe v2 FIPS SED MU U.2 Gen4 1.6 TB	nvme_pcie	1.2.3.11-1vmw	2.1.0
		Dell PowerEdge Express Flash Ent NVMe v2 FIPS SED MU U.2 Gen4 12.8TB	nvme_pcie	1.2.3.11-1vmw	2.1.0
		Dell PowerEdge Express Flash Ent NVMe v2 FIPS SED MU U.2 Gen4 3.2 TB	nvme_pcie	1.2.3.11-1vmw	2.1.0
		Dell PowerEdge Express Flash Ent NVMe v2 FIPS SED MU U.2 Gen4 6.4 TB	nvme_pcie	1.2.3.11-1vmw	2.1.0
	Intel	Dell PowerEdge Express Flash Ent NVMe P5500 RI U.2 Gen4 1.92 TB	nvme_pcie	1.2.3.11-1vmw	1.0.0
		Dell PowerEdge Express Flash Ent NVMe P5500 RI U.2 Gen4 3.84 TB	nvme_pcie	1.2.3.11-1vmw	1.0.0
		Dell PowerEdge Express Flash Ent NVMe P5500 RI U.2 Gen4 7.68 TB	nvme_pcie	1.2.3.11-1vmw	1.0.0
		Dell PowerEdge Express Flash Ent NVMe SED P5500 RI U.2 Gen4 1.92 TB	nvme_pcie	1.2.3.11-1vmw	1.0.0
		Dell PowerEdge Express Flash Ent NVMe SED P5500 RI U.2 Gen4 3.84 TB	nvme_pcie	1.2.3.11-1vmw	1.0.0
		Dell PowerEdge Express Flash Ent NVMe SED P5500 RI U.2 Gen4 7.68 TB	nvme_pcie	1.2.3.11-1vmw	1.0.0
		Dell PowerEdge Express Flash Ent NVMe P5600 MU U.2 Gen4 1.6 TB	nvme_pcie	1.2.3.11-1vmw	1.0.0
		Dell PowerEdge Express Flash Ent NVMe P5600 MU U.2 Gen4 3.2 TB	nvme_pcie	1.2.3.11-1vmw	1.0.0
		Dell PowerEdge Express Flash Ent NVMe P5600 MU U.2 Gen4 6.4TB	nvme_pcie	1.2.3.11-1vmw	1.0.0
		Dell PowerEdge Express Flash Ent NVMe SED P5600 MU U.2 Gen4 1.6 TB	nvme_pcie	1.2.3.11-1vmw	1.0.0
		Dell PowerEdge Express Flash Ent NVMe SED P5600 MU U.2 Gen4 3.2 TB	nvme_pcie	1.2.3.11-1vmw	1.0.0

