Dell PowerEdge R6715

Technical Guide

Regulatory Model: E115S Series
Regulatory Type: E115S001
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DELL Technologies

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.

Contents

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PowerEdge R6715 system configurations and features

The PowerEdge R6715 system is a 1U server that supports:

- One 5th Generation AMD EPYC 9005 Series processor with up to 160 Zen5 cores per processor
- 24 DIMM slots
- Two redundant AC or DC power supply units
- No backplane configuration
- Up to 4 x 3.5-inch SAS/SATA drives*
- Up to 8 x 2.5-inch Universal SSDs
- Up to 8 x U.2 SSDs
- Up to 10 x 2.5-inch SAS/SATA drives*
- Up to 10 x 2.5-inch with 4 x Universal drives*
- Up to 16 x EDSFF E3.S Gen5 NVMe drives
- Up to 20 x EDSFF E3.S Gen5 NVMe + rear 2 x EDSFF E3.S Gen5 NVMe drives*

NOTE: * Expected to be available in the first half of 2025. Planned Offerings are subject to change and may not be released as originally designed.

NOTE: System board is known as the Host Processor Module (HPM) board in this document.

NOTE: For more information about how to hot swap NVMe PCIe SSD device, see the *Dell Express Flash NVMe PCIe SSD User's Guide* at Dell Support page **> Browse all products** > **Infrastructure** > **Data Center Infrastructure** > **Storage Adapters & Controllers** > **Dell PowerEdge Express Flash NVMe PCIe SSD** > **Select This Product** > **Documentation** > **Manuals and Documents**.

NOTE: All instances of SAS, SATA drives are referred to as drives in this document, unless specified otherwise.

CAUTION: Do not install GPUs, network cards, or other PCIe devices on your system that are not validated and tested by Dell. Damage caused by unauthorized and invalidated hardware installation will null and void the system warranty.

Topics:

Key workloads

The Dell PowerEdge R6715 offers powerful performance in a purpose-built, cyber resilient, mainstream server. Ideal for:

- Data Analytics
- Dense virtualization
- Software defined storage

New technologies

The PowerEdge R6715 can handle demanding workloads and applications, such as data warehouse, eCommerce, databases, and high-performance computing (HPC).

Table 1. New technologies

Technology	Detailed Description
AMD EPYC 5th Generation 9005 Series	Core count: Up to 160 Zen5 cores per processor
	CXL 2.0: Not supported. **NOTE:** While the AMD 9005 series CPUs supports CXL 2.0 devices Type 1, Type 2, and Type 3, Dell is not planning to support CXL on this system.
	PCIe link encryption and PCIe hotplug port reconfiguration.
	Maximum TDP: 400 W
6400 MT/s DDR5 Memory	Up to 12 channels per CPU and 24 DIMMs in total
	Supports RDIMM with ECC up to 5200 MT/s (1DPC) and 4400 MT/s (2DPC)
PCIe Gen	Gen5 slots
PCIe Slot	Up to three x16 PCIe slots
Rear I/O	Rear OCP FLOP with DC-MHS compliant
	BOSS-N1 DC-MHS
FPGA PESTI	Support payload data of Front PERC 12 and BOSS N1-DC-MHS
DC-SCM	Datacenter-ready Secure Control Module
Software RAID	N/A
Power supplies	M-CRPS 60 mm support

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Product comparison

Table 2. Comparison of PowerEdge R6715 and R6615

Feature	PowerEdge R6715	PowerEdge R6615
Processor	One 5th Generation AMD EPYC 9005 Series processor , with up to 160 Zen5 cores per processor	One 4th Generation Genoa AMD EPYC (SP5) processor, with up to 128 cores
Chipset	AMD chipset	AMD chipset
Accelerators	Up to three 75 W GPUs	Up to three 75 W GPUs
Memory		
DIMM speed	Up to 5200 MT/s	Up to 4800 MT/s
Memory type	RDIMM	RDIMM
Memory module slots	24 DDR5 DIMM slots	12 DDR5 DIMM slots
	NOTE: Supports registered ECC DDR5 DIMMs only.	**NOTE:** Supports registered ECC DDR45 DIMMs only.
Storage		
Front bays	• No backplane configuration • Up to 4 x 3.5-inch SAS/SATA drives* • Up to 8 x 2.5-inch Universal SSDs • Up to 8 x U.2 SSDs • Up to 10 x 2.5-inch SAS/SATA drives* • Up to 10 x 2.5-inch with 4 x Universal drives* • Up to 16 x EDSFF E3.S Gen5 NVMe drives • Up to 20 x EDSFF E3.S Gen5 NVMe drives*	• Up to 4 x 3.5-inch SAS/SATA (HDD/SSD) max 80 TB • Up to 8 x 2.5-inch NVMe SSD max 122.88 TB • Up to 10 x 2.5-inch SAS/SATA/NVMe (HDD/SSD) max 153.6 TB • Up to 14 x E3.S (NVMe Gen5) max 107.52 TB • Up to 16 x E3.S (NVMe Gen5) max 122.88 TB
Rear bays	2 x EDSFF E3.S Gen5 NVMe*	• Up to 2 x 2.5-inch SAS/SATA (HDD/SSD) max 30.72 TB • Up to 2 x E3.S (NVMe Gen5) max 15.36 TB
Storage controllers		
Internal controllers	PERC H365i, H965i, H975i*	HBA355i, H355, H755, H755N, H965i, BHA465i
External controllers	HBA465e*, H965e*	HBA355e, HBA465e, H965e
Software RAID	N/A	S160
Internal boot	Boot Optimized Storage Subsystem (BOSS-N1 DC-MHS)	Boot Optimized Storage Subsystem (BOSS): HW RAID 2 x M.2 SSDs 480 GB or 960 GB
	Internal USB	Internal USB
Power supply	• 1800 W Titanium 100-240 VAC or 240 VDC, hot swap redundant ** • 1500 W Titanium 277 VAC or HVDC**	• 1800 W Titanium 200-240 VAC or 240 HVDC • 1400 W Platinum 100-240 VAC or 240 HVDC

Table 2. Comparison of PowerEdge R6715 and R6615 (continued)

Feature	PowerEdge R6715	PowerEdge R6615
	• 1500 W Titanium 100-240 VAC or 240 HVDC, hot swap redundant • 1400 W Telco -48 VDC* • 1100 W Titanium 100-240 VAC or 240 VDC, hot swap redundant • 1100 W Platinum 100-240 VAC or 240 VDC, hot swap redundant • 800 W Titanium 100-240 VAC or 240 VDC, hot swap redundant • 800 W Platinum 100-240 VAC or 240 VDC, hot swap redundant	• 1400 W Titanium 100-240 VAC or 240 HVDC • 1400 W Titanium 277 VAC or 336 HVDC • 1100 W Titanium 100-240 VAC or 240 HVDC • 1100 W LVDC -48 - -60 VDC • 800 W Platinum 100-240 VAC or 240 HVDC • 700 W Titanium 200-240 VAC or 240 HVDC
Cooling options	• Air cooling • Liquid cooling	• Air cooling • Optional Direct Liquid Cooling (DLC) **NOTE:** DLC is a rack solution and requires rack manifolds and a cooling distribution unit (CDU) to operate.
Fans	Up to four sets (dual fan module) Standard (STD) / High-Performance Silver (HPR SLVR) hot plug fans	Up to three sets (dual fan module) Standard (STD) / High performance (HPR) hot plug fans
Ports		
Network ports	1 Gb dedicated BMC Ethernet port	2 x 1 GbE LOM card (optional)
	2 x OCP NIC 3.0 card	1 x OCP card 3.0 (optional) **NOTE:** The system allows either LOM card or OCP card or both to be installed in the system.
Front ports	1 x USB 2.0 Type-A (optional LCP KVM)	1 x Dedicated iDRAC Micro-USB
	USB Type C dual-mode host/iDRAC Direct Port	1 x USB 2.0
	1 x MiniDisplay port	1 x VGA
Rear ports	1 Gb dedicated BMC Ethernet port	1 x USB 2.0
	Two USB 3.1-compliant ports	1 x iDRAC Direct/Ethernet port
	1 x VGA	1 x USB 3.0
		1 x VGA (optional for liquid cooling configuration)
Internal ports	One Internal USB 3.0 Type-A	1 x USB 3.0
Slots		
PCIe	Up to three PCIe Gen5 slots	Up to 3 x PCIe Gen5 and Gen4 slots
Form factor	1 U rack server	1U rack server
Dimensions and weight		
Height	42.8 mm (1.68 inches)	42.8 mm (1.685 inches)
Width	482.0 mm (18.97 inches)	482.0 mm (18.97 inches)
Depth	750.6 mm (29.55 inches) without bezel 786.14 mm (30.95 inches) with bezel	772.13 mm (30.39 inches) with bezel 758.29 mm (29.85 inches) without bezel
Weight	Max 19.96 kg (44.00 pound)	Max 20.2 kg (44.53 pounds)

Table 2. Comparison of PowerEdge R6715 and R6615 (continued)

Feature	PowerEdge R6715	PowerEdge R6615
Bezel	Optional Metal Bezel	Optional LCD bezel or security bezel
System management		
Embedded management	• iDRAC10 Enterprise • iDRAC10 Datacenter * • iDRAC10 • iDRAC Direct • iDRAC RESTful API with Redfish • Racadm CLI • Quick Sync 2 wireless module	• iDRAC9 • iDRAC Direct • iDRAC RESTful API with Redfish • iDRAC Service Manual • Quick Sync 2 wireless module
OpenManage Console	• OpenManage Enterprise (OME) • OME Power Manager • OME Services • OME Update Manager • OME APEX AIOps Observability • OME Integration for VMware vCenter (with VMware Aria Operations) • OME Integration for Microsoft System Center • OpenManage Integration with Windows Admin Center	• OpenManage Enterprise • OpenManage Power Manager plug-in • OpenManage Services plug-in • OpenManage Update Manager plug-in
Mobility	N/A	OpenManage Mobile
Tools	IPMI	IPMI
Change Management	• Dell Repository Manager • Dell System Update • Enterprise Catalogs • Server Update Utility (SUU)	• Update Tools (Repository Manager, DSU, Catalogs) • Server Update Utility • Lifecycle Controller Driver Pack • Bootable ISO
OpenManage Integrations	• Red Hat Ansible Collections • Terraform Providers	• Microsoft System Center • Red Hat Ansible Modules • VMware vCenter and vRealize Operations Manager
Security	• AMD Secure Encrypted Virtualization (SEV) • AMD Secure Memory Encryption (SME) • Cryptographically signed firmware • Data at Rest Encryption (SEDs with local or external key mgmt) • Secure Boot • Secured Component Verification (Hardware integrity check) • Secure Erase • Silicon Root of Trust • System Lockdown • TPM 2.0 FIPS, CC-TCG certificate • Chassis Intrusion Detection	• AMD Secure Encrypted Virtualization (SEV) • AMD Secure Memory Encryption (SME) • Cryptographically signed firmware • Secure Boot • Secure Erase • Silicon Root of Trust • System Lockdown (requires iDRAC9 Enterprise or Datacenter) • TPM 1.2/2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ • Chassis Intrusion Detection
Operating System and Hypervisors	• Canonical Ubuntu Server LTS • Microsoft Windows Server with Hyper-V • Red Hat Enterprise Linux • VMware ESXi • SUSE Linux Enterprise Server	• Canonical Ubuntu Server LTS • Microsoft Windows Server with Hyper-V • Red Hat Enterprise Linux • SUSE Linux Enterprise Server • VMware ESXi

Table 2. Comparison of PowerEdge R6715 and R6615 (continued)

Feature	PowerEdge R6715	PowerEdge R6615
	For specifications and interoperability details, see Dell Enterprise Operating Systems on Servers, Storage, and Networking page at Dell.com/OSsupport	

NOTE: * Expected to be available in the first half of 2025. Planned Offerings are subject to change and may not be released as originally designed.

NOTE: ** : Expected to be available in the second half of 2025.

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Chassis views and features

Topics:

- Chassis views
- Chassis dimensions
- System weight

Chassis views

System configurations - front view for PowerEdge R6715 system

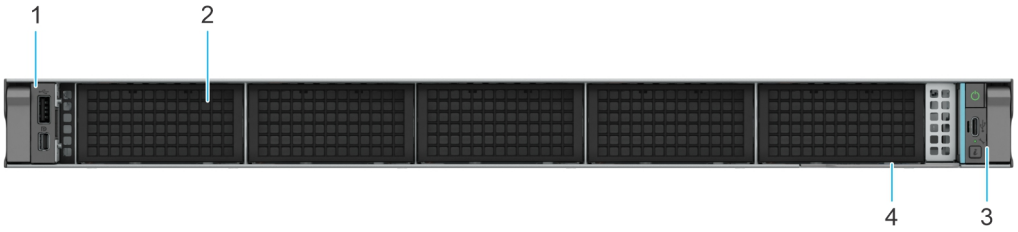

Figure 1. Front view of no backplane configuration system

Table 3. Features are available on the front of the system

Item	Ports, panels, and slots	Icon	Description
1	Left Control Panel (LCP) - Secondary	N/A	Contains the USB 2.0 Type-A port (optional LCP KVM) and the Mini DisplayPort (optional LCP KVM). ● USB 2.0 Type-A port (optional LCP KVM): This port is USB 2.0-compliant with optional LCP KVM functions. ● Mini DisplayPort (optional LCP KVM): Enables you to connect a display device to the system. **NOTE:** Use a certified Mini DisplayPort to DisplayPort cable complying with VESA DisplayPort standards for video output with a monitor. **NOTE:** Mini DisplayPort to VGA

Table 3. Features are available on the front of the system (continued)

Item	Ports, panels, and slots	Icon	Description
			or Mini DisplayPort to HDMI adapters are not recommended.
2	Blank panel	N/A	Blank panel to allow air flow for thermal efficiency.
3	Right Control Panel (RCP) - Primary	N/A	Contains the power button, USB 2.0 Type-C port (HOST/BMC Direct), and the system identification button.
4	Blank panel	N/A	Blank panel to allow air flow for thermal efficiency.

Figure 2. Front view of 4 x 3.5-inch SAS/SATA drives system*

Table 4. Features are available on the front of the system

Item	Ports, panels, and slots	Icon	Description
1	Left Control Panel (LCP) - Secondary	N/A	Contains the USB 2.0 Type-A port (optional LCP KVM) and the Mini DisplayPort (optional LCP KVM). • USB 2.0 Type-A port (optional LCP KVM): This port is USB 2.0-compliant with optional LCP KVM functions. • Mini DisplayPort (optional LCP KVM): Enables you to connect a display device to the system. **NOTE:** Use a certified Mini DisplayPort to DisplayPort cable complying with VESA DisplayPort standards for video output with a monitor. **NOTE:** Mini DisplayPort to VGA or Mini DisplayPort to HDMI adapters are not recommended.

Table 4. Features are available on the front of the system (continued)

Item	Ports, panels, and slots	Icon	Description
2	Drive	N/A	Enables you to install drives that are supported on your system.
3	Right Control Panel (RCP) - Primary	N/A	Contains the power button, USB 2.0 Type-C port (HOST/BMC Direct), and the system identification button.
4	Express service tag	N/A	The Express service tag is a slide-out label panel that contains system information such as Service Tag, NIC, MAC address, and so on. If you have opted for the secure default access to iDRAC, the Express service tag also contains iDRAC secure default password.

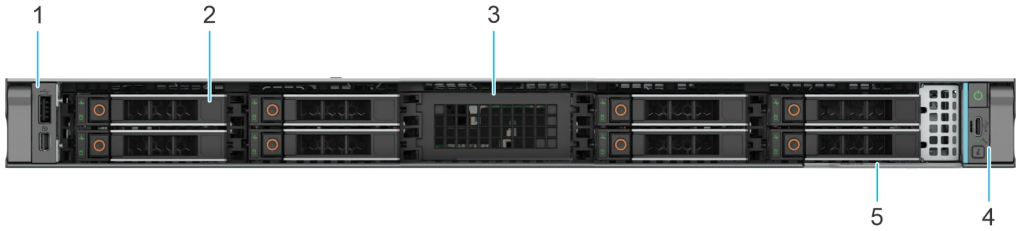

Figure 3. Front view of 8 x 2.5-inch Universal SSD drive system

Table 5. Features are available on the front of the system

Item	Ports, panels, and slots	Icon	Description
1	Left Control Panel (LCP) - Secondary	N/A	Contains the USB 2.0 Type-A port (optional LCP KVM) and the Mini DisplayPort (optional LCP KVM). • USB 2.0 Type-A port (optional LCP KVM): This port is USB 2.0-compliant with optional LCP KVM functions. • Mini DisplayPort (optional LCP KVM): Enables you to connect a display device to the system. **NOTE:** Use a certified Mini DisplayPort to DisplayPort cable complying with VESA DisplayPort standards for video output with a monitor. **NOTE:** Mini DisplayPort to VGA or Mini DisplayPort to

Table 5. Features are available on the front of the system (continued)

Item	Ports, panels, and slots	Icon	Description
			HDMI adapters are not recommended.
2	Drive	N/A	Enables you to install drives that are supported on your system.
3	Blank panel	N/A	Blank panel to allow air flow for thermal efficiency.
4	Right Control Panel (RCP) - Primary	N/A	Contains the power button, USB 2.0 Type-C port (HOST/BMC Direct), and the system identification button.
5	Express service tag	N/A	The Express service tag is a slide-out label panel that contains system information such as Service Tag, NIC, MAC address, and so on. If you have opted for the secure default access to iDRAC, the Express service tag also contains iDRAC secure default password.