**Table 2. yx5x I/O devices supported for quick boot (continued)**

Type	Vendor	Model	Driver	Minimum driver version	Minimum firmware version
		Dell PowerEdge Express Flash Ent NVMe SED P5600 MU U.2 Gen4 6.4 TB	nvme_pcie	1.2.3.11-1vmw	1.0.0
		Dell Express Flash NVMe 750 GB (UP) U.2 (P4800X)	nvme_pcie	1.2.3.11-1vmw	E201DP36
		Dell Express Flash NVMe 375 GB (UP) U.2 (P4800X)	nvme_pcie	1.2.3.11-1vmw	E201DP36
		Dell Express Flash NVMe 375 GB HHHL AIC P4800X	nvme_pcie	1.2.3.11-1vmw	E201DP36
	Kioxia	Dell Express Flash NVMe 1.6 TB (MU) 2.5 U.2 (CM6)	nvme_pcie	1.2.3.11-1vmw	2.1.3
		Dell Express Flash NVMe 1.6 TB (MU) 2.5 U.2 (CM6)	nvme_pcie	1.2.3.11-1vmw	2.1.3
		Dell Express Flash NVMe 1.92 TB (RI) 2.5 U.2 (CM6)	nvme_pcie	1.2.3.11-1vmw	2.1.3
		Dell Express Flash NVMe 1.92 TB (RI) 2.5 U.2 (CM6)	nvme_pcie	1.2.3.11-1vmw	2.1.3
		Dell Express Flash NVMe 15.360 TB (RI) 2.5 U.2 (CM6)	nvme_pcie	1.2.3.11-1vmw	2.1.3
		Dell Express Flash NVMe 15.360 TB (RI) 2.5 U.2 (CM6)	nvme_pcie	1.2.3.11-1vmw	2.1.3
		Dell Express Flash NVMe 3.2 TB (MU) 2.5 U.2 (CM6)	nvme_pcie	1.2.3.11-1vmw	2.1.3
		Dell Express Flash NVMe 3.2 TB (MU) 2.5 U.2 (CM6)	nvme_pcie	1.2.3.11-1vmw	2.1.3
		Dell Express Flash NVMe 3.84 TB (RI) 2.5 U.2 (CM6)	nvme_pcie	1.2.3.11-1vmw	2.1.3
		Dell Express Flash NVMe 3.84 TB (RI) 2.5 U.2 (CM6)	nvme_pcie	1.2.3.11-1vmw	2.1.3
		Dell Express Flash NVMe 6.4 TB (MU) 2.5 U.2 (CM6)	nvme_pcie	1.2.3.11-1vmw	2.1.3
		Dell Express Flash NVMe 6.4 TB (MU) 2.5 U.2 (CM6)	nvme_pcie	1.2.3.11-1vmw	2.1.3
		Dell Express Flash NVMe 7.68 TB (RI) 2.5 U.2 (CM6)	nvme_pcie	1.2.3.11-1vmw	2.1.3
		Dell Express Flash NVMe 7.68 TB (RI) 2.5 U.2 (CM6)	nvme_pcie	1.2.3.11-1vmw	2.1.3
	Dell	Dell Express Flash NVMe 1.6 TB (MU)	nvme_pcie	1.2.3.11-1vmw	2.1.3
		Dell Express Flash NVMe PM1735 3.2 TB PCIe SSD	nvme_pcie	1.2.3.11-1vmw	2.0.2
		Dell Express Flash NVMe PM1735 6.4 TB PCIe SSD	nvme_pcie	1.2.3.11-1vmw	2.0.2



## yx4x I/O devices supported for quick boot

Table 3. yx4x I/O devices supported for quick boot

Type	Vendor	Model	Driver	Minimum driver version	Minimum firmware version
RAID Controller	Dell	PERC H730P Mini Monolithic	lsi_mr3	7.712.51.00	25.5.6.009
		PERC H730P Adapter	lsi_mr3	7.712.51.00	25.5.6.009
		PERC H330 Mini Monolithic	lsi_mr3	7.712.51.00	25.5.6.009
		PERC H330 Adapter	lsi_mr3	7.712.51.00	25.5.6.009
		PERC H740P Mini Monolithic	lsi_mr3	7.712.51.00	50.9.4-3025
		PERC H740P Adapter	lsi_mr3	7.712.51.00	50.9.4-3025
		PERC H840 Adapter	lsi_mr3	7.712.51.00	50.9.4-3025
HBA Controller	Dell	Dell 12Gbps SAS HBA	lsi_msgpt3	7.712.50.00	16.17.01.05
		HBA330 Mini Mono	lsi_msgpt3	7.712.50.00	16.17.01.05
		HBA330 Adapter	lsi_msgpt3	7.712.50.00	16.17.01.05
Network Controller	Intel	Intel Ethernet I350 DP 1Gb Server Adapter	igbn	0.1.1.0	19.5.12
		Intel Ethernet I350 QP 1Gb Server Adapter	igbn	0.1.1.0	19.5.12
		Intel Ethernet i350 QP 1Gb Network Daughter Card	igbn	0.1.1.0	19.5.12
		Intel XL710 Dual Port 40G, QSFP+	i40en	1.8.1.16	19.5.12
		Intel X710 Quad Port 10Gb DA/SFP+ Ethernet, Network Daughter Card	i40en	1.8.1.16	19.5.12
		Intel X710 Quad Port 10Gb Direct Aattach, SFP+, Converged Network Adapter	i40en	1.8.1.16	19.5.12
		Intel X710 Dual Port 10Gb Direct Aattach, SFP+, Converged Network Adapter	i40en	1.8.1.16	19.5.12
		Intel X710 DP 10Gb DA/SFP+, + I350 DP 1Gb Ethernet, Network Daughter Card	i40en	1.8.1.16	19.5.12
		Intel X710 Quad Port 10GbE, Base-T, PCIe Adapter	ixgben	1.8.1.16	19.5.12
		Intel XXV710 Dual Port 25GbE SFP28 PCIe Adapter	ixgben	1.8.1.16	19.5.12
		Intel X550 Dual Port 10G Base-T Adapter	ixgben	1.7.1.26	19.5.12
		Intel X550 Quad Port 10GbE, Base-T, rNDC	ixgben	1.7.1.26	19.5.12
		Intel X550 2 Port 10Gb Base-T + I350 2 Port 1Gb Base-T, rNDC	ixgben	1.7.1.26	19.5.12
	Mellanox	Mellanox ConnectX-4 Lx Dual Port 25GbE SFP28 rNDC	nmlx5_core	4.19.16.7	14.25.80.00
		Mellanox ConnectX-4 Lx Dual Port 25GbE SFP28 Network Adapter	nmlx5_core	4.19.16.7	14.25.80.00
		Mellanox ConnectX-5 EX Dual Port 100GbE QSFP28 PCIe Adapter	nmlx5_core	4.19.16.7	14.25.80.00

**Table 3. yx4x I/O devices supported for quick boot (continued)**

Type	Vendor	Model	Driver	Minimum driver version	Minimum firmware version
	Broadcom	Broadcom 5720 DP 1Gb Network Interface Card	ntg3	4.1.4.1	21.60.2
		Broadcom 5720 QP 1Gb Network Daughter Card	ntg3	4.1.4.1	21.60.2
		Broadcom 57414 Dual Port 25Gb, SFP28, PCIe Adapter	bnxtnet	216.0.50.0	21.60.22.11
		Broadcom 57412 Dual Port 10Gb, SFP+, PCIe Adapter	bnxtnet	216.0.50.0	21.60.22.11
		Broadcom 57416 Dual Port 10Gb, Base-T, PCIe Adapter	bnxtnet	216.0.50.0	21.40.22.20
		Broadcom 57414 Dual Port 25Gb, SFP28, rNDC	bnxtnet	216.0.50.0	21.60.22.11
		Broadcom 57416 2 Port 10Gb Base-T + 5720 2 Port 1Gb Base-T, rNDC	bnxtnet	216.0.50.0	21.60.22.11
		Broadcom 57412 2 Port 10Gb SFP+ + 5720 2 Port 1Gb Base-T, rNDC	bnxtnet	216.0.50.0	21.60.22.11
	Qlogic	QLogic 57800 2x10Gb BT + 2x1Gb BT Network Daughter Card	qfle3	1.0.66.0	15.05.12
		QLogic 57800 2x10Gb DA/SFP+ + 2x1Gb BT Network Daughter Card	qfle3	1.0.66.0	15.05.12
		QLogic 25GE 2P QL41262HxCU-DE Adapter	qedentv	3.12.1.0	15.05.14
FC Controller	Emulex	Emulex LightPulse LPe35002-M2 2-Port 32Gb Fibre Channel Adapter	lpfc	12.4.293.3	3.01.41
		Emulex LPe31002-M6-D Dual Port 16Gb Fibre Channel HBA	lpfc	12.4.293.3	03.02.18
		Emulex LPe32000-M2-D Single Port 32Gb Fibre Channel HBA	lpfc	12.4.293.3	03.02.18
		Emulex LPe32000-M2-D Single Port 32Gb Fibre Channel HBA	lpfc	12.4.293.3	03.02.18
	Qlogic	QLogic 2690 Single Port 16Gb Fibre Channel HBA	qlnatvfc	4.0.1.0	15.05.12
		QLogic 2692 Dual Port 16Gb Fibre Channel HBA	qlnatvfc	4.0.1.0	15.05.12
		QLogic 2740 Single Port 32Gb Fibre Channel HBA	qlnatvfc	4.0.1.0	15.05.12
		QLogic 2742 Dual Port 32Gb Fibre Channel HBA	qlnatvfc	4.0.1.0	15.05.12
		QLogic 277x Fibre Channel Dual Port 32GFC PCIe Gen4 x8 Adapter	qlnatvfc	4.0.1.0	15.05.12
NVMe Controller	Samsung	Dell Express Flash NVMe PM1725 1.6 TB PCIe SSD Adapter by Samsung	nvme-pcie	1.2.2.13	KPYABD3Q
		Dell Express Flash NVMe PM1725 1.6 TB PCIe SSD Controller	nvme-pcie	1.2.2.13	KPYABD3Q
		Dell Express Flash NVMe PM1725 3.2 TB PCIe SSD Adapter by Samsung	nvme-pcie	1.2.2.13	KPYABD3Q