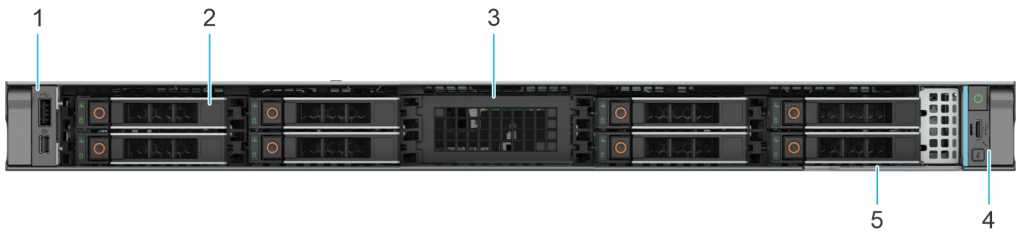

Figure 4. Front view of 8 x U.2 NVMe SSDs system

Table 6. Features are available on the front of the system

Item	Ports, panels, and slots	Icon	Description
1	Left Control Panel (LCP) - Secondary	N/A	Contains the USB 2.0 Type-A port (optional LCP KVM) and the Mini DisplayPort (optional LCP KVM). • USB 2.0 Type-A port (optional LCP KVM): This port is USB 2.0-compliant with optional LCP KVM functions. • Mini DisplayPort (optional LCP KVM): Enables you to connect a display device to the system. **NOTE:** Use a certified Mini DisplayPort to DisplayPort cable complying with VESA DisplayPort standards

Table 6. Features are available on the front of the system (continued)

Item	Ports, panels, and slots	Icon	Description
			for video output with a monitor. **NOTE:** Mini DisplayPort to VGA or Mini DisplayPort to HDMI adapters are not recommended.
2	Drive	N/A	Enables you to install drives that are supported on your system.
3	Blank panel	N/A	Blank panel to allow air flow for thermal efficiency.
4	Right Control Panel (RCP) - Primary	N/A	Contains the power button, USB 2.0 Type-C port (HOST/BMC Direct), and the system identification button.
5	Express service tag	N/A	The Express service tag is a slide-out label panel that contains system information such as Service Tag, NIC, MAC address, and so on. If you have opted for the secure default access to iDRAC, the Express service tag also contains iDRAC secure default password.

Figure 5. Front view of 10 x 2.5-inch SAS/SATA system*

Table 7. Features are available on the front of the system

Item	Ports, panels, and slots	Icon	Description
1	Left Control Panel (LCP) - Secondary	N/A	Contains the USB 2.0 Type-A port (optional LCP KVM) and the Mini DisplayPort (optional LCP KVM). • USB 2.0 Type-A port (optional LCP KVM): This port is USB 2.0-compliant with optional LCP KVM functions. • Mini DisplayPort (optional LCP KVM): Enables you to connect a display device to the system.

Table 7. Features are available on the front of the system (continued)

Item	Ports, panels, and slots	Icon	Description
			NOTE: Use a certified Mini DisplayPort to DisplayPort cable complying with VESA DisplayPort standards for video output with a monitor. **NOTE:** Mini DisplayPort to VGA or Mini DisplayPort to HDMI adapters are not recommended.
2	Drive	N/A	Enables you to install drives that are supported on your system.
3	Right Control Panel (RCP) - Primary	N/A	Contains the power button, USB 2.0 Type-C port (HOST/BMC Direct), and the system identification button.
4	Express service tag	N/A	The Express service tag is a slide-out label panel that contains system information such as Service Tag, NIC, MAC address, and so on. If you have opted for the secure default access to iDRAC, the Express service tag also contains iDRAC secure default password.

Figure 6. Front view of 10 x 2.5-inch SAS/SATA with 4 x Universal SSDs drives system*

Table 8. Features are available on the front of the system

Item	Ports, panels, and slots	Icon	Description
1	Left Control Panel (LCP) - Secondary	N/A	Contains the USB 2.0 Type-A port (optional LCP KVM) and the Mini DisplayPort (optional LCP KVM). • USB 2.0 Type-A port (optional LCP KVM): This port is USB 2.0-compliant with optional LCP KVM functions.

Table 8. Features are available on the front of the system (continued)

Item	Ports, panels, and slots	Icon	Description
			• Mini DisplayPort (optional LCP KVM): Enables you to connect a display device to the system. **NOTE:** Use a certified Mini DisplayPort to DisplayPort cable complying with VESA DisplayPort standards for video output with a monitor. **NOTE:** Mini DisplayPort to VGA or Mini DisplayPort to HDMI adapters are not recommended.
2	Drive	N/A	Enables you to install drives that are supported on your system.
3	Right Control Panel (RCP) - Primary	N/A	Contains the power button, USB 2.0 Type-C port (HOST/BMC Direct), and the system identification button.
4	Express service tag	N/A	The Express service tag is a slide-out label panel that contains system information such as Service Tag, NIC, MAC address, and so on. If you have opted for the secure default access to iDRAC, the Express service tag also contains iDRAC secure default password.

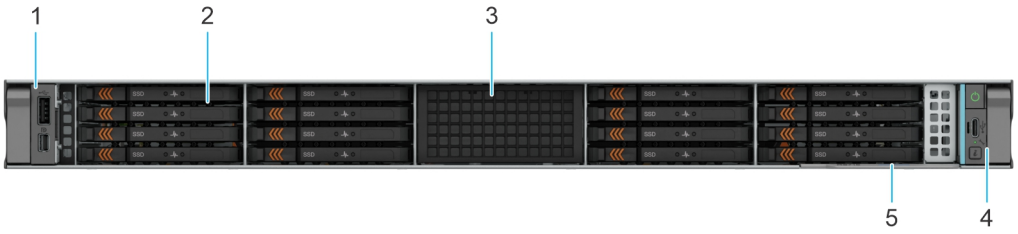

Figure 7. Front view of 16 x EDSFF E3.S Gen5 NVMe drive system

Table 9. Features are available on the front of the system

Item	Ports, panels, and slots	Icon	Description
1	Left Control Panel (LCP) - Secondary	N/A	Contains the USB 2.0 Type-A port (optional LCP KVM) and the Mini DisplayPort. • USB 2.0 Type-A port (optional LCP KVM): This

Table 9. Features are available on the front of the system (continued)

Item	Ports, panels, and slots	Icon	Description
			port is USB 2.0-compliant with optional LCP KVM functions. • Mini DisplayPort (optional LCP KVM)Enables you to connect a display device to the system. **NOTE:** Use a certified Mini DisplayPort to DisplayPort cable complying with VESA DisplayPort standards for video output with a monitor. **NOTE:** Mini DisplayPort to VGA or Mini DisplayPort to HDMI adapters are not recommended.
2	Drive	N/A	Enables you to install drives that are supported on your system.
3	Blank panel	N/A	Blank panel to allow air flow for thermal efficiency.
4	Right Control Panel (RCP) - Primary	N/A	Contains the power button, USB 2.0 Type-C port (HOST/BMC Direct), and the system identification button.
5	Express service tag	N/A	The Express service tag is a slide-out label panel that contains system information such as Service Tag, NIC, MAC address, and so on. If you have opted for the secure default access to iDRAC, the Express service tag also contains iDRAC secure default password.

Figure 8. Front view of 20 x EDSFF E3.S Gen5 NVMe + rear 2 x EDSFF E3.S Gen5 NVMe system*

Table 10. Features are available on the front of the system

Item	Ports, panels, and slots	Icon	Description
1	Left Control Panel (LCP) - Secondary	N/A	Contains the USB 2.0 Type-A port (optional LCP KVM) and the Mini DisplayPort (optional LCP KVM). • USB 2.0 Type-A port (optional LCP KVM): This port is USB 2.0-compliant with optional LCP KVM functions. • Mini DisplayPort (optional LCP KVM): Enables you to connect a display device to the system. **NOTE:** Use a certified Mini DisplayPort to DisplayPort cable complying with VESA DisplayPort standards for video output with a monitor. **NOTE:** Mini DisplayPort to VGA or Mini DisplayPort to HDMI adapters are not recommended.
2	Drive	N/A	Enables you to install drives that are supported on your system.
3	Right Control Panel (RCP) - Primary	N/A	Contains the power button, USB 2.0 Type-C port (HOST/BMC Direct), and the system identification button.
4	Express service tag	N/A	The Express service tag is a slide-out label panel that contains system information such as Service Tag, NIC, MAC address, and so on. If you have opted for the secure default access to iDRAC, the Express service tag also contains iDRAC secure default password.

NOTE: For more information about the ports, see the Technical Specifications in the *Installation and Service Manual* available on the PowerEdge Manuals.

Left Control Panel (LCP) - Secondary

The left control panel (LCP) - secondary supports an optional KVM module.

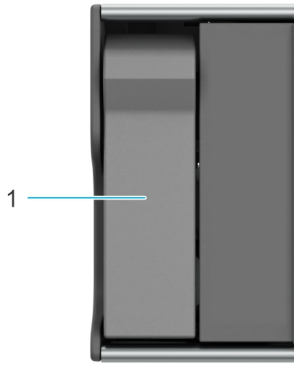

Figure 9. Left Control Panel (LCP) - Secondary blank

- Blank
- KVM module
- Quick Sync 2.0

1. Blank control panel

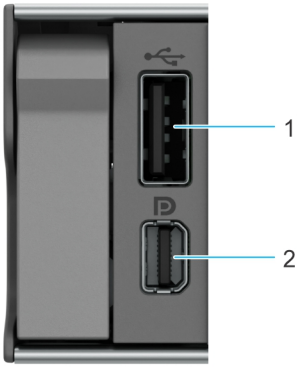

Figure 10. Left Control Panel (LCP) - Secondary with optional KVM

1. USB 2.0 (optional LCP KVM)
2. Mini DisplayPort (optional LCP KVM)

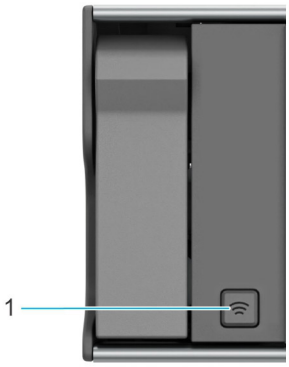

Figure 11. Left Control Panel (LCP) - Secondary with optional Quick Sync 2.0*

1. Quick Sync 2.0 button

NOTE: * Expected to be available in the first half of 2025. Planned Offerings are subject to change and may not be released as originally designed.

Right Control Panel (RCP) - Primary

The right control panel (RCP) - primary encompasses many of the features that are no longer supported by the left control panel (LCP) - secondary.

Features of the RCP - primary include:

1. Power button with integrated power LED
2. Status LED for host
3. Host/iDRAC Mode LED
4. System ID button
5. USB 2.0 Type-C

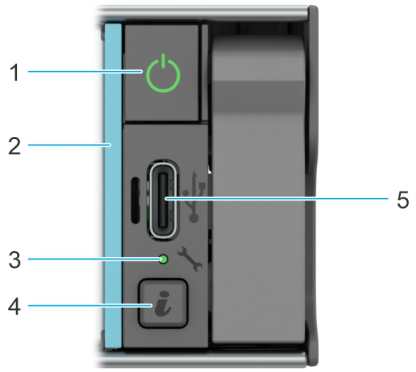

Figure 12. Right Control Panel (RCP) - Primary of R6715

Table 11. System health and system ID indicator codes

System health and system ID indicator code	Condition
Solid blue	Indicates that the system is powered on, is healthy, and system ID mode is not active. Press the system ID button to switch to system ID mode.
Blinking blue	Indicates that the system ID mode is active. Press the system ID button to switch to system health mode.
Blinking amber	Indicates that the system is experiencing a fault. Check the System Event Log for specific error messages. For more information about the event and error messages that are generated by the system firmware and agents that monitor system components, go to PowerEdge Manuals.

System configurations - rear view for PowerEdge R6715 system

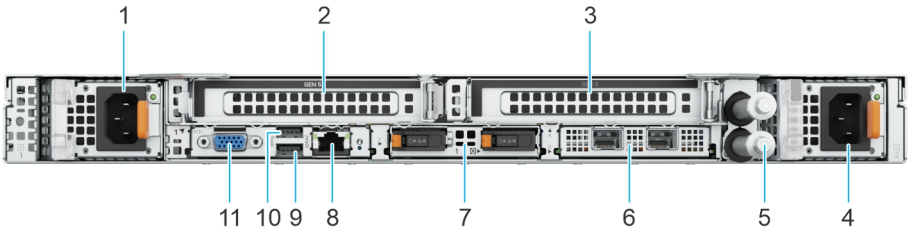

Figure 13. Rear view of the liquid cooling system

Table 12. Rear view of the liquid cooling system

Item	Ports, panels, or slots	Icon	Description
1	Power supply unit (PSU 1)		Indicates the PSU 1.

Table 12. Rear view of the liquid cooling system (continued)

Item	Ports, panels, or slots	Icon	Description
2	PCIe expansion card riser slot	N/A	Enables you to connect PCI Express expansion cards.
3	PCIe expansion card riser slot	N/A	Enables you to connect PCI Express expansion cards.
4	Power supply unit (PSU 2)	2	Indicates the PSU 2.
5	Liquid cooling module tubes	N/A	Cold coolant flows into the system from one tube and hot coolant leaves the system from another tube.
6	OCP NIC ports	N/A	This port supports OCP 3.0.
7	BOSS-N1 DC-MHS	N/A	Enables you to install the BOSS-N1 DC-MHS.
8	Dedicated BMC Ethernet port	N/A	Enables you to remotely access Open Server Manager.
9	USB 3.1 port	SS	The USB port is 9-pin and 3.1-compliant. This port enables you to connect USB devices to the system.
10	USB 3.1 port	SS	The USB port is 9-pin and 3.1-compliant. This port enables you to connect USB devices to the system.
11	VGA port		Enables you to connect a display device to the system.

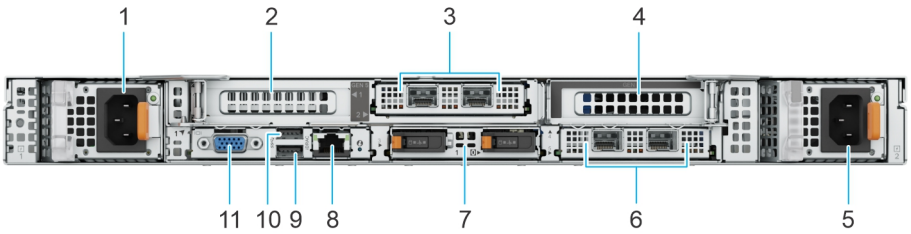

Figure 14. Rear view of the system

Table 13. Rear view of the system

Item	Ports, panels, or slots	Icon	Description
1	Power supply unit (PSU 1)	1	Indicates the PSU 1.
2	PCIe expansion card riser slot	N/A	Enables you to connect PCI Express expansion cards.
3	OCP NIC ports	N/A	This port supports OCP 3.0.
4	PCIe expansion card riser slot	N/A	Enables you to connect PCI Express expansion cards.
5	Power supply unit (PSU 2)	2	Indicates the PSU 2.
6	OCP NIC ports	N/A	This port supports OCP 3.0.
7	BOSS-N1 DC-MHS	N/A	Enables you to install the BOSS-N1 DC-MHS.
8	Dedicated BMC Ethernet port	N/A	Enables you to remotely access Open Server Manager.
9	USB 3.1 port	SS	The USB port is 9-pin and 3.1-compliant. This port enables you to connect USB devices to the system.
10	USB 3.1 port	SS	The USB port is 9-pin and 3.1-compliant. This port enables you to connect USB devices to the system.

Table 13. Rear view of the system (continued)

Item	Ports, panels, or slots	Icon	Description
11	VGA port		Enables you to connect a display device to the system.

Inside the system

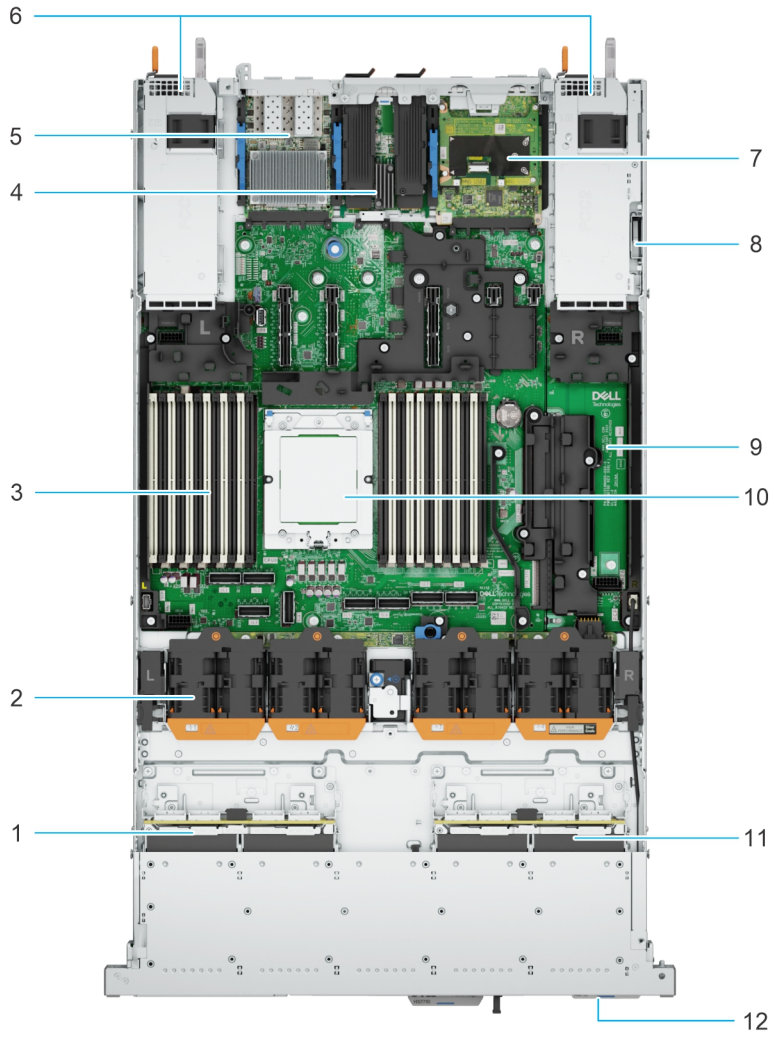

Figure 15. Inside the system

1. Backplane
2. Cooling fans
3. Memory module slots
4. BOSS-N1 DC-MHS
5. OCP 3.0 NIC card
6. Power supplies
7. DC-SCM card
8. Intrusion switch
9. HPM board
10. CPU
11. Backplane
12. Information tag

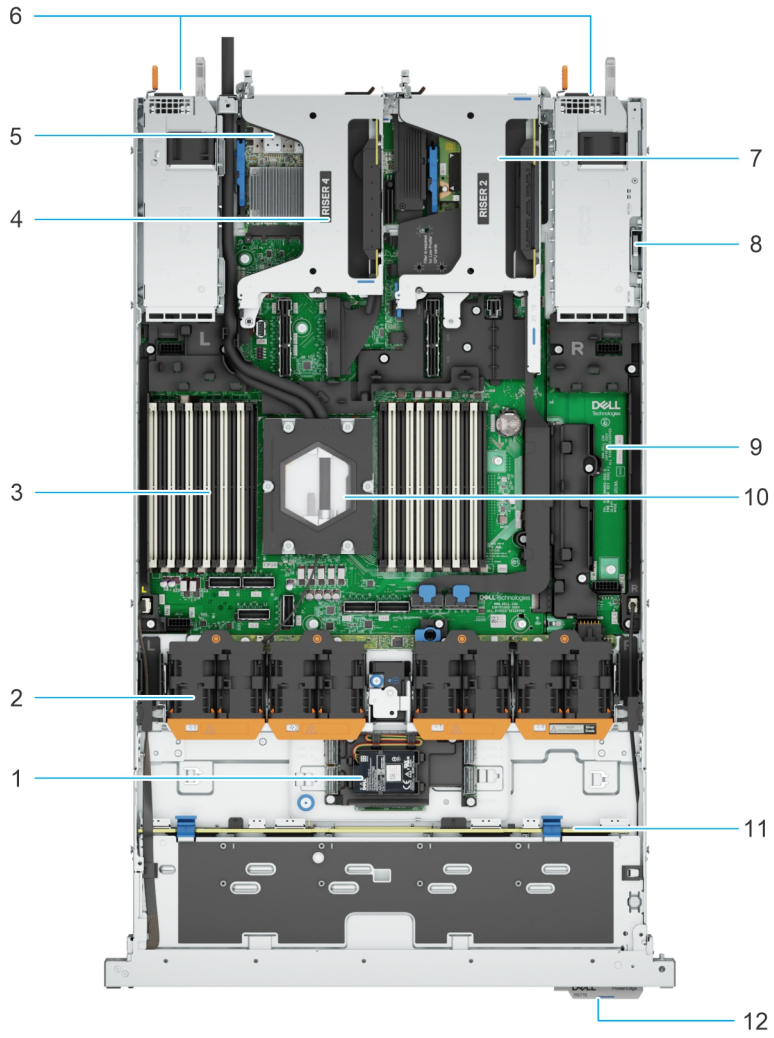

Figure 16. Inside the liquid cooling configuration system

1. Front PERC
2. Cooling fans
3. Memory module slots
4. Riser R4a
5. OCP 3.0 NIC card
6. Power supplies
7. Riser R2k
8. Intrusion switch
9. HPM board
10. Liquid cooling module
11. Backplane
12. Information tag

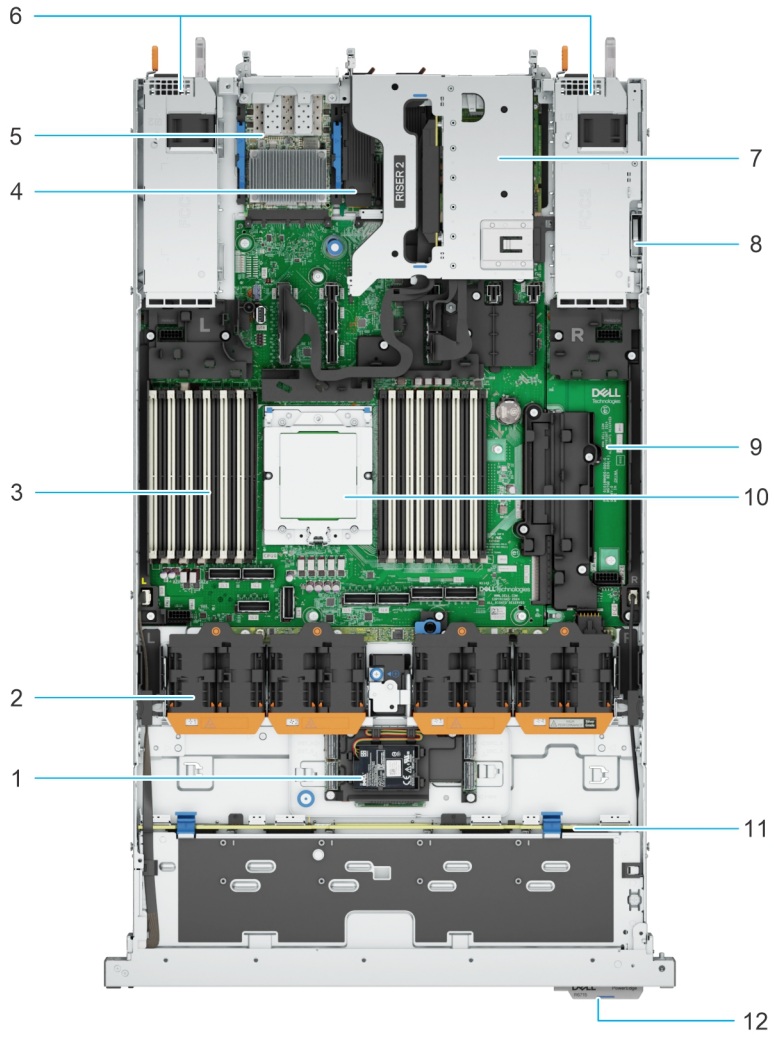

Figure 17. Inside the system view riser R2r

1. Front PERC
2. Cooling fans
3. Memory module slots
4. BOSS-N1 DC-MHS
5. OCP 3.0 NIC card
6. Power supplies
7. Riser R2r
8. Intrusion switch
9. HPM board
10. CPU
11. Backplane
12. Information tag

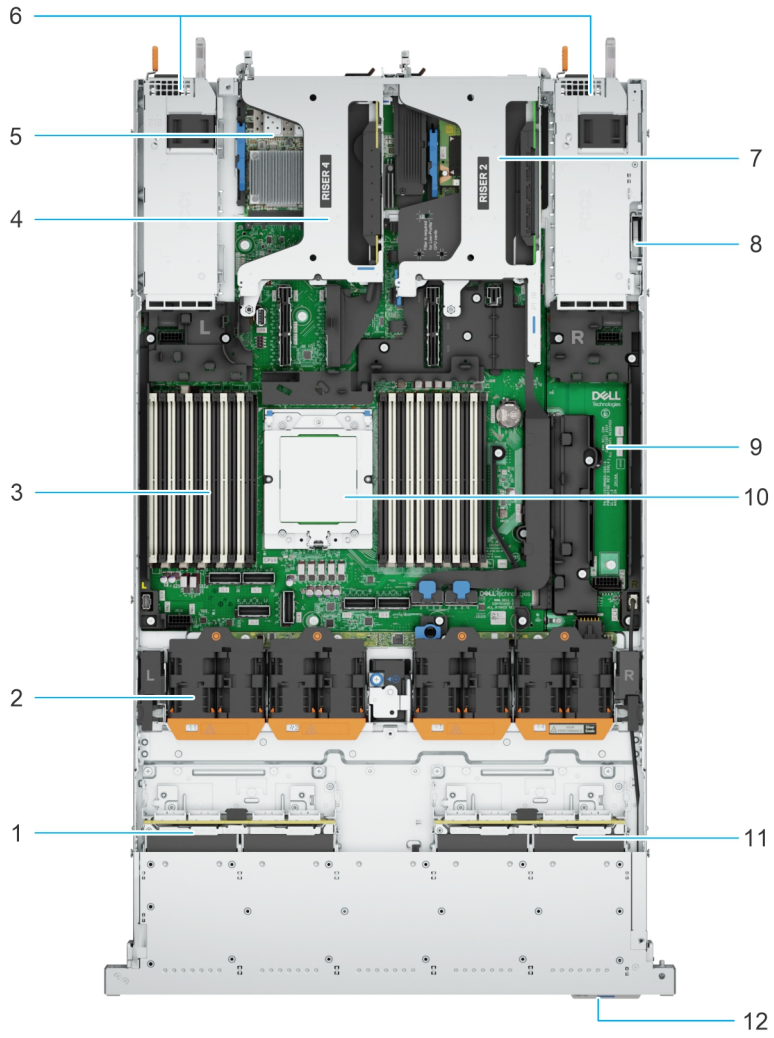

Figure 18. Inside the system with riser R4a and riser R2k

1. Backplane
2. Cooling fans
3. Memory module slots
4. Riser R4a
5. OCP 3.0 NIC card
6. Power supplies
7. Riser R2k
8. Intrusion switch
9. HPM board
10. CPU
11. Backplane
12. Information tag

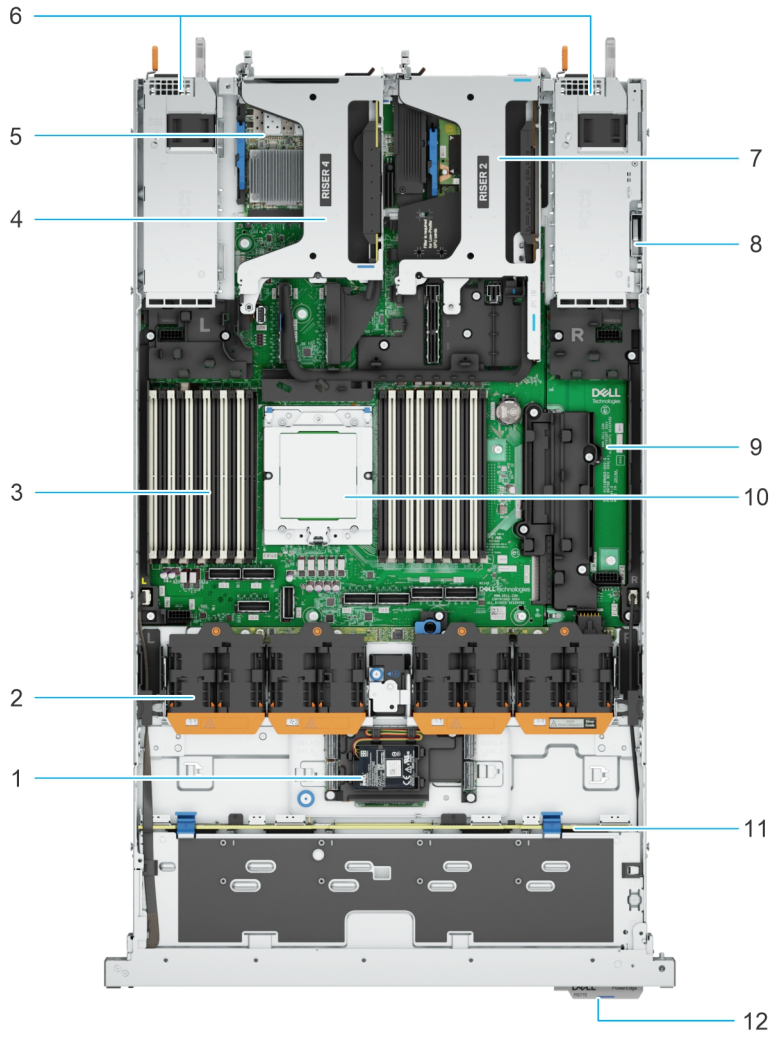

Figure 19. Inside the system with riser R2q and R4b

1. Front PERC
2. Cooling fans
3. Memory module slots
4. Riser R4b
5. OCP 3.0 NIC card
6. Power supplies
7. Riser R2q
8. Intrusion switch
9. HPM board
10. CPU
11. Backplane
12. Information tag

Chassis dimensions

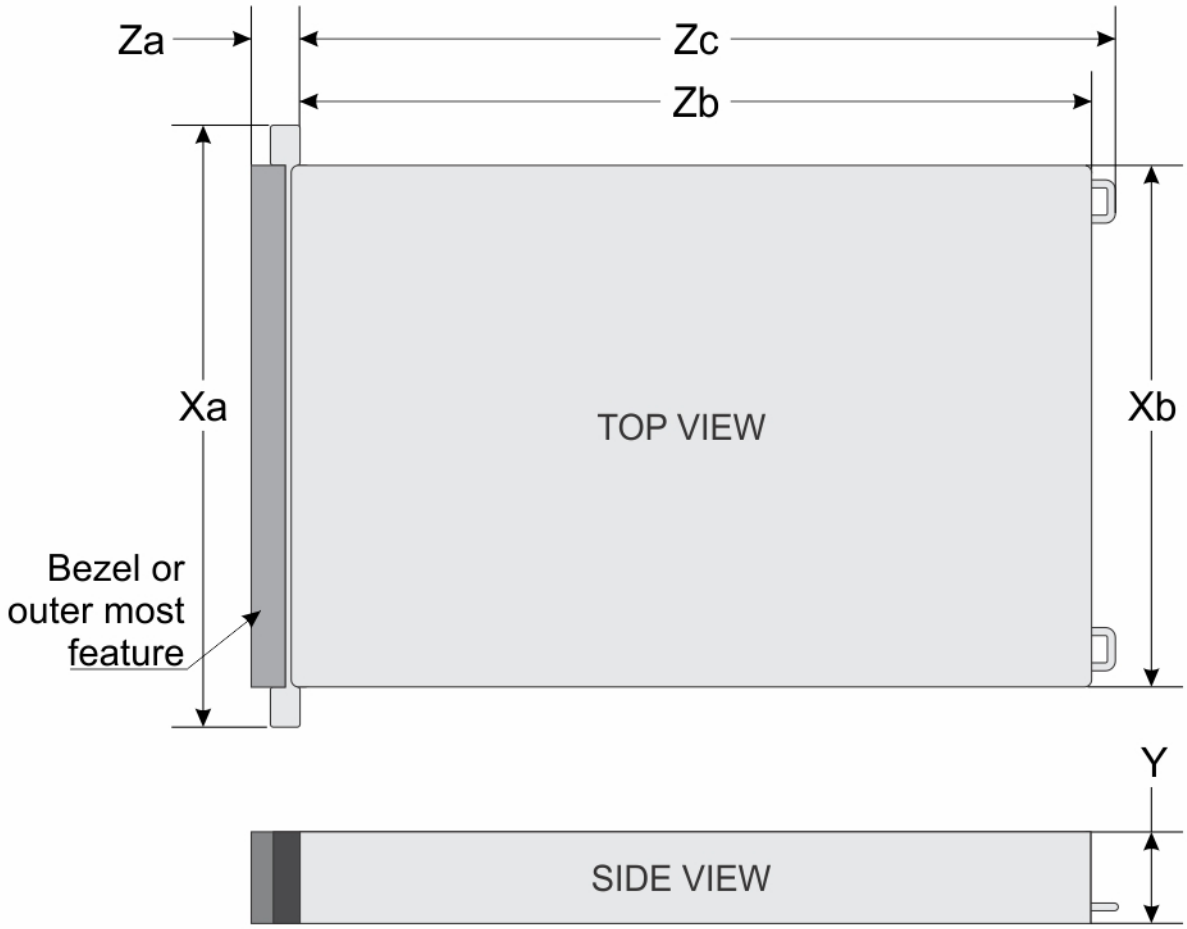

Figure 20. Chassis dimensions

Table 14. PowerEdge R6715 chassis dimensions

Drives	Xa	Xb	Y	Za (with bezel)	Za (without bezel)	Zb	Zc
All drive configurations	482.0 mm (18.97 inches)	434.0 mm (17.08 inches)	42.8 mm (1.68 inches)	31.75 mm (1.25 inches)	28.96 mm (1.14 inches)	750.6 mm (29.55 inches) without bezel	786.14 mm (30.95 inches) with bezel

NOTE: Zb is the nominal rear wall external surface where the HPM board I/O connectors reside.

System weight

Table 15. PowerEdge R6715 system weight

System configuration	Maximum weight (with all drives/SSDs)
4 x 3.5-inch SAS/SATA drives*	RC4 (3 x 16 FH) : 19.54 kg (43.07 pounds) RC5 (2 x 16 LP + 2nd OCP) : 19.41 kg (42.79 pounds)
8 x 2.5-inch Universal SSDs	19.96 kg (44.00 pounds)

Table 15. PowerEdge R6715 system weight (continued)

System configuration	Maximum weight (with all drives/SSDs)
8 x U.2 SSDs	20.78 kg (45.81 pounds)
10 x 2.5-inch SAS/SATA drives*	21.19 kg (46.71 pounds)
10 x 2.5-inch with 4 x Universal drives*	21.09 kg (46.49 pounds)
16 x EDSFF E3.S Gen5 NVMe drives	21.09 kg (46.49 pounds)
20 x EDSFF E3.S Gen5 NVMe + rear 2 x EDSFF E3.S Gen5 NVMe drives*	20.25 kg (46.64 pounds)

Table 16. PowerEdge R6715 weight handling recommendations

Chassis weight	Description
40–70 pounds	Recommend two people to lift
70–120 pounds	Recommend three people to lift
≥ 121 pounds	Recommend to use a server-lift

4

Processor

Topics:

- Processor features

Processor features

The AMD EPYC™ 9005 system on a chip (SOC) is the next-generation data center CPU supporting socket compatibility with EPYC™ 9004 in SP5 + socket infrastructure. Based on of AMD's new enhanced Zen5 CPU cores with integrated I/O controllers, AMD EPYC™ "Turin" SOC offers significant performance improvement from current generation production and the best performance per price and lowers TCO through an optimal balance of compute, memory, I/O, and security.