**Table 3. yx4x I/O devices supported for quick boot (continued)**

Type	Vendor	Model	Driver	Minimum driver version	Minimum firmware version
		Dell Express Flash NVMe PM1725 3.2 TB PCIe SSD Controller	nvme-pcie	1.2.2.13	KPYABD3Q
		Dell Express Flash NVMe PM1725 6.4 TB PCIe SSD Adapter by Samsung	nvme-pcie	1.2.2.13	KPYABD3Q
		Dell Express Flash NVMe PM1725 800 GB PCIe SSD Controller	nvme-pcie	1.2.2.13	KPYABD3Q
		Dell Express Flash NVMe PM1725a 1.6 TB PCIe SSD Controller	nvme-pcie	1.2.2.13	1.1.2
		Dell Express Flash NVMe PM1725a 1.6TB PCIe SSD Adapter by Samsung	nvme-pcie	1.2.2.13	1.1.2
		Dell Express Flash NVMe PM1725a 3.2 TB PCIe SSD Controller	nvme-pcie	1.2.2.13	1.1.2
		Dell Express Flash NVMe PM1725a 3.2TB PCIe SSD Adapter by Samsung	nvme-pcie	1.2.2.13	1.1.2
		Dell Express Flash NVMe PM1725a 6.4 TB PCIe SSD Controller	nvme-pcie	1.2.2.13	1.1.2
		Dell Express Flash NVMe PM1725a 6.4TB PCIe SSD Adapter by Samsung	nvme-pcie	1.2.2.13	1.1.2
		Dell Express Flash NVMe PM1725a 800 GB PCIe SSD Controller	nvme-pcie	1.2.2.13	1.1.2
		Dell Express Flash PM1725b 1.6TB AIC	nvme-pcie	1.2.2.13	1.0.0
		Dell Express Flash PM1725b 1.6TB SFF	nvme-pcie	1.2.2.13	1.0.0
		Dell Express Flash PM1725b 12.8TB SFF	nvme-pcie	1.2.2.13	1.0.0
		Dell Express Flash PM1725b 3.2TB AIC	nvme-pcie	1.2.2.13	1.0.0
		Dell Express Flash PM1725b 3.2TB SFF	nvme-pcie	1.2.2.13	1.0.0
		Dell Express Flash PM1725b 6.4TB AIC	nvme-pcie	1.2.2.13	1.0.0
		Dell Express Flash PM1725b 6.4TB SFF	nvme-pcie	1.2.2.13	1.0.0
	Intel	Dell Express Flash NVMe 2.0TB HHHL AIC (P4600)	nvme-pcie	1.2.2.13	QDV1DP15
		Dell Express Flash NVMe 4.0TB HHHL AIC (P4600)	nvme-pcie	1.2.2.13	QDV1DP15
		Dell Express Flash NVMe 375GB HHHL AIC P4800X	nvme-pcie	1.2.2.13	E201DP31
		Dell Express Flash NVMe 750GB HHHL AIC P4800X	nvme-pcie	1.2.2.13	E201DP31
		Dell Express Flash NVMe 750GB (UP) AIC (P4800X)	nvme-pcie	1.2.2.13	E201DP31
		Intel Optane SSD DC P4800X Series 375 GB Capacity	nvme-pcie	1.2.2.13	E201DP31
		Intel Optane SSD DC P4800X Series 375 GB Capacity	nvme-pcie	1.2.2.13	E201DP31
	Toshiba	Dell Express Flash NVMe 960GB (RI) 2.5 U.2 (CD5)	nvme-pcie	1.2.2.13	E201DP31

## Getting help

### Topics:

- [Contacting Dell](#)
- [Related information for virtualization solutions](#)
- [Documentation resources](#)
- [Identifying the series of your Dell PowerEdge servers](#)
- [Download drivers and firmware](#)
- [Documentation feedback](#)

## Contacting Dell

Dell provides several online and telephone-based support and service options. Availability varies by country, region, and product, and some services may not be available in your area.

### About this task

To contact Dell for sales, technical assistance, or customer service issues, see [www.dell.com/contactdell](http://www.dell.com/contactdell).

If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or the product catalog.