The following lists the features and functions in the AMD Family 1 Ah Models 00h-0Fh and 10H-1FH Socket SP5 processors:

- Compute
  - Zen5 cores:
    - Up to 160 cores with 2 x threads per socket
    - Up to 256 MB L3 cache
- Memory
  - 12 DDR5 memory channels up to 5200 MT/s (2 DPC)
  - RDIMM
  - Dynamic PPR for non-Chipkill DIMMs
  - Up to 2 DPC capacity of 3 TB/socket
- Integrated I/O
  - Up to 128 lanes of High Speed I /O
  - Server Controller Hub (USB, UART, SPI, LPC, I2C, so on)

Supported processors

The following table shows the 5th Generation AMD EPYC 9005 Series processor SKUs that are supported on the R6715.

Table 17. 5th Generation AMD EPYC 9005 Series processor supported in R6715

Processor	Base Clock Speed (GHz)	Max Clock Speed (GHz)	Cache (M)	Cores	Threads	Memory Speed (MT/s)	Memory Capacity	TDP (W)
9845	2.1	3.7	320	160	320	6400	3 TB	390
9825	2.2	3.7	384	144	288	6400	3 TB	390
9745	2.4	3.7	256	128	256	6400	3 TB	400
9655P	2.6	4.5	384	96	192	6400	3 TB	400
9555P	3.2	4.4	256	64	128	6400	3 TB	360
9575F	3.3	5.0	256	64	128	6400	3 TB	400
9475F	3.65	4.8	256	48	96	6400	3 TB	400
9375F	3.85	4.8	256	32	64	6400	3 TB	320
9335	3.0	4.4	128	32	64	6400	3 TB	210
9355P	3.55	4.4	256	32	64	6400	3 TB	280

Table 17. 5th Generation AMD EPYC 9005 Series processor supported in R6715 (continued)

Processor	Base Clock Speed (GHz)	Max Clock Speed (GHz)	Cache (M)	Cores	Threads	Memory Speed (MT/s)	Memory Capacity	TDP (W)
9275F	4.1	4.8	256	24	48	6400	3 TB	320
9255	3.25	4.3	128	24	48	6400	3 TB	200
9175F	4.2	5.0	512	16	32	6400	3 TB	320
9135	3.65	4.3	64	16	32	6400	3 TB	200
9115	2.6	4.1	64	16	32	6400	3 TB	125
9015	3.6	4.1	64	8	16	6400	3 TB	125

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Memory subsystem

Topics:

Supported memory

The R6715 supports up to 24 DIMMs (12 per channel), with up to 3 TB of memory and speeds of up to 5200 MT/s.

The R6715 support registered (RDIMMs) which use a buffer to reduce memory loading and provide greater density, allowing for the maximum platform memory capacity. Unbuffered DIMMs (UDIMMs) are not supported.

Table 18. Memory technology comparison

Feature	PowerEdge R6715 (DDR5)
DIMM type	RDIMM
Transfer speed	5200 MT/s for 1 DPC and 4400 MT/s for 2 DPC **NOTE:** Maximum DIMM transfer speed support dependent on CPU SKU and DIMM population
Voltage	1.1 V

System memory guidelines

The PowerEdge R6715 system supports DDR5 registered DIMMs (RDIMMs). System memory holds the instructions that are started by the processor.

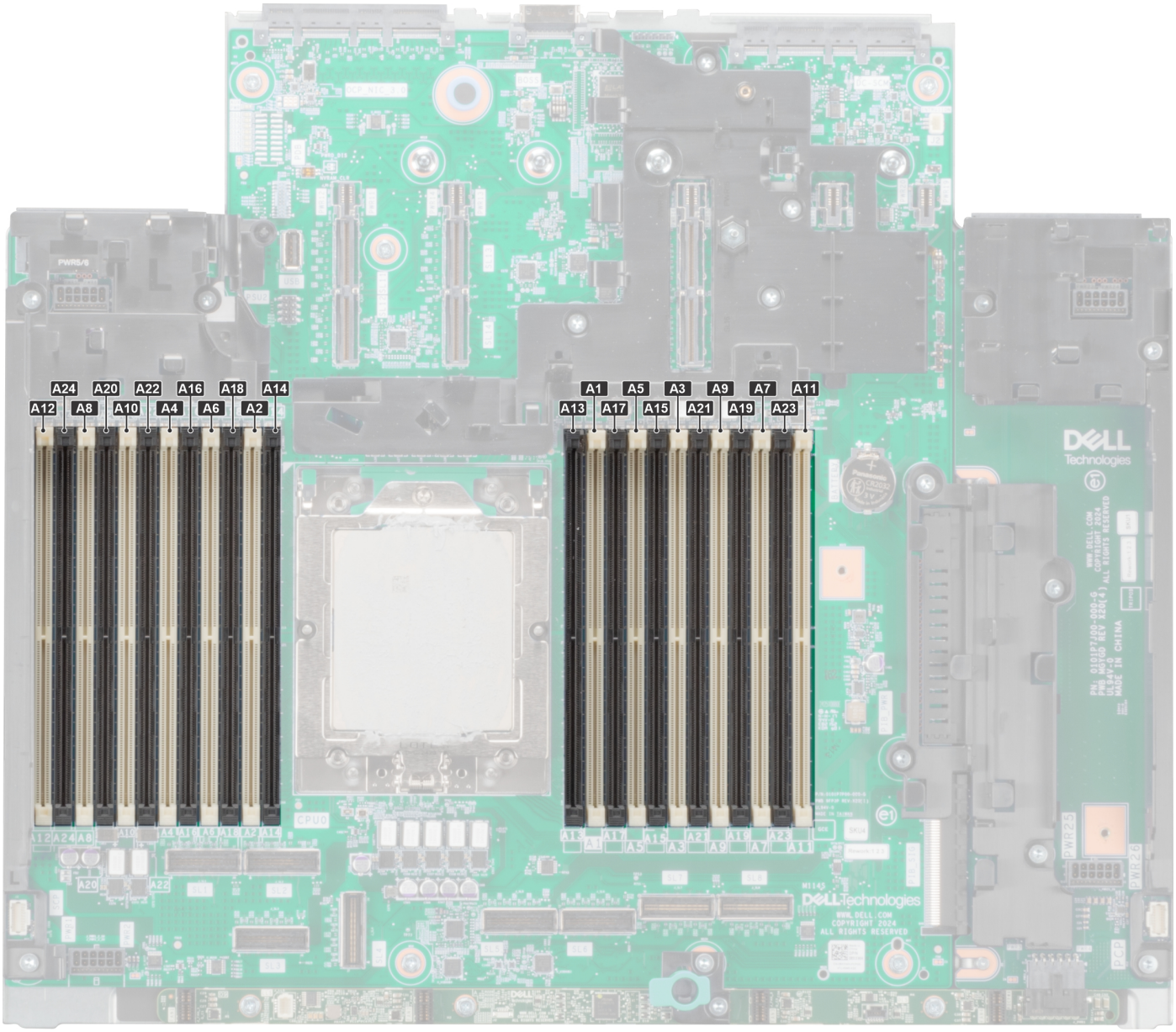

Figure 21. Memory channels

Memory channels are organized as follows:

Table 19. Memory channels

Processor	Channel A	Channel B	Channel C	Channel D	Channel E	Channel F
Processor 0	Slots A1 and A13	Slots A5 and A17	Slots A3 and A15	Slots A9 and A21	Slots A7 and A19	Slots A11 and A23

Table 20. Memory channels

Processor	Channel G	Channel H	Channel I	Channel J	Channel K	Channel L
Processor 0	Slots A2 and A14	Slots A6 and A18	Slots A4 and A16	Slots A10 and A22	Slots A8 and A20	Slots A12 and A24

Table 21. Supported memory matrix

DIMM type	Rank	Capacity	DIMM rated voltage and speed	Operating Speed	
				1 DIMM per channel (DPC)	2 DIMMs per channel (DPC)
RDIMM	1 R	16	DDR5 (1.1 V), 6400 MT/s	5200 MT/s	4400 MT/s
	2 R	32 GB, 64 GB , 96 GB, 128 GB	DDR5 (1.1 V), 6400 MT/s	5200 MT/s	4000 MT/s

NOTE: The processor may reduce the performance of the rated DIMM speed.

NOTE: Maximum DIMM transfer speed support dependent on CPU SKU and DIMM population.

6

Storage

Topics:

- Storage controllers
- Supported Drives
- Internal storage configuration

Storage controllers

NOTE: The size of the RAID 1 drives must be less than that of the second RAID container.

Dell RAID controller options offer performance improvements, including the fPERC solution. fPERC provides a base RAID HW controller without consuming a PCIe slot by using a small form factor and high-density connector to the base planar.

PERC Controller offerings are a heavy leverage of the predecessor PERC family. The Value and Value Performance levels carry over to the systems from the predecessor family.

Table 22. Storage controller feature matrix

Performance Level	Controller and Description
Premium Performance	H975i* Avenger 2 Memory: 1 GB DDR4 2400 MT/s Cache Memory 192 MB x16 PCIe 5.0 at 32 Gbps
	H965i Avenger 1 Memory: 8GB DDR4 3200 MT/s DC-MHS form factor x16 PCIe 4.0 PCIe 4 at 16 Gbps
	H365i Avenger 1 X8 PCIe 4.0 at 16Gbps
	HBA465e* Avenger 1 X16 PCIe 4.0 at 16Gbps
	H965e* Avenger 1

Table 22. Storage controller feature matrix (continued)

Performance Level	Controller and Description
	Memory: 8 GB DDR4 3200 MT/s x16 PCIe 4,0 at 16 Gbps

NOTE: * Expected to be available in the first half of 2025. Planned Offerings are subject to change and may not be released as originally designed.

NOTE: PowerEdge does not support Tri-Mode, the mixing of SAS, SATA, and NVMe behind the same controller.

NOTE: For more information about the features of the Dell PowerEdge RAID controllers (PERC), Software RAID controllers, or BOSS cards, and on deploying the cards, see the storage controller documentation at Storage Controller Manuals.

Storage controller feature matrix

Table 23. Storage controller feature matrix

Model and Form Factors	Interface Support	PCI Support	SAS Connection	Cache Memory Size	Write Back Cache	RAID Levels	Max Drive Support	RAID Support
H975i Front*	Gen3 (8 GT/s) NVMe Gen5 (32 GT/s) NVMe Gen4 (16 GT/s) NVMe	PCIe Gen5	Not supported	192 MB (on chip)	Flash Backed Cache	0, 1, 5, 6, 10, 50, 60	16x PCIe SSD controller	Hardware RAID
H965i Front	24Gb/s SAS 6Gb/s SAS/SATA Gen3 (8 GT/s) NVMe Gen4 (16 GT/s) NVMe	PCIe Gen 4	16 ports/ lanes-2x8 Internal	8 GB NV	Flash Backed Cache	0, 1, 5, 6, 10, 50, 60	16	Hardware
H365i Front	24Gb/s SAS 6Gb/s SAS/SATA Gen4 (16 GT/s) NVMe	PCIe Gen 4	16 ports/ lanes-2x8 Internal	No cache	No cache	N/A	N/A	Hardware
HBA465e*	24Gb/s SAS	PCIe Gen 4	4 ports/ lanes-4x4 external	N/A	N/A	N/A	1200 SAS **NOTE:** Please refer MD2400 Series User Guide for Supported Configuration	N/A

Table 23. Storage controller feature matrix (continued)

Model and Form Factors	Interface Support	PCI Support	SAS Connection	Cache Memory Size	Write Back Cache	RAID Levels	Max Drive Support	RAID Support
							and Topology.	
H965e	22.5 Gb/s SAS 12 Gb/s SAS	PCIe Gen 4	16 ports/ lanes-4x4 external	8 GB NV	Flash Backed Cache	0,1,5,6,10,50,60	240 SAS drives	Hardware RAID

This document is updated as changes happen, so for the latest version be sure to bookmark it rather than downloading an offline copy or see the Storage Controller Matrix on sales portal.

NOTE: * Expected to be available in the first half of 2025. Planned Offerings are subject to change and may not be released as originally designed.

Server storage controllers User Guide

- Server-Storage Controllers User's Guides, click here

Supported Drives

The table that is shown below lists the internal drives that are supported in R6715. See Agile for the latest SDL.

Table 24. Supported drives

Form Factor	Type	Speed	Rotational Speed	Capacities
2.5 inches	SATA SSD	6 Gbps	SSD	480 GB, 960 GB, 1.92 TB, 3.84 TB
2.5 inches*	SAS HDD	12 Gbps	10K	600 GB, 1.2 TB, 2.4 TB
3.5 inches*	SATA HDD	6 Gbps	7.2K	2 TB, 4 TB, 8 TB, 12 TB, 16 TB, 20 TB, 24 TB
3.5 inches*	SAS HDD	12 Gbps	7.2K	4 TB, 8 TB, 12 TB, 16 TB, 20 TB, 24 TB
EDSFF E3.S NVMe	NVMe	Gen5	SSD	1.6 TB, 1.92 TB, 3.2 TB, 3.84 TB, 6.4 TB, 7.68 TB, 15.36 TB

NOTE: * Expected to be available in the first half of 2025. Planned Offerings are subject to change and may not be released as originally designed.

Internal storage configuration

R6715 available internal storage configurations:

- No backplane configuration
- 4 x 3.5-inch SAS/SATA drives*
- 8 x 2.5-inch Universal SSDs
- 8 x U.2 SSDs
- 10 x 2.5-inch SAS/SATA drives*
- 10 x 2.5-inch with 4 x Universal drives*
- 16 x EDSFF E3.S Gen5 NVMe drives

- 20 x EDSFF E3.S Gen5 NVMe + rear 2 x EDSFF E3.S Gen5 NVMe*

NOTE: * Expected to be available in the first half of 2025. Planned Offerings are subject to change and may not be released as originally designed.

7

Networking

Topics:

Overview

PowerEdge offers a wide variety of options to get information moving to and from our servers. Industry best technologies are chosen and these adapters are rigorously validated for worry-free, fully supported use in Dell servers.

OCP 3.0 support

Table 25. OCP 3.0 feature list

Feature	OCP 3.0
Form factor	SFF
PCIe Gen	Gen5
Max PCIe width	x16
Max number of ports	4
Port type	BT/SFP/SFP28/QSFP56/QSFP112
Max port speed	400 GbE
NC-SI	Yes, support on embedded slot (slot 5) only.
SNAP I/O	N/A
WoL	Yes
Power consumption	15 W–35 W

Supported OCP cards

NOTE: * Expected to be available in the first half of 2025. Planned Offerings are subject to change and may not be released as originally designed.

Table 26. Supported OCP cards

Form factor	Vendor	Port type	Port speed	Port count
OCP 3.0	Broadcom	QSFP56	100 GbE	2
	Broadcom	SFP28	25 GbE	4
	Broadcom	BT	1 GbE	4
	Broadcom	BT	10 GbE	2
	Broadcom	BT	10 GbE	4

Table 26. Supported OCP cards (continued)

Form factor	Vendor	Port type	Port speed	Port count
	Broadcom	SFP28	25 GbE	2
	Broadcom	QSFP112	200 GbE	2
	Intel	BT	10 GbE	2
	Intel	BT	10 GbE	4
	Intel	BT	1 GbE	4
	NVIDIA	SFP28	25 GbE	2
	NVIDIA	QSFP56	100 GbE	2
	Broadcom	QSFP56	100 GbE	2
	Broadcom	SFP28	25 GbE	4

OCP NIC 3.0 vs 2.0

Table 27. OCP 3.0 and 2.0 NIC comparison

Form Factor	OCP 3.0	OCP 2.0 (LOM Mezz)	Notes
PCIe Gen	Gen5	Gen3	Supported OCP3 is SFF (small form factor).
Max PCIe Lanes	Up to x16	Up to x16	See server slot priority matrix.
Shared LOM/DC-SCM	Yes	Yes	Only OCP on slot 5 (embedded OCP slot) can support BMC port redirect as shared NIC.
Aux Power	Yes	Yes	Used for Shared LOM

8

PCIe subsystem

Topics:

- PCIe risers

PCIe risers

Shown below are the riser offerings for the platform.

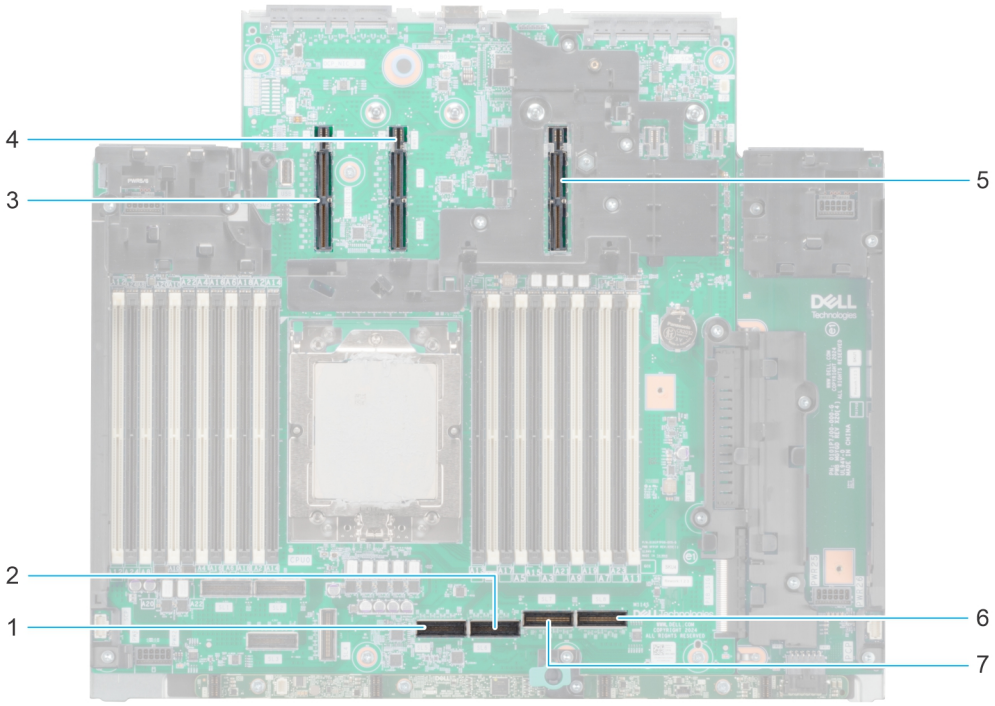

Figure 22. Riser connector location on the HPM board

1. PCIe connector 5 (SL5_CPU 0)
2. PCIe connector 6 (SL6_CPU 0)
3. Riser connector - requires CPU 0 (SL11/SL12/PWR11/PWR12)
4. Riser connector - requires CPU 0 (SL13/SL14/PWR13/PWR14)
5. Riser connector - requires CPU 0 (SL15/SL16/PWR15/PWR16)
6. PCIe connector 8 (SL8_CPU 0)
7. PCIe connector 7 (SL7_CPU 0)

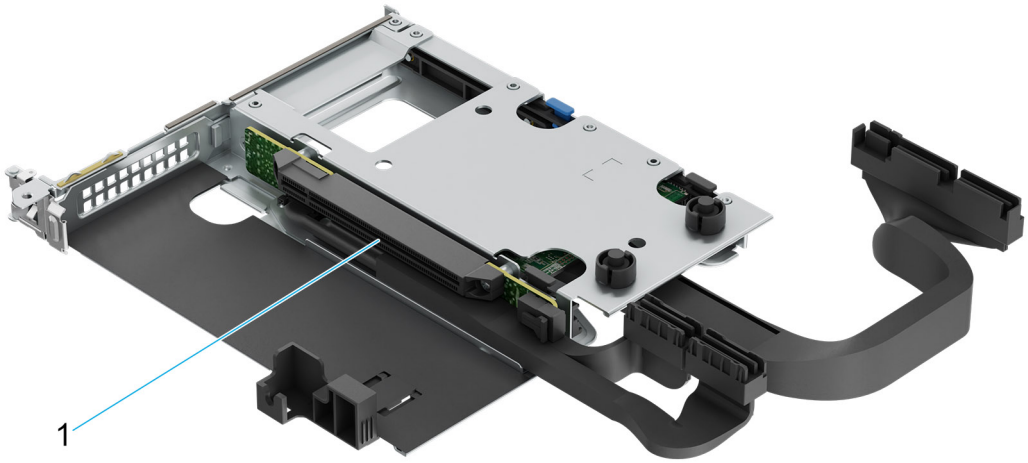

Figure 23. Riser 2k

1. Slot 1

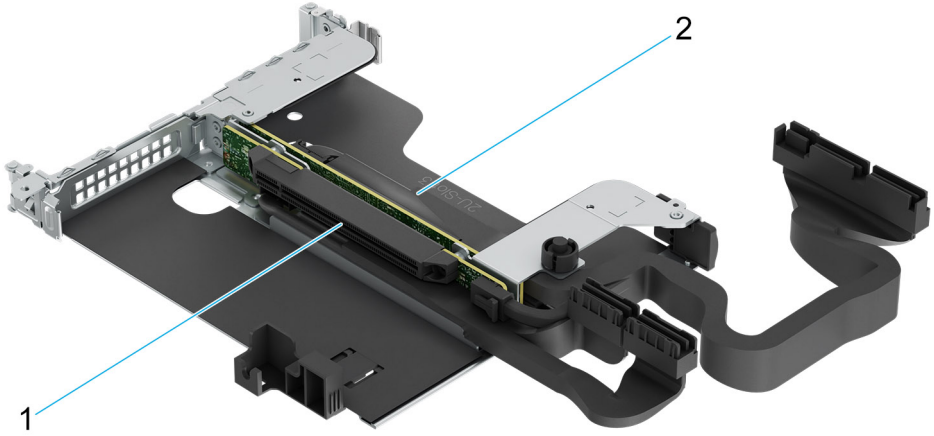

Figure 24. Riser 2q

1. Slot 1

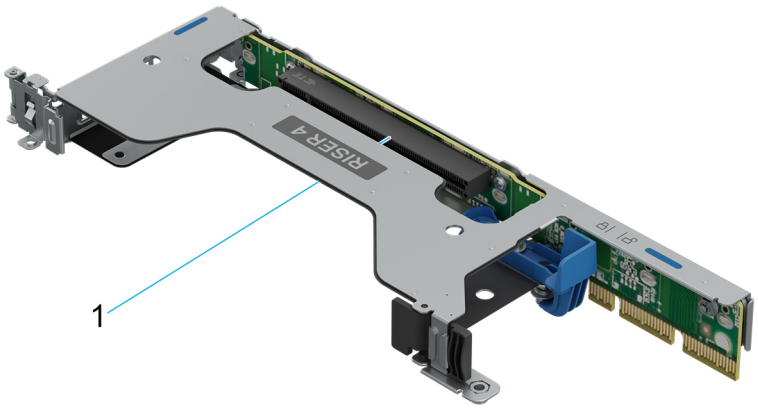

Figure 25. Riser 4a

1. Slot 4

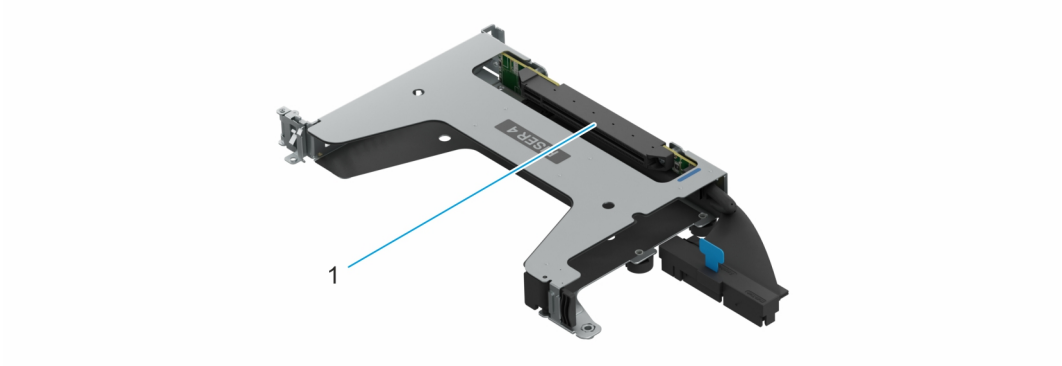

Figure 26. Riser 4b

1. Slot 4

Table 28. PCIe riser configurations

Config No.	Riser configuration	No. of Processors	PERC type supported	Rear storage possible
2	R2r	1	Front PERC	No
3	R2q+R4b	1	Front PERC	No
4	R2r+R4a	1	Front PERC	No
5	R2k+R4a	1	Front PERC	No
6*	R2s+R4a	1	Front PERC	Yes

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Power, thermal, and acoustics

PowerEdge servers have an extensive collection of sensors that automatically track thermal activity, which helps to regulate temperature by reducing server noise and power consumption. The table below lists the tools and technologies Dell offers to lower power consumption and increase energy efficiency.

Topics:

Power

Table 29. Power tools and technologies

Feature	Description
Power Supply Units(PSU) portfolio	Dell's PSU portfolio includes intelligent features such as dynamically optimizing efficiency while maintaining availability and redundancy. Find additional information in the Power supply units section.
Tools for right sizing	Enterprise Infrastructure Planning Tool (EIPT) is a tool that can help you determine the most efficient configuration possible. With Dell's EIPT, you can calculate the power consumption of your hardware, power infrastructure, and storage at a given workload. Learn more at Dell EIPT.
Industry Compliance	Dell's servers are compliant with all relevant industry certifications and guide lines, including 80 PLUS, Climate Savers and ENERGY STAR.
Power monitoring accuracy	PSU power monitoring improvements include: ● Dell's power monitoring accuracy is currently 1%, whereas the industry standard is 5% ● More accurate reporting of power
Rack infrastructure	Dell offers some of the industry's highest-efficiency power infrastructure solutions, including: ● Power distribution units (PDUs) ● Uninterruptible power supplies (UPSs) ● Energy Smart containment rack enclosures ● AC Blind Mate Find additional information at: Power and Cooling

Power Supply Units

Energy Smart power supplies have intelligent features, such as the ability to dynamically optimize efficiency while maintaining availability and redundancy. Also featured are enhanced power-consumption reduction technologies, such as high-efficiency power conversion and advanced thermal-management techniques, and embedded power-management features, including high-accuracy power monitoring. The table below shows the power supply unit options that are available for the system.

Table 30. PSU specifications

PSU	Class	Heat dissipation (maximum) (BTU/hr)	Frequency (Hz)	Input voltage	Current (A)
1800 W Titanium **	Titanium	6750	50/60	200-240 Vac	9.8-8.2

Table 30. PSU specifications (continued)

PSU	Class	Heat dissipation (maximum) (BTU/hr)	Frequency (Hz)	Input voltage	Current (A)
	N/A	6750	N/A	240 Vdc	8.2
1500 W Titanium	Titanium	5625	50/60	100-240 Vac	12-8.2
	N/A	5625	N/A	240 Vdc	6.8
1500 W 277 Vac & HVDC **	Titanium	5625	50/60	277 Vac	6.1
	N/A	5625	N/A	336 Vdc	4.91
1400 W -48 Vdc*	Telco	5310	N/A	(-48) - (-60) Vdc	33
1100 W Titanium	Titanium	4125	50/60	100-240 Vac	12-6.1
	N/A	4125	N/A	240 Vdc	5.1
1100 W Platinum	Platinum	4125	50/60	100-240 Vac	12-6.1
	N/A	4125	N/A	240 Vdc	5.1
800 W Titanium	Titanium	3000	50/60	100-240 Vac	9.2-4.5
	N/A	3000	N/A	240 Vdc	3.7
800 W Platinum	Platinum	3000	50/60	100-240 Vac	9.2-4.5
	N/A	3000	N/A	240 Vdc	3.7

NOTE: If a system with AC 1500 W PSUs operates at low line 100-120 Vac, then the power rating per PSU is d e-rated to 1050 W.

NOTE: * : Limited availability in the first half of 2025, then expected to be availale in the second half of 2025.

NOTE: ** : Expected to be available in the second half of 2025.

Figure 27. C13 power cord

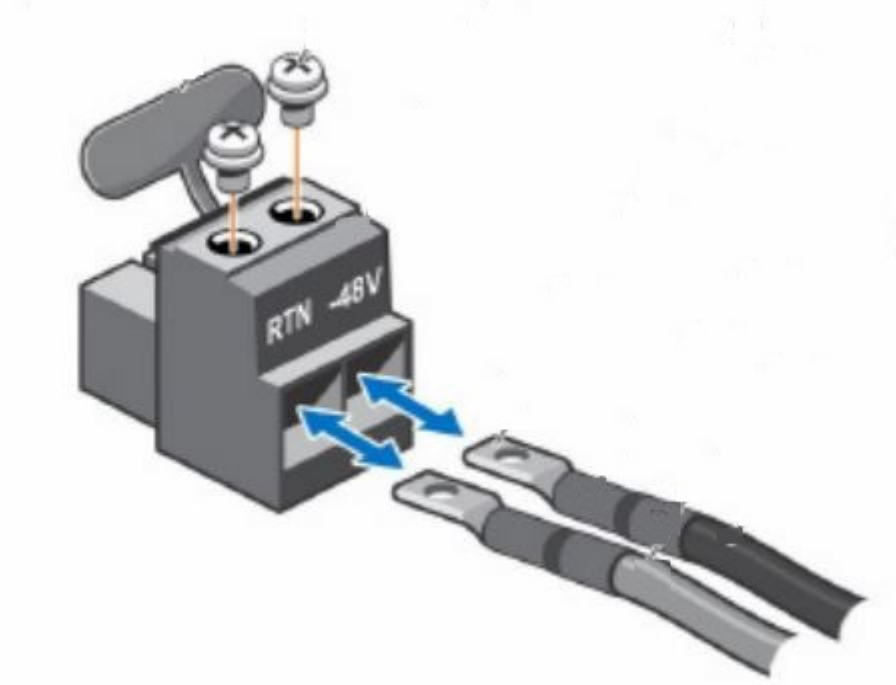

Figure 28. DC PSU power cord *

Table 31. PSU power cables

Form factor	Output	Power cable
Redundant 60 mm	1800 W Titanium mixed mode **	C15
Redundant 60 mm	1500 W Titanium mixed mode	C13
Redundant 60 mm	1500 W 277 Vac and HVDC **	APP/Saf-D-Grid
Redundant 60 mm	1400 W Telco*	DC power cable
Redundant 60 mm	1100 W Titanium mixed mode	C13
Redundant 60 mm	1100 W Platinum mixed mode	C13
Redundant 60 mm	800 W Titanium mixed mode	C13
Redundant 60 mm	800 W Platinum mixed mode	C13

NOTE: * Expected to be available in the first half of 2025. Planned Offerings are subject to change and may not be released as originally designed.

NOTE: ** : Expected to be available in the second half of 2025.

Thermal

PowerEdge servers have an extensive collection of sensors that automatically track thermal activity, which helps regulate temperature thereby reducing server noise and power consumption.

Thermal design

Thermal management of the platform helps deliver high performance with the right amount of cooling to components, while maintaining the lowest fan speeds possible. This is done across a wide range of ambient temperatures from 10°C to 35°C (50°F to 95°F) and to extended ambient temperature ranges.

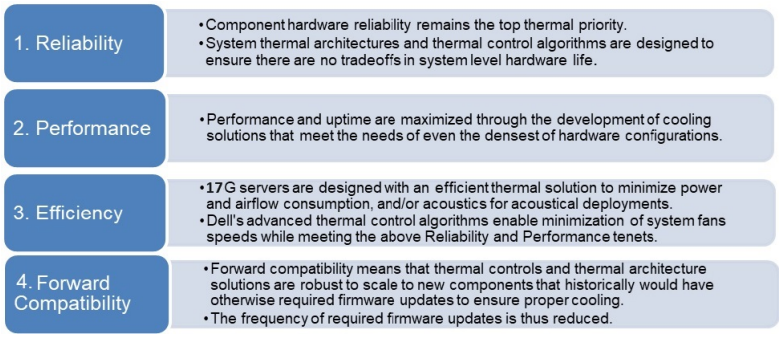

Figure 29. Thermal design characteristics

The thermal design of the PowerEdge R6715 reflects the following:

- Optimized thermal design: The system layout is architected for optimum thermal design.
- System component placement and layout are designed to provide maximum airflow coverage to critical components with minimum expense of fan power.
- Comprehensive thermal management: The thermal control system regulates the fan speed based on several different responses from all system-component temperature sensors, and inventory for system configurations. Temperature monitoring includes components such as processors, DIMMs, chipset, the inlet air ambient, hard disk drives, and OCP.
- Open and closed loop thermal fan speed control: Open loop thermal control uses system configuration to determine fan speed based on inlet air ambient temperature. Closed loop thermal control method uses feedback temperatures to dynamically determine proper fan speeds.
- User-configurable settings: With the understanding and realization that every customer has unique set of circumstances or expectations from the system. For more information, see the Dell PowerEdge R6715 Installation and Service Manual at PowerEdge Manuals and "Advanced Thermal Control: Optimizing across Environments and Power Goals" on Dell.com.
- Cooling redundancy: The R6715 allows N+1 fan redundancy, allowing continuous operation with one fan failure in the system.
- Environmental Specifications: The optimized thermal management makes the R6715 reliable under a wide range of operating environments.

Acoustics

Acoustical configurations of R6715

Dell PowerEdge R6715 is a rack or tower server appropriate for attended data center environment. However, lower acoustical output is attainable with proper hardware or software configurations.

Table 32. Acoustical performance of the R6715

R6715 Configurations	Low	Typical - 3.5"	Typical - 2.5"	NVMe	E3	GPU
System fan type	TBD	BKF	TBD	BKF	TBD	TBD
Processor	TBD	1 x AMD 195W	1 x AMD 200W	1 x AMD 280W	1 x AMD 280W	1 x AMD 400W
Memory	TBD	12 x 16GB RDIMM DDR5	24 x 16GB RDIMM DDR5	24 x 64GB RDIMM DDR5	24 x 96GB RDIMM DDR5	24 x 128GB RDIMM DDR5
Storage	TBD	2 x 2.5" HDD	4 x 3.5" HDD	8 x 2.5" HDD	10 x 2.5" NVMe	20 x E3.s SSD
BP	TBD	8 x 2.5" BP	4 x 3.5"	8 x 2.5"	10 x 2.5"	20 x E3.s
PERC	TBD	None	PERC 12	PERC 12	PERC 12	None
BOSS	TBD	17G BOSS	17G BOSS	17G BOSS	17G BOSS	17G BOSS
OCP	TBD	1 x OCP(x16) - 1Gbx4	2 x OCP(x16) - 10 GbE	None	None	2 x OCP(x16) - 100 GbE

Table 32. Acoustical performance of the R6715 (continued)

R6715 Configurations	Low	Typical - 3.5"	Typical - 2.5"	NVMe	E3	GPU
PSU	TBD	1 x 800W	2 x 1100W	2 x 1100W	2 x 1500W	2 x 1500W
Bezel	TBD	Yes	Yes	Yes	Yes	Yes

Table 33. Acoustical experience of R6715 configurations

Configuration		The Quietest configuration	Low	Volume - 3.5"	Volume - 2.5 - inch	NVMe	HPC
Acoustical Performance: Idle/ Operating @ 25°C Ambient							
$L_{wA,m}$ (B)	Idle[4]	TBD	5.6	TBD	5.6	TBD	TBD
	Operating/ Customer usage operating[5][6]	TBD	5.6	TBD	5.6	TBD	TBD
K_v (B)	Idle [4]	TBD	0.4	TBD	0.4	TBD	TBD
	Operating/ Customer usage operating[5][6]	TBD	0.4	TBD	0.4	TBD	TBD
$L_{pA,m}$ (dB)	Idle[4]	TBD	40	TBD	40	TBD	TBD
	Operating/ Customer usage operating[5][6]	TBD	40	TBD	40	TBD	TBD
Prominent discrete tones[3]		TBD	TBD				
Acoustical Performance: Idle @ 28°C Ambient							
$L_{wA,m}$[1] (B)		TBD	6.0	TBD	6.0	TBD	TBD
K_v (B)		TBD	0.4	TBD	0.4	TBD	TBD
$L_{pA,m}$[2] (dB)		TBD	49	TBD	49	TBD	TBD
Acoustical Performance: Max. loading @ 35°C Ambient							
$L_{wA,m}$[1] (B)		TBD	8.3	TBD	8.3	TBD	TBD
K_v (B)		TBD	0.4	TBD	0.4	TBD	TBD
$L_{pA,m}$[2](dB)		TBD	74	TBD	74	TBD	TBD

LwA,m: The declared mean A-weighted sound power level (LwA) is calculated per section 5.2 of ISO 9296 (2017) with data collected using the methods described in ISO 7779 (2010). Data presented here may not be fully compliant with ISO 7779.