## Related information for virtualization solutions

**Table 4. Related information for virtualization solutions**

If you need information about	See
Dell VMware documentation	<a href="http://www.dell.com/virtualizationsolutions">www.dell.com/virtualizationsolutions</a>
OpenManage documentation	<a href="https://www.dell.com/openmanagemanuals">https://www.dell.com/openmanagemanuals</a>
PowerEdge documentation	<a href="https://www.dell.com/poweredgemanuals">https://www.dell.com/poweredgemanuals</a>
Basic configuration information for running ESXi on a Dell PowerEdge server	Getting Started Guide at <a href="http://www.dell.com/virtualizationsolutions">www.dell.com/virtualizationsolutions</a>
<ul style="list-style-type: none"> <li>• Information about downloading, installing, and configuring ESXi</li> <li>• Supported hardware configurations for running ESXi on a Dell PowerEdge server</li> </ul>	Installation Instructions and Important Information Guide at <a href="http://www.dell.com/virtualizationsolutions">www.dell.com/virtualizationsolutions</a>
PowerEdge systems and compatibility with vMotion	VMware ESXi vMotion Support on Dell PowerEdge Servers Compatibility Matrix at <a href="http://www.dell.com/virtualizationsolutions">www.dell.com/virtualizationsolutions</a>
PowerEdge systems compatibility information for running ESXi	VMware vSphere on Dell PowerEdge Servers Compatibility Matrix at <a href="http://www.dell.com/virtualizationsolutions">www.dell.com/virtualizationsolutions</a>
Known issues and resolutions	VMware vSphere ESXi 8.x on Dell PowerEdge Server Release Notes at <a href="http://www.dell.com/virtualizationsolutions">www.dell.com/virtualizationsolutions</a>

**Table 4. Related information for virtualization solutions (continued)**

If you need information about	See
ESXi ISO image customization information	VMware ESXi on Dell PowerEdge Systems Image Customization Information at <a href="http://www.dell.com/virtualizationsolutions">www.dell.com/virtualizationsolutions</a>
UEFI Boot order management utility in VMware ESXi 7.x and above	<a href="http://www.dell.com/support/article/en-us/sln321019">www.dell.com/support/article/en-us/sln321019</a>
Dell Add-on for VMware vSphere 7.x and above	<a href="http://www.dell.com/support/article/en-us/sln320956">www.dell.com/support/article/en-us/sln320956</a>
Dell ESXi 7.0 Quick Boot compatibility guide	<a href="http://www.dell.com/support/article/en-us/sln320746">www.dell.com/support/article/en-us/sln320746</a>

## Technical support resources

- [vmware.com/support](http://vmware.com/support)
- [www.dell.com/support/home](http://www.dell.com/support/home)
- [Dell.com/services](http://Dell.com/services)

## Discussion forums

- [Communities.vmware.com/community/vmtn](http://Communities.vmware.com/community/vmtn)
- [Dell Virtualization](#)
- [Wikis, Forums, Blogs, and Videos](#)
- [Dell Community](#)

## Knowledge base

- [kb.vmware.com/kb](http://kb.vmware.com/kb)

## Virtualization videos for Dell PowerEdge servers

All the supported virtualization videos for PowerEdge systems are available in the [Supported Operating Systems for Dell PowerEdge systems](#) playlist.

**Table 5. Virtualization videos for Dell PowerEdge servers**

Video title	Links
Downloading the Dell customized ESXi image from support site	<a href="http://www.youtube.com/watch?v=YnVxtkAkYTI">www.youtube.com/watch?v=YnVxtkAkYTI</a>
Downloading Dell customized ESXi image from VMware website	<a href="http://www.youtube.com/watch?v=TnWyuyxuk5k">www.youtube.com/watch?v=TnWyuyxuk5k</a>
Operating system Deployment (VMware ESXi)—Installing Using CD/DVD	<a href="http://www.youtube.com/watch?v=-EbufUS86zA">www.youtube.com/watch?v=-EbufUS86zA</a>
Enabling and Configuring Fault Resilient Memory on Dell PowerEdge servers	<a href="http://www.youtube.com/watch?v=retSh-XIsK0">www.youtube.com/watch?v=retSh-XIsK0</a>
OS Deployment (VMware ESXi)—Installing on BOSS S1 device	<a href="http://www.youtube.com/watch?v=TB1loXpFFME">www.youtube.com/watch?v=TB1loXpFFME</a>
OS Deployment (VMware ESXi)—Installing on IDSDM	<a href="http://www.youtube.com/watch?v=EC-Xntg5mgw">www.youtube.com/watch?v=EC-Xntg5mgw</a>

# Documentation resources

This section provides information about the documentation resources for your server.