LpA,m: The declared mean A-weighted emission sound pressure level is at the bystander position per section 5.3 of ISO 9296 (2017) and measured using methods described in ISO 7779 (2010). The system is placed on a standard table, 75cm above a reflective floor. Data presented here may not be fully compliant with ISO 7779.

Prominent tones: Criteria of D.6 and D.11 of ECMA-74 (17th ed., Dec. 2019) are followed to determine if discrete tones are prominent and to report them, if so.

Idle mode: The steady-state condition in which the server is energized but not operating any intended function.

Operating mode: The maximum of the steady state acoustical output at 50% of CPU TDP or active HDDs per C.9.3.2 in ECMA-74 (17th ed., Dec. 2019).

10

Rack, rails, and cable management

Topics:

Rails and cable management information

The rail offerings for the PowerEdge R6715 consist of two general types: sliding and static. The cable management offerings consist of an optional cable management arm (CMA) and an optional strain relief bar (SRB).

See the *Enterprise Systems Rail Sizing and Rack Compatibility Matrix* available at Dell Technologies Enterprise Systems Rail Sizing and Rack Compatibility Matrix for information regarding:

- Specific details about rail types.
- Rail adjustability ranges for various rack mounting flange types.
- Rail depth with and without cable management accessories.
- Rack types that are supported for various rack mounting flange types.

Key factors governing proper rail selection include the following:

- Spacing between the front and rear mounting flanges of the rack.
- Type and location of any equipment that is mounted in the back of the rack such as power distribution units (PDUs).
- Overall depth of the rack.

Sliding rails features summary

The sliding rails allow the system to be fully extended out of the rack for service. There are two types of sliding rails available, ReadyRails II sliding rails and Stab-in/Drop-in sliding rails. The sliding rails are available with or without the optional cable management arm (CMA) or strain relief bar (SRB).

A15 ReadyRails sliding rails for 4-post racks

- Supports drop-in installation of the chassis to the rails.
- Support for tool-less installation in 19" EIA-310-E compliant square or unthreaded round hole 4-post racks including all generations of the Dell racks.
- Support for tooled installation in 19" EIA-310-E compliant threaded hole 4-post racks.
- Support full extension of the system out of the rack to allow serviceability of key internal components.
- Support for optional strain relief bar (SRB).
- Support for an optional cable management arm (CMA).

> **NOTE:** For situations where CMA support is not required, the outer CMA mounting brackets can be uninstalled from the sliding rails. This reduces the overall length of the rails and eliminates the potential interference with rear-mounted PDUs or the rear rack door.

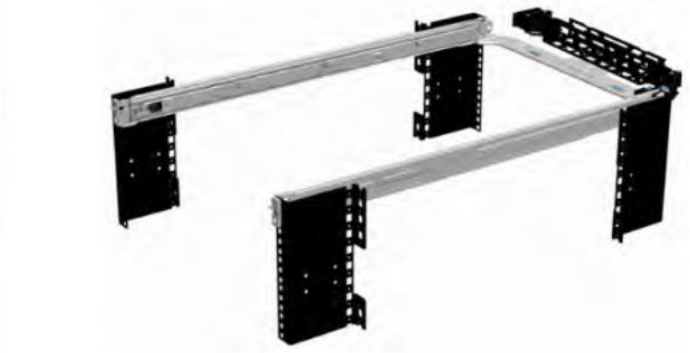

Figure 30. Sliding rails with optional CMA

Figure 31. Sliding rails with optional SRB

A16 Stab-in/Drop-in sliding rails for 4-post racks

- Supports drop-in or stab-in installation of the chassis to the rails.
- Support for tool-less installation in 19" EIA-310-E compliant square, unthreaded round hole racks including all generations of the Dell racks. Also supports tool-less installation in threaded round hole 4-post racks.
- Support for tool-less installation in Titan or Titan-D racks.
- Support full extension of the system out of the rack to allow serviceability of key internal components.
- Support for an optional cable management arm (CMA).
- Support for optional strain relief bar (SRB).

NOTE: For situations where CMA support is not required, the outer CMA mounting brackets can be uninstalled from the sliding rails. This reduces the overall length of the rails and eliminates the potential interference with rear-mounted PDUs or the rear rack door.

A14 static rails summary

The static rails offer a greater adjustability range and a smaller overall mounting footprint than the sliding rails because of their reduced complexity and lack of need for CMA support. The static rails support a wider variety of racks than the sliding rails. However, they do not support serviceability in the rack and are thus not compatible with the CMA. The static rails are also not compatible with SRB.

Figure 32. Static rails

Static rails features summary

Static rails for 4-post and 2-post racks:

- Supports Stab-in installation of the chassis to the rails.
- Support tool-less installation in 19" EIA-310-E compliant square or unthreaded round hole 4-post racks including all generations of Dell racks.
- Support tooled installation in 19" EIA-310-E compliant threaded hole 4-post and 2-post racks.
- Support for tooled installation in Dell Titan or Titan-D rack.

NOTE:

- Screws are not included with the static rail kit since racks are offered with various thread types. The screws are provided for mounting static rails in racks with threaded mounting flanges.
- Screw head diameter should be 10 mm or less.

2-Post racks installation

If installing to 2-Post (Telco) racks, the ReadyRails II static rails (A14) must be used. Sliding rails support mounting in 4-post racks only.

Figure 33. Static rails in 2-post center mount configuration

Installation in the Titan or Titan-D racks

For tool-less installation in Titan or Titan-D racks, the Stab-in/Drop-in sliding rails (A16) must be used. This rail collapses down sufficiently to fit in the rack with mounting flanges that are spaced about 24 inches apart from front to back. The Stab-in/Drop-in sliding rail allows bezels of the servers and storage systems to be aligned when installed in these racks. For tooled installation, Stab-in Static rails (A14) must be used for bezel alignment with storage systems.

Cable management arm (CMA)

The optional cable management arm (CMA) organizes and secures the cords and cables exiting the back of the systems. It unfolds to allow the systems to extend out of the rack without having to detach the cables. Some key features of the CMA include:

- Large U-shaped baskets to support dense cable loads.
- Open vent pattern for optimal airflow.
- Ability to mount on either side by swinging the spring-loaded brackets from one side to the other.
- Utilizes hook-and-loop straps rather than plastic tie wraps to eliminate the risk of cable damage during cycling.
- Includes a low-profile fixed tray to both support and retain the CMA in its fully closed position.
- Both the CMA and the tray mount without the use of tools by simple and intuitive snap-in designs.

The CMA can be mounted to either side of the sliding rails without the use of tools or the need for conversion. For systems with one power supply unit (PSU), it is recommended to mount on the side opposite to that of the power supply to allow easier access to it and the rear drives (if applicable) for service or replacement.

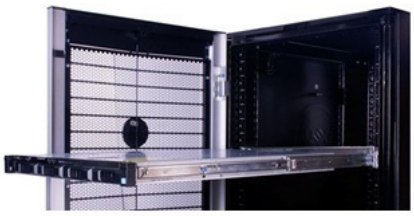

Figure 34. Sliding rails with CMA

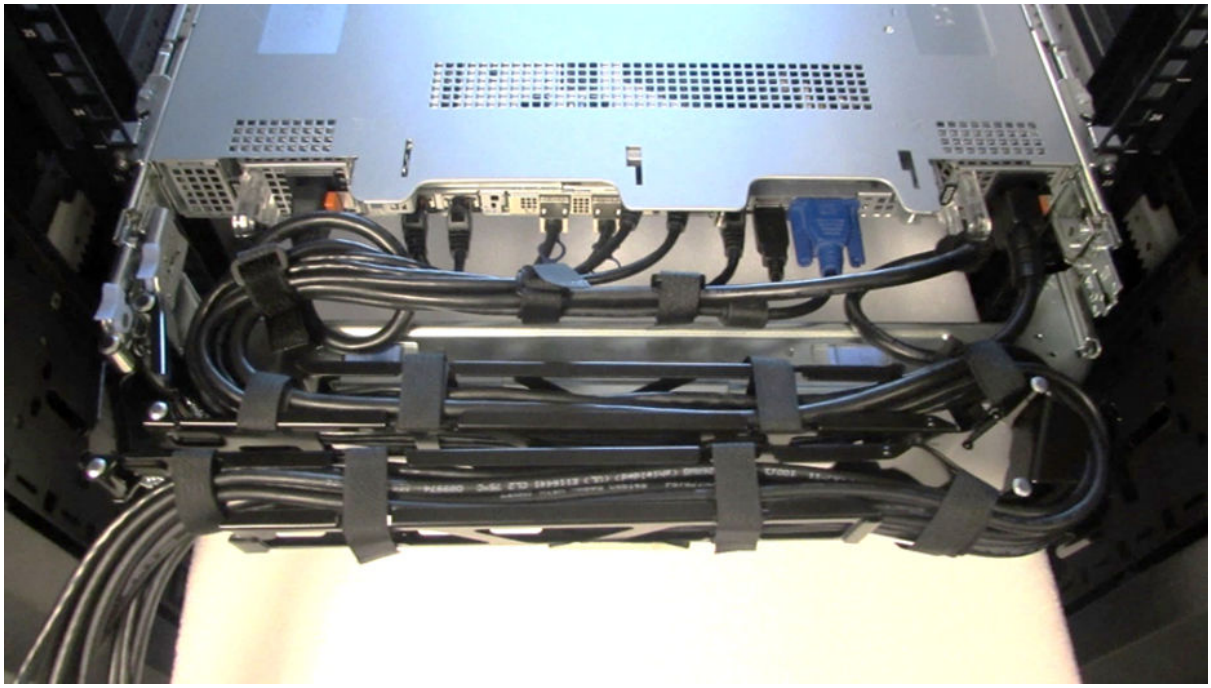

Figure 35. CMA Cabling

Strain Relief Bar (SRB)

The optional strain relief bar (SRB) for the PowerEdge R6715 organizes and supports cable connections at the rear end of the server to avoid damage from bending.

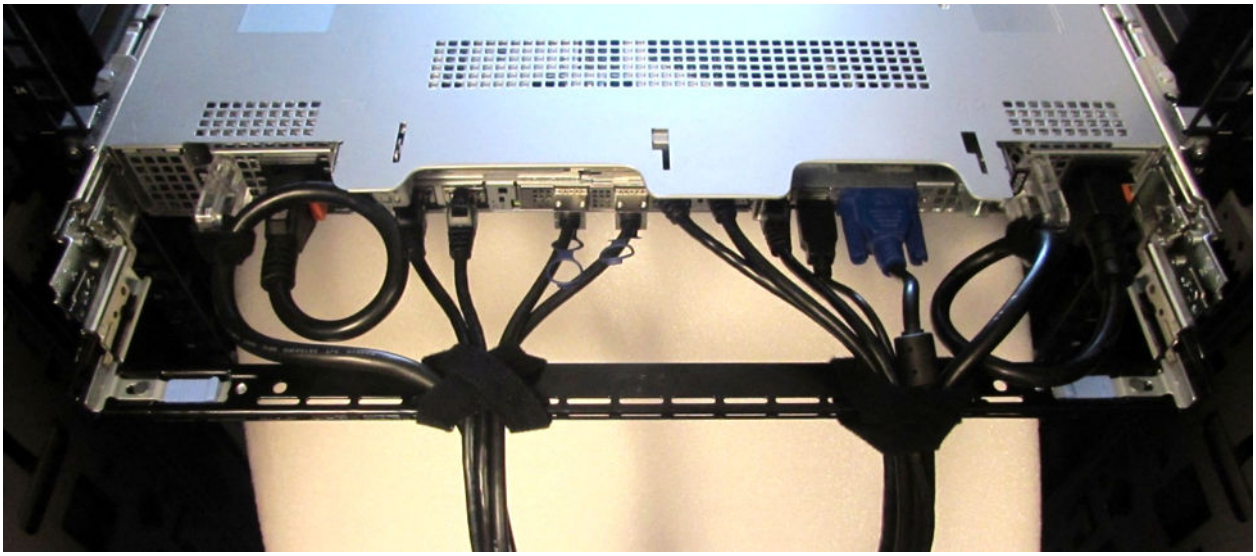

Figure 36. Cabled strain relief bar

- Tool-less attachment to the rails
- Two depth positions to accommodate various cable loads and rack depths.
- Supports cable loads and controls stresses on server connectors.
- Cables can be segregated into discrete purpose-specific bundles.

Rack Installation

Drop-in design means that the system is installed vertically into the rails by inserting the standoffs on the sides of the system into the J-slots in the inner rail members with the rails in the fully extended position. The recommended method of installation is to first insert the rear standoffs on the system into the rear J-slots on the rails to free up a hand and then rotate the system down into the remaining J-slots while using the free hand to hold the rail against the side of the system.

Stab-in design means that the inner (chassis) rail members must first be attached to the sides of the system and then inserted into the outer (cabinet) members installed in the rack.

Installing the system into the rack (option A: Drop-In)

1. Pull the inner rails out of the rack until they lock into place.

Figure 37. Pull out inner rail

2. Locate the rear rail standoff on each side of the system and lower them into the rear J-slots on the slide assemblies.
3. Rotate the system downward until all the rail standoffs are seated in the J-slots.

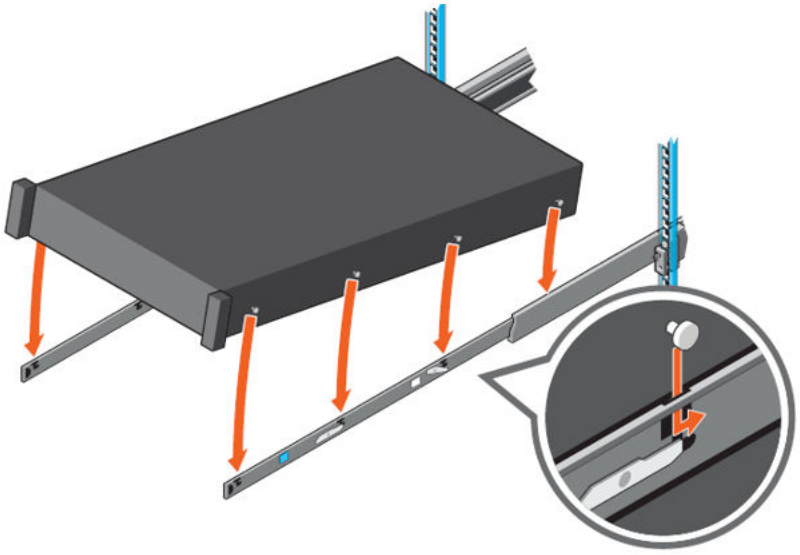

Figure 38. Rail standoffs seated in J-slots

4. Push the system inward until the lock levers click into place.
5. Pull the blue side release lock tabs forward or backward on both rails and slide the system into the rack until the system is in the rack.

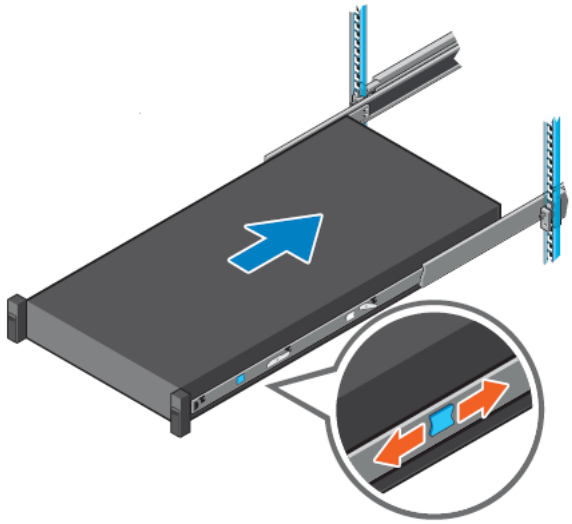

Figure 39. Slide system into the rack

Installing the system into the rack (option B: Stab-In)

1. Pull the intermediate rails out of the rack until they lock into place.
2. Release the inner rail lock by pulling forward on the white tabs and sliding the inner rail out of the intermediate rails.

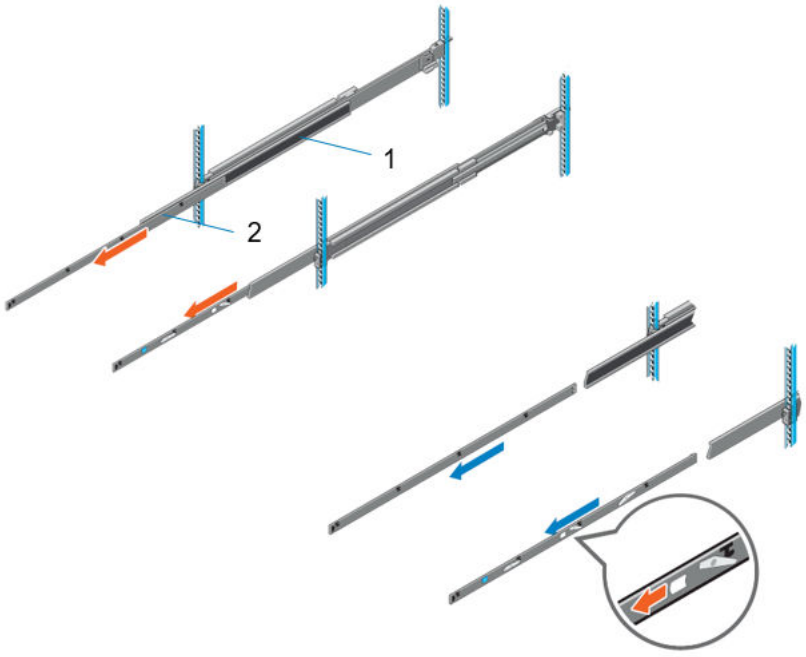

Figure 40. Pull out the intermediate rail

Table 34. Rail component label

Number	Component
1	Intermediate rail

Table 34. Rail component label (continued)

Number	Component
2	Inner rail

3. Attach the inner rails to the sides of the system by aligning the J-slots on the rail with the standoffs on the system and sliding forward on the system until they lock into place.