**Table 6. Additional documentation resources for your server**

Task	Document	Location
Setting up your server	For information about installing the server into a rack, see the rack documentation included with your rack solution or the <i>Getting Started Guide</i> that is shipped with your server.	<a href="https://www.dell.com/poweredgemanuals">https://www.dell.com/poweredgemanuals</a>
	For information about turning on the server and the technical specifications of your server, see the <i>Getting Started Guide</i> that is shipped with your server.	<a href="https://www.dell.com/poweredgemanuals">https://www.dell.com/poweredgemanuals</a>
Configuring your server	For information about the iDRAC features, configuring and logging in to iDRAC, and managing your server remotely, see the <i>Integrated Dell Remote Access Configuration Tool User's Guide</i> .	<a href="https://www.dell.com/idracmanuals">https://www.dell.com/idracmanuals</a>
	For information about installing the operating system, see operating system documentation.	<a href="https://www.dell.com/operatingsystemmanuals">https://www.dell.com/operatingsystemmanuals</a>
	For information about understanding Remote Access Controller Admin (RACADM) subcommands and supported RACADM interfaces, see the <i>Integrated Dell Remote Access Controller RACADM CLI Guide</i> .	<a href="https://www.dell.com/idracmanuals">https://www.dell.com/idracmanuals</a>
	For information about updating drivers and firmware, see <a href="#">Download drivers and firmware</a> topic in this document.	<a href="http://www.dell.com/support/drivers">www.dell.com/support/drivers</a>
Managing your server	For information about server management software offered by Dell, see the <i>Dell Systems Management Overview Guide</i> .	<a href="https://www.dell.com/openmanagemanuals">https://www.dell.com/openmanagemanuals</a>
	For information about setting up, using, and troubleshooting OpenManage, see the <i>Dell OpenManage Server Administrator User's Guide</i> .	<a href="https://www.dell.com/openmanagemanuals">https://www.dell.com/openmanagemanuals</a>
	For information about installing, using, and troubleshooting Dell OpenManage Essentials, go to <a href="http://www.dell.com/openmanagemanuals">www.dell.com/openmanagemanuals</a> > <i>OpenManage Essentials User's Guide</i> .	<a href="https://www.dell.com/openmanagemanuals">https://www.dell.com/openmanagemanuals</a>

**Table 6. Additional documentation resources for your server (continued)**

Task	Document	Location
	For information about installing and using Dell SupportAssist, see the <i>Dell SupportAssist Enterprise User's Guide</i> .	<a href="https://www.dell.com/serviceabilitytools">https://www.dell.com/serviceabilitytools</a>
	For understanding the features of Dell Lifecycle Controller (LC), see the <i>Dell Lifecycle Controller User's Guide</i> .	<a href="https://www.dell.com/idracmanuals">https://www.dell.com/idracmanuals</a>
	For information about partner programs enterprise systems management, see the <i>OpenManage Connections Enterprise Systems Management</i> documents.	<a href="https://www.dell.com/esmmanuals">https://www.dell.com/esmmanuals</a>
	For information about viewing inventory, performing configuration, and monitoring tasks, remotely turning on or off servers, and enabling alerts for events on servers and components using the Dell Chassis Management Controller (CMC), see the <i>Chassis Management Controller User's Guide</i> .	<a href="https://www.dell.com/esmmanuals">https://www.dell.com/esmmanuals</a>
Working with the Dell PowerEdge RAID controllers	For information about understanding the features of the Dell PowerEdge RAID controllers (PERC) and deploying the PERC cards, see the Storage controller documentation.	<a href="http://www.dell.com/storagecontrollermanuals">www.dell.com/storagecontrollermanuals</a>
Understanding event and error messages	For information about checking the event and error messages generated by the system firmware and agents that monitor server components, see the Dell Event and Error Messages Reference Guide.	<a href="http://www.dell.com/openmanagemanuals">www.dell.com/openmanagemanuals</a>
Troubleshooting your system	For information about identifying and troubleshooting the PowerEdge server issues, see the <i>PowerEdge Servers Troubleshooting Guide</i> .	<a href="https://www.dell.com/poweredgemanuals">https://www.dell.com/poweredgemanuals</a>
Configuring Dell PowerEdge VRTX shared storage for VMware vSphere environment	For information on configuring Dell PowerEdge VRTX shared storage for VMware vSphere environment, see Dell White papers.	<a href="#">Configuring Dell PowerEdge VRTX shared storage for VMware vSphere Environment</a>

## Identifying the series of your Dell PowerEdge servers

The PowerEdge series of servers from Dell are divided into different categories based on their configuration. They are referred as YX2X, YX3X, YX4X, YX4XX, or YX5XX series of servers. The structure of the naming convention is described below:

The letter Y denotes the character in the server model number. The character denotes the form factor of the server. The form factors are listed below:

- C- Cloud
- F- Flexible
- M or MX- Modular
- R- Rack
- T- Tower

The letter X denotes the numbers in the server model number. The number denotes multiple characteristics about the server. They are listed as follows:

- The first digit (X) denotes the value stream or class of the server.
  - 1-5—iDRAC basic
  - 6-9—iDRAC Express
- The second digit denotes the series of the server. It is retained in the server naming convention and does not replace the letter X.
  - 0—series 10
  - 1—series 11
  - 2—series 12
  - 3—series 13
  - 4—series 14
  - 5—series 15
- The last digit (X) always denotes the make of the processor as described below:
  - 0-Intel
  - 5-AMD

**NOTE:** For servers that use an AMD processor, the model number is made up of four digits instead of three. The third digit (X) denotes the number of processor sockets that the series of server supports.

- 1—one socket server
- 2—two socket server

**Table 7. PowerEdge servers naming convention and examples**

<b>YX3X servers</b>	<b>YX4X systems</b>	<b>YX4XX systems</b>	<b>YX5XX</b>
PowerEdge M630	PowerEdge M640	PowerEdge R6415	PowerEdge R6515
PowerEdge M830	PowerEdge R440	PowerEdge R7415	PowerEdge R7515
PowerEdge T130	PowerEdge R540	PowerEdge R7425	PowerEdge R6525

## Download drivers and firmware

It is recommended that you download and install the latest BIOS, drivers, and systems management firmware on your system.

### Prerequisites

Ensure that you clear the web browser cache before downloading the drivers and firmware.

### Steps

1. Go to [www.dell.com/support/drivers](http://www.dell.com/support/drivers).
2. In the **Drivers & Downloads** section, enter the Service Tag of your system in the **Enter a Dell Service Tag, Dell Product ID, or Model** text box, and then click the right arrow button.


**NOTE:** If you do not have the Service Tag, click **Detect PC** to allow the system to automatically detect your Service Tag.

3. Click **Drivers & Downloads**.  
A list of applicable downloads is displayed.
4. Download the drivers or firmware to a USB drive, CD, or DVD.



# Download Dell customized ESXi image and Dell add-on from Dell support site

## About this task


 **NOTE:** Ensure that you clear the web browser cache before downloading the drivers and firmware.


## Steps

1. Go to [www.dell.com/support/drivers](http://www.dell.com/support/drivers).
2. In the **Drivers & Downloads** section, enter the Service Tag of your system in the **Enter a Dell Service Tag, Dell Product ID, or Model** box, and then click the right arrow button. If you do not have the Service Tag, select **Detect PC** to allow the system to automatically detect the service tag, or click **Browse all products**, and then navigate to your product.
3. Click **Drivers & Downloads**.  
The drivers that are applicable to your system are displayed.
4. From the **Operating System** list, select the appropriate VMware version.
5. In the **Category** list, select **Enterprise Solutions**.  
The latest Dell VMware ESXi customized image files are displayed.
6. Click **Download**.  
The Dell customized image file is successfully downloaded from the Dell support site.

# Download Dell customized ESXi image file from VMware site

## About this task

 **NOTE:** Ensure that you clear the web browser cache before downloading the drivers and firmware.

 **NOTE:** To download the drivers and firmware, you must be a registered user in [VMware Customer Connect](#).

To download the ESXi image file, do the following:

## Steps

1. Go to [VMware Customer Connect](#) and log in with your admin credentials.
2. Select **View & Download products > All Products** and then click the **View Download Components** link of **VMware vSphere**.
3. Select the image version from the **Select Version** list.
4. Click **Custom ISOs**.
5. Expand the **OEM Customized Installer CDs** option, and then click **Go to Downloads** to download the image.

# Documentation feedback

You can rate the documentation or write your feedback on any of our Dell documentation pages and click **Send Feedback** to send your feedback.