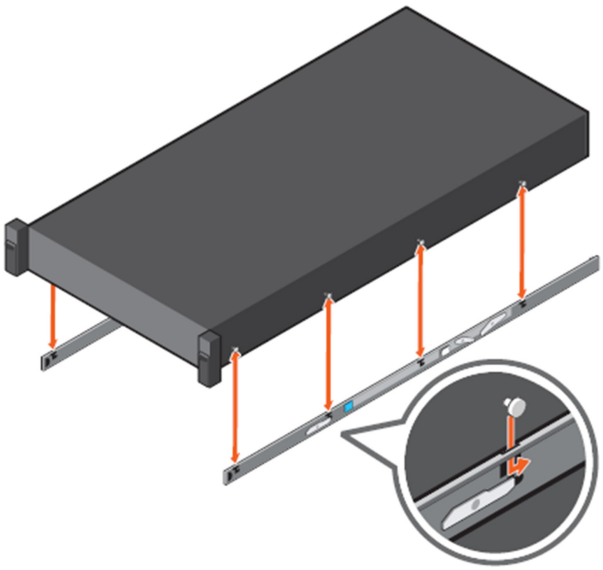

Figure 41. Attach the inner rails to the system

4. With the intermediate rails extended, install the system into the extended rails.

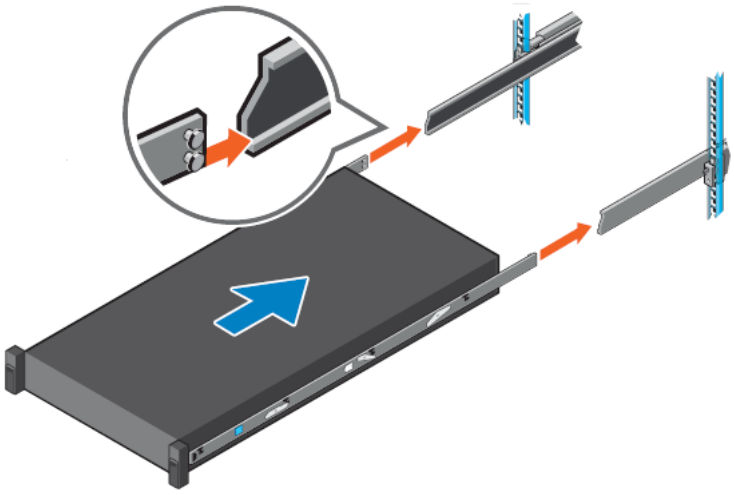

Figure 42. Install system into the extended rails

5. Pull blue slide release lock tabs forward or backward on both rails, and slide the system into the rack.

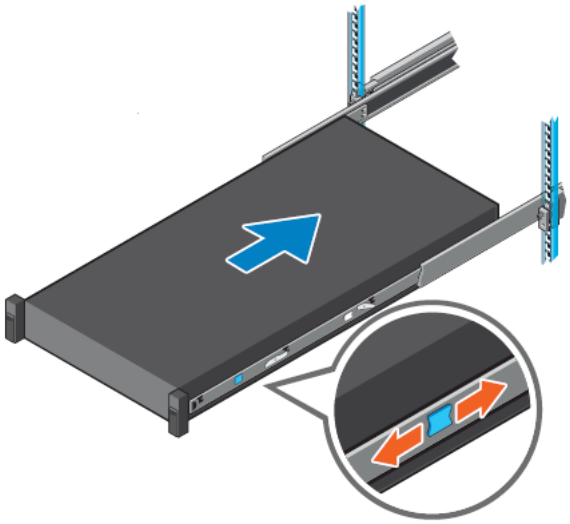

Figure 43. Slide system into the rack

11

Operating Systems and Virtualization

Topics:

- Supported operating systems

Supported operating systems

The PowerEdge R6715 system supports the following operating systems:

- Microsoft Windows Server with Hyper-V
- Canonical Ubuntu Server LTS
- Red Hat Enterprise Linux
- SUSE Linux Enterprise Server
- VMware ESXi

For specifications and interoperability details, see OS support.

12

Dell Systems Management

Dell delivers management solutions that help IT administrators deploy, update, monitor, and manage IT assets. OpenManage solutions and tools enable you to solve and respond to problems quickly by manage Dell servers efficiently in physical and remote environments, and operating in-band and out-of-band (agent-free).

The OpenManage portfolio includes innovative embedded management tools such as the integrated Dell Remote Access Controller (iDRAC) and consoles like OpenManage Enterprise, OpenManage Power Manager Plugin, and tools like Repository Manager. Dell has developed comprehensive systems management solutions that are based on open standards by connecting and/or integrating it's offers with top system management vendors and frameworks such as Ansible, Microsoft, and VMware, enabling advanced management of Dell hardware. The key tools for managing Dell PowerEdge servers are iDRAC and OpenManage Enterprise (OME) console. OpenManage Enterprise helps the system administrators with the life cycle management of multiple generations of PowerEdge servers. OME has additional functions that can be added with plugins like OpenManage Enterprise Services, Update Manager, APEX AIOps Observability (formerly CloudIQ), and Power Manager. It also offers integration with VMware vCenter and Microsoft System Center, and a set of tools, including Repository Manager, enabling easy management of PowerEdge hardware. The four main pillars of Dell systems management closely align with the issues and business challenges that are faced by many IT departments.

- Automating IT management.
  - Comprehensive automation management for reducing OPEX and increasing uptime and overall efficiency of systems.
  - Comprehensive suite of tools to automate according to your needs.
- Management made simple.
  - Simple but powerful tools for managing your Dell servers.
  - Integrated tools that streamline support engagements.
  - Innovative at-the-box management features.
- Secure by default.
  - Dell servers offer robust security defenses to prevent the next generation of malicious attacks.
  - Security is designed deep into the hardware and firmware architecture for optimal protection.
- Smarter infrastructure management.
  - It offers a next-generation 1-to-many console to manage your IT and server infrastructure.
  - Embedded intelligence that is infrastructure-aware to optimize troubleshooting and deployment.

This document provides an overview of the OpenManage Systems Management offerings to help IT administrators choose the appropriate tools to completely manage Dell PowerEdge servers.

- The latest Dell Systems Management Overview Guide.

Topics:

Integrated Dell Remote Access Controller (iDRAC)

iDRAC10 delivers advanced, agent-free, local and remote server administration. Embedded in every PowerEdge server, iDRAC10 provides a secure means to automate a multitude of common management tasks. Because iDRAC is embedded within every PowerEdge server, there is no additional software to install; plug in power and network cables, and iDRAC is ready to go. Even before installing an operating system (operating system) or hypervisor, IT administrators have a complete set of server management features at their fingertips.

With iDRAC10 in-place across the Dell PowerEdge portfolio, the same IT administration techniques and tools can be applied throughout. This consistent management platform allows scaling of PowerEdge servers as an organization's infrastructure grows. Customers can use the iDRAC RESTful API for the latest in scalable administration methods of PowerEdge servers. With this API, iDRAC enables support for the Redfish standard and enhances it with Dell extensions to optimize at-scale management of PowerEdge servers. By having iDRAC at the core, the entire OpenManage portfolio of Systems Management tools allows every customer to tailor an effective, affordable solution for any size environment.

Zero-Touch Provisioning (ZTP) is embedded in iDRAC. ZTP is an Intelligent Automation Dell's agent-free management. Once a PowerEdge server is connected to power and networking that system can be monitored and fully managed, whether you are standing in front of the server or remotely over a network. With no need for software agents, an IT administrator can:

- Monitor
- Manage
- Update
- Troubleshoot, and remediate Dell servers.

With features like zero-touch deployment and provisioning, and System Lockdown, iDRAC10 is purpose-built to simplify server administration. For those customers whose existing management platform uses in-band management, Dell does provide iDRAC Service Module, a lightweight service that can interact with both iDRAC10 and the host operating system to support legacy management platforms.

When ordered with DHCP enabled from the factory, PowerEdge servers can be automatically configured when they are initially powered up and connected to your network. This process uses profile-based configurations that ensure each server is configured per your specifications. This feature requires an iDRAC Enterprise license.

iDRAC10 offers the following license tiers:

Table 35. iDRAC10 license tiers

License	Description
iDRAC10 Core	• Available for all servers. • Core system management features for users who are cost conscious.
iDRAC10 Enterprise	• Available as an upsell on all servers. • Includes all features of Core. Also, includes additional automation features and virtual console and security features. • Bundled with Secure Enterprise Key Management (SEKM) and Secure Component Verification (SCV) licenses.
iDRAC10 Datacenter *	• Available as an upsell on all servers. • Includes all features of Core and Enterprise. • Includes key features such as telemetry streaming and thermal management. • Includes advanced accelerators (GPU and DPU) system management and advanced air and liquid cooling.

NOTE: * Expected to be available in the first half of 2025. Planned Offerings are subject to change and may not be released as originally designed.

For a full list of iDRAC features by license tier, see the **Integrated Dell Remote Access Controller 10 User's Guide** at Dell.com.

For more details on iDRAC10 including white papers and videos, see:

- Support for Integrated Dell Remote Access Controller 10 (iDRAC10) is on the Knowledge Base page at Dell.com

Systems Management software support matrix

Table 36. Systems Management software support matrix

Categories	Features	PE mainstream
Embedded Management	iDRAC	Supported
	iDRAC Direct	Supported
	iDRAC RESTful API with Redfish	Supported
	Racadm CLI	Supported
	iDRAC Service Module (iSM)	Supported
	NativeEdge Endpoint	Supported
	NativeEdge Orchestrator	Supported
Change Management	Dell Repository Manager	Supported

Table 36. Systems Management software support matrix (continued)

Categories	Features	PE mainstream
	Dell System Update	Supported
	Enterprise Catalogs	Supported
	Server Update Utility (SUU)	Supported
OpenManage console	OpenManage Enterprise (OME)	Supported
	OME Power Manager	Supported
	OME Services	Supported
	OME Update Manager	Supported
	OME APEX AIOps Observability	Supported
	OME Integration for VMware vCenter (with VMware Aria Operations)	Supported
	OME integration for Microsoft System Center	Supported
	OpenManage Integration for Windows Admin Center	Supported
Mobility	OME Mobile with Quick Sync 2 wireless module*	Supported
Tools	IPMI	Supported
OpenManage Integrations	Red Hat Ansible Collections	Supported
	Terraform Providers	Supported
Security	Cryptographically signed firmware	Supported
	Data at Rest Encryption (SEDs with local or external key mgmt)	Supported
	Secure Boot	Supported
	Secured Component Verification (Hardware integrity check)	Supported
	Secure Erase	Supported
	Silicon Root of Trust	Supported
	System Lockdown	Supported
	TPM 2.0 FIPS, CC-TCG certified	Supported
	Chassis Intrusion Detection	Supported
	AMD Secure Memory Encryption (SME)	Supported
	AMD Secure Encrypted Virtualization (SEV)	Supported
Operating system	Canonical Ubuntu Server LTS	Supported
	Microsoft Windows Server with Hyper-V	Supported
	Red Hat Enterprise Linux	Supported
	SUSE Linux Enterprise Server	Supported
	VMware ESXi *	Supported
	Dell NativeEdge OS	Supported

NOTE: * Expected to be available in the first half of 2025. Planned Offerings are subject to change and may not be released as originally designed.

13

Appendix A: Additional specifications

Topics:

Chassis dimensions

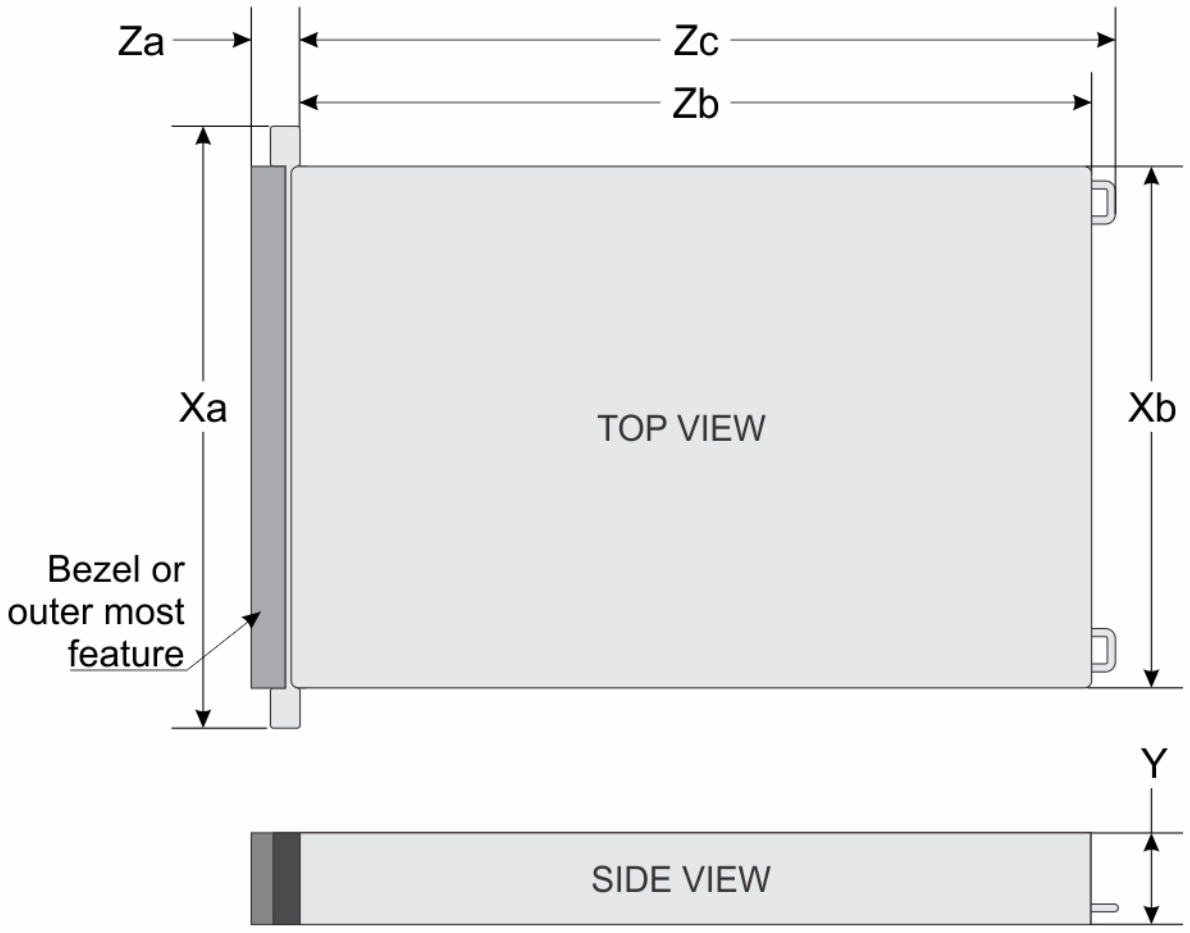

Figure 44. Chassis dimensions

Table 37. PowerEdge R6715 chassis dimensions

Drives	Xa	Xb	Y	Za (with bezel)	Za (without bezel)	Zb	Zc
All drive configurations	482.0 mm (18.97 inches)	434.0 mm (17.08 inches)	42.8 mm (1.68 inches)	31.75 mm (1.25 inches)	28.96 mm (1.14 inches)	750.6 mm (29.55 inches) without bezel	786.14 mm (30.95 inches) with bezel

NOTE: Zb is the nominal rear wall external surface where the HPM board I/O connectors reside.

System weight

Table 38. PowerEdge R6715 system weight

System configuration	Maximum weight (with all drives/SSDs)
4 x 3.5-inch SAS/SATA drives*	RC4 (3 x 16 FH) : 19.54 kg (43.07 pounds) RC5 (2 x 16 LP + 2nd OCP) : 19.41 kg (42.79 pounds)
8 x 2.5-inch Universal SSDs	19.96 kg (44.00 pounds)
8 x U.2 SSDs	20.78 kg (45.81 pounds)
10 x 2.5-inch SAS/SATA drives*	21.19 kg (46.71 pounds)
10 x 2.5-inch with 4 x Universal drives*	21.09 kg (46.49 pounds)
16 x EDSFF E3.S Gen5 NVMe drives	21.09 kg (46.49 pounds)
20 x EDSFF E3.S Gen5 NVMe + rear 2 x EDSFF E3.S Gen5 NVMe drives*	20.25 kg (46.64 pounds)

Table 39. PowerEdge R6715 weight handling recommendations

Chassis weight	Description
40–70 pounds	Recommend two people to lift
70–120 pounds	Recommend three people to lift
≥ 121 pounds	Recommend to use a server-lift

NIC port specifications

The PowerEdge R6715 system supports one 10/100/1000 Mbps BMC Ethernet, up to three PCIe Add-in cards, up to two fibre channel HBA cards, and two optional Open Compute Project (OCP) cards.

Table 40. NIC port specification for the system

Feature	Specifications
Datacenter-Secure Control Module (DC-SCM)	1 Gb Dedicated BMC Ethernet port x1
2 x OCP NIC 3.0 card	200GbE x 2 (configurable to 400GbE x1), 100 GbE x 2, 25 GbE x 2, 25 GbE x 4 , 10 GbE x 4, 10 GbE x 2, 1 GbE x 4
PCIe Add-in Card (AIC) NIC	400 GbE x 1, 100 Gbe x 2
Fibre channel HBA	FC32

NOTE: The system allows either DS-SCM or an OCP NIC card or both to be installed in the system.

NOTE: On the HPM board, the supported OCP NIC PCIe width is x8; when x16 PCIe width is installed, it is downgraded to x8.

NOTE: The system allows either DS-SCM or a MIC card to be installed in the system.

VGA ports specifications

The PowerEdge R6715 system supports DB-15 DB-15 port on the rear I/O board of the Datacenter Secure Control Module (DC-SCM).

USB Ports

Figure 45. Front USB Ports

Figure 46. Rear USB Ports

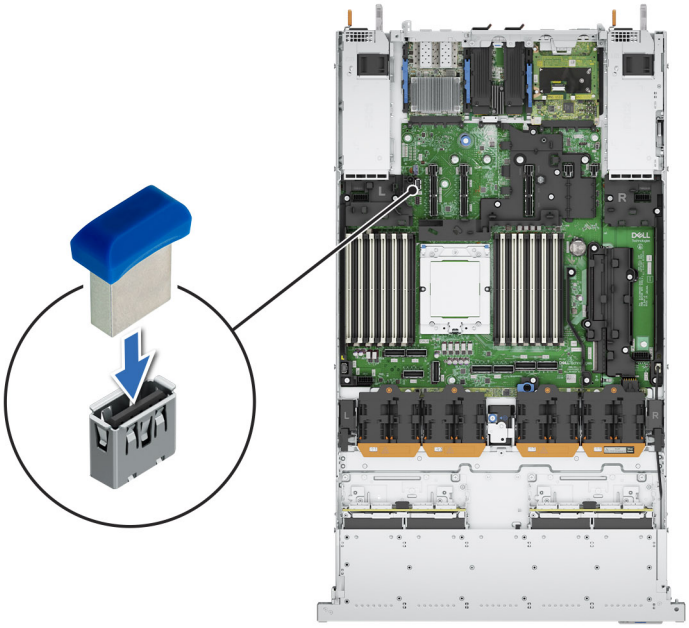

Figure 47. Internal USB Port

Table 41. Systems USB Specifications

Front		Rear		Internal	
USB port type	**No. of ports**	**USB port type**	**No. of ports**	**USB port type**	**No. of ports**
USB 2.0 Type-A (optional LCP KVM)	1	USB 3.1 Type-A	1	USB x.3.0 Type-A	1

Table 41. Systems USB Specifications (continued)

Front		Rear		Internal	
USB port type	**No. of ports**	**USB port type**	**No. of ports**	**USB port type**	**No. of ports**
USB 2.0 Type-C (HOST/iDRAC Direct)	1	USB 3.1 Type-A	1		

PSU rating

Below table lists the power capacity of the PSUs in high/low line operation mode.

Table 42. PSU highline and lowline rating

PSU	Class	Output power while used at					
		AC			HVDC	DC	
		High Line 200-240V	**Low Line 100-120 V**	**277V**	**336V**	**240V**	**-48V**
1800 W Titanium **	Titanium	1800W	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	1800W	N/A
1500 W 277 Vac and HVDC **	Titanium	N/A	N/A	1500 W	N/A	N/A	N/A
	Titanium	N/A	N/A	N/A	1500W	N/A	N/A
1500 W Titanium	Titanium	1500W	1050W	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	1500W	N/A
1400 W -48Vdc *	N/A	N/A	N/A	N/A	N/A	N/A	1400W
1100 W Titanium	Titanium	1100W	1050W	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	1100W	N/A
1100 W Platinum	Platinum	1100W	1050W	N/A	N/A	N/A	N/A
	Platinum	N/A	N/A	N/A	N/A	1100W	N/A
800 W Titanium	Titanium	800W	800W	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	800W	N/A
800 W Platinum	Platinum	800W	800W	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	800W	N/A

NOTE: * : Limited availability in the first half of 2025, then expected to be availale in the second half of 2025.

NOTE: ** : Expected to be available in the second half of 2025.

The PowerEdge R6715 supports up to two AC power supplies with 1+1 redundancy, autosensing, and auto switching capability.

If two PSUs are present during POST, a comparison is made between the wattage capacities of the PSUs. In case the PSU wattages do not match, the larger of the two PSUs is enabled. Also, there is a PSU mismatch warning that is displayed in the BIOS, iDRAC, or on the system LCD.

If a second PSU is added at run-time, in order for that particular PSU to be enabled, the wattage capacity of the first PSU must equal the second PSU. Otherwise, the PSU is identified as unmatched in iDRAC and the second PSU is not enabled.

Dell PSUs have achieved Platinum efficiency levels as shown in the table below.

Table 43. PSU efficiency level

Efficiency Targets by Load						
Form factor	**Output**	**Class**	**10%**	**20%**	**50%**	**100%**
Redundant 60	1800 W Mixed mode**	Titanium	90.00%	94.00%	96.00%	91.00%
Redundant 60 mm	1500 W mixed mode	Titanium	90.00%	94.00%	96.00%	91.00%
Redundant 60 mm	1500 W 277 Vac and HVDC**	Titanium	90.00%	94.00%	96.00%	91.00%
Redundant 60 mm	1400 W -48Vdc*	Telco	85.00%	90.00%	94.00%	92.00%
Redundant 60 mm	1100 W mixed mode	Titanium	90.00%	94.00%	96.00%	91.00%
Redundant 60 mm	1100 W mixed mode	Platinum	90.00%	94.00%	96.00%	91.00%
Redundant 60 mm	800 W mixed mode	Titanium	90.00%	94.00%	96.00%	91.00%
Redundant 60 mm	800 W mixed mode	Platinum	90.00%	94.00%	96.00%	91.00%

NOTE: * : Limited availability in the first half of 2025, then expected to be availale in the second half of 2025.

NOTE: ** : Expected to be available in the second half of 2025.

Environmental specifications

NOTE: For additional information about environmental certifications, refer to the Product Environmental Datasheet located with the **Manuals & Documents** on Dell Support.

Table 44. Operational climatic range for category A2

Item	Allowable continuous operations
Temperature range for altitudes <= 900 m (<= 2953 ft)	10–35°C (50–95°F) with no direct sunlight on the equipment
Humidity percent range (non-condensing at all times)	8% RH with -12°C minimum dew point to 80% RH with 21°C (69.8°F) maximum dew point
Operational altitude de-rating	Maximum temperature is reduced by 1°C/300 m (33.8°F/984 Ft) above 900 m (2953 Ft)

Table 45. Operational climatic range for category A3

Item	Allowable continuous operations
Temperature range for altitudes <= 900 m (<= 2953 ft)	5–40°C (41–104°F) with no direct sunlight on the equipment
Humidity percent range (non-condensing at all times)	8% RH with -12°C minimum dew point to 85% RH with 24°C (75.2°F) maximum dew point
Operational altitude de-rating	Maximum temperature is reduced by 1°C/175 m (33.8°F/574 Ft) above 900 m (2953 Ft)

Table 46. Operational climatic range for category A4

Item	Allowable continuous operations
Temperature range for altitudes <= 900 m (<= 2953 ft)	5–45°C (41–113°F) with no direct sunlight on the equipment
Humidity percent range (non-condensing at all times)	8% RH with -12°C minimum dew point to 90% RH with 24°C (75.2°F) maximum dew point

Table 46. Operational climatic range for category A4 (continued)

Item	Allowable continuous operations
Operational altitude de-rating	Maximum temperature is reduced by 1°C/125 m (33.8°F/410 Ft) above 900 m (2953 Ft)

Table 47. Shared requirements

Item	Allowable continuous operations
Maximum Temperature Gradient (applies to both operation and non-operation)	20°C in an hour* (36°F in an hour) and 5°C in 15 minutes (9°F in 15 minutes), 5°C in an hour* (9°F in an hour) for tape hardware
Non-Operational Temperature Limits	-40 to 65°C (-40 to 149°F)
Non-Operational Humidity Limits (Non-Condensing at all times)	5% to 95%RH with 27°C (80.6°F) maximum dew point.
Maximum Non-Operational Altitude	12,000 meters (39,370 feet)
Maximum Operational Altitude	3,048 meters (10,000 feet)

Table 48. Maximum vibration specifications

Maximum vibration	Specifications
Operating	0.26 G_{rms} at 5 Hz to 350 Hz (all operation orientations)
Storage	1.88 G_{rms} at 10 Hz to 500 Hz for 15 minutes (all six sides tested)

Table 49. Maximum shock pulse specifications

Maximum shock pulse	Specifications
Operating	Six consecutively executed shock pulses in the positive and negative x, y, and z axis of 6 G for up to 11 ms.
Storage	Six consecutively executed shock pulses in the positive and negative x, y, and z axis (one pulse on each side of the system) of 71 G for up to 2 ms.

Thermal restriction matrix

Table 50. Label reference

Label	Description
STD	Standard
HPR (Silver)	High performance Silver (HPR SLVR) fan
HPR (Gold)	High performance Gold (HPR GOLD) fan
HSK	Heat sink
LP	Low profile
FH	Full height
DLC	Direct Liquid Cooling

Table 51. Heat sink thermal restriction matrix

Heat sink	Processor TDP
C-type HSK	Supports all air cooling

Table 52. R6715 thermal restriction Air cooling matrix

Supported at 35°C					**R6715 Air Cooling**		
Configuration					No Backplane	8 x 2.5-inch	16 x EDSFF E3.S NVMe
Rear storage					No rear Drive	No rear Drive	No rear Drive
CPU	CPU	cTDP	Max cTDP	Core Count	C Type HSK STD Fan	C Type HSK STD Fan	C Type HSK HPR Silver Fan
	9015	125	155	8	C Type HSK STD Fan	C Type HSK STD Fan	C Type HSK HPR Silver Fan
	9115	125	155	16	C Type HSK STD Fan	C Type HSK STD Fan	C Type HSK HPR Silver Fan
	9135	200	240	16	C Type HSK STD Fan	C Type HSK STD Fan	C Type HSK HPR Silver Fan
	9255	200	240	24	C Type HSK STD Fan	C Type HSK STD Fan	C Type HSK HPR Silver Fan
	9335	280	300	32	C Type HSK STD Fan	C Type HSK STD Fan	C Type HSK HPR Silver Fan
	9355P	280	300	32	C Type HSK STD Fan	C Type HSK STD Fan	C Type HSK HPR Silver Fan
	9175F	320	400	16	C Type HSK HPR Silver Fan	C Type HSK HPR Silver Fan	C Type HSK HPR Silver Fan
	9275F	320	400	24	Not Supported	Not Supported	Not Supported
	9375F	320	400	32	C Type HSK HPR Silver Fan	C Type HSK HPR Silver Fan	C Type HSK HPR Silver Fan
	9475F	400	400	48	C Type HSK HPR Silver Fan	C Type HSK HPR Silver Fan	C Type HSK HPR Silver Fan
	9555P	360	400	64	C Type HSK	C Type HSK	C Type HSK

Table 52. R6715 thermal restriction Air cooling matrix (continued)

Supported at 35°C					R6715 Air Cooling		
					HPR Silver Fan	HPR Silver Fan	HPR Silver Fan
	9575F	400	400	64	C Type HSK HPR Silver Fan	C Type HSK HPR Silver Fan	C Type HSK HPR Silver Fan
	9655P	320	400	96	C Type HSK HPR Silver Fan	C Type HSK HPR Silver Fan	C Type HSK HPR Silver Fan
	9745	400	400	128	C Type HSK HPR Silver Fan	C Type HSK HPR Silver Fan	C Type HSK HPR Silver Fan
	9825	390	400	144	C Type HSK HPR Silver Fan	C Type HSK HPR Silver Fan	C Type HSK HPR Silver Fan
	9845	390	400	160	C Type HSK HPR Silver Fan	C Type HSK HPR Silver Fan	C Type HSK HPR Silver Fan
Memory	16 GB RDIMM				STD Fan	STD Fan	HPR Sliver Fan
	32 GB RDIMM				STD Fan	STD Fan	HPR Sliver Fan
	64 GB RDIMM				STD Fan	STD Fan	HPR Sliver Fan
	96 GB RDIMM				HPR Sliver Fan	HPR Sliver Fan	HPR Sliver Fan
	128 GB RDIMM				HPR Sliver Fan	HPR Sliver Fan	HPR Sliver Fan

NOTE: The AMD 400w 24c 9275F can't be supported by air cooling based on current test result.

NOTE: The configuration's ambient temperature is dictated by its critical component. For example, if the processor's ambient temperature is 35°C, the DIMM is 35°C, and the GPU is 30°C, the configuration's ambient temperature can only be 30°C.

R6715 thermal restriction Liquid cooling matrix

No thermal restriction requirement for all CPUs with liquid cooling supported config.

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Appendix B. Standards compliance

The system conforms to the following industry standards.

Table 53. Industry standard documents

Standard	URL for information and specifications
ACPIAdvance Configuration and Power Interface Specification, v6.4	ACPI
Ethernet IEEE Std 802.3-2022	IEEE Standards
MSFT WHQL Microsoft Windows Hardware Quality Labs	Windows Hardware Compatibility Program
IPMI Intelligent Platform Management Interface, v2.0	IPMI
DDR5 Memory DDR5 SDRAM Specification	DDR5 SDRAM
PCI Express PCI Express Base Specification, v5.0	PCIe specifications
PMBus Power System Management Protocol Specification, v1.2	PMBus specifications
SAS Serial Attached SCSI, 3 (SAS-3) (T10/INCITS 519)	SCSI storage interfaces
SATA Serial ATA Rev. 3.3	SATA IO
SMBIOS System Management BIOS Reference Specification, v3.3.0	DMTF SMBIOS
TPM Trusted Platform Module Specification, v2.0	TPM specifications
UEFI Unified Extensible Firmware Interface Specification, v2.7	UEFI specifications
PI Platform Initialization Specification, v1.7	
USB Universal Serial Bus v2.0 and SuperSpeed v3.0 (USB 3.1 Gen1)	USB document library
NVMe Express Base Specification. Revision 2.0c	NVMe specifications
NVMe Command Set Specifications 1. NVM Express NVM Command Set Specification. Revision 1.1c 2. NVM Express Zoned Namespaces Command Set. Revision 1.0c 3. NVM Express® Key Value Command Set. Revision 1.0c	
NVMe Transport Specifications 1. NVM Express over PCIe Transport. Revision 1.0c 2. NVM Express RDMA Transport Revision. 1.0b 3. NVM Express TCP Transport. Revision 1.0c	
NVMe NVM Express Management Interface. Revision 1.2c	
NVMe NVMe Boot Specification. Revision 1.0	

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Appendix C: Additional resources

Table 54. Additional resources

Resource	Description of contents	Location
Installation and Service Manual	This manual, available in PDF format, provides the following information: • Chassis features • System Setup program • System indicator codes • System BIOS • Remove and replace procedures • Diagnostics • Jumpers and connectors	Dell.com/Support/Manuals
Getting Started Guide	This guide ships with the system, and is also available in PDF format. This guide provides the following information: • Initial setup steps	Dell.com/Support/Manuals
Rack Installation Guide	This document ships with the rack kits, and provides instructions for installing a server in a rack.	Dell.com/Support/Manuals
System Information Label	The system information label documents the HPM board layout and system jumper settings. Text is minimized due to space limitations and translation considerations. The label size is standardized across platforms.	Inside the system chassis cover
MyDell label	This code on the chassis can be scanned by a phone application to access additional information and resources for the server, including videos, reference materials, service tag information, and Dell contact information.	Inside the system chassis cover
Enterprise Infrastructure Planning Tool (EIPT)	The Dell online EIPT enables easier and more meaningful estimates to help you determine the most efficient configuration possible. Use EIPT to calculate the power consumption of your hardware, power infrastructure, and storage.	Dell.com/calc

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Appendix D: Services

Topics:

Why attach service contracts

Dell PowerEdge servers include a standard hardware warranty that highlights our commitment to product quality by guaranteeing repair or replacement of defective components. While industry-leading, our warranties are limited to 1 or 3 years, depending on model, and do not cover software assistance. Call records show that customers are most often seeking Dell technical support for software related issues like configuration guidance, troubleshooting, upgrade assistance or performance tuning. Encourage customers to purchase ProSupport service contracts to supplement warranty coverage and ensure optimal support for both hardware and software. ProSupport provides a complete hardware guarantee beyond the original warranty period.

ProSupport Infrastructure Suite

ProSupport Infrastructure Suite is a set of support services that enable customers to build the solution that is right for their organization. It is an industry-leading, enterprise-class support that aligns with the criticality of your systems, the complexity of your environment, and the allocation of your IT resources.

Figure 48. ProSupport Enterprise Suite

	Basic Hardware Support	ProSupport	BEST ProSupport Plus
Customer Advocacy *via assigned Services Account Manager* ⓘ			
Benefit from personalized services assistance that aligns with your business goals.			✓
Stay ahead of challenges with actionable insights gained through comprehensive service intelligence.			✓
Experience fast critical issue resolution through coordinated team response and executive escalation paths.			✓
Ensure **coverage continuity** by planning effectively for technology lifecycle transitions.			✓
Proactive Monitoring & Actionable Insights *via Dell's connectivity solutions and tools*			
Quickly visualize performance through a current system health score		✓	✓
Cybersecurity monitoring and mitigation recommendations provide another layer of protection		✓	✓
Predictive performance and capacity analysis address bottlenecks		✓	✓
Prevent or plan for downtime with predictive hardware anomaly detection		✓	✓
Energy consumption and carbon footprint forecasting support sustainability and stewardship initiatives		✓	✓
Get ahead of problems with proactive issue detection with automated case creation	✓	✓	✓
Streamline internal IT efforts with efficient service request and escalation management tools	✓	✓	✓
Minimize disruptions by self-dispatching eligible parts	✓	✓	✓
Support Essentials			
Keep systems code current and performing at peak through Proactive System Maintenance			✓
Count on Mission Critical Support during Sev 1 incidents and natural disasters ⓘ			✓
Enjoy priority access to senior technical support engineers			✓
Bringing your own software? We provide limited 3rd party software support ⓘ			✓
Choose onsite parts delivery and labor response that meets your needs	Next Business Day	NBD or 4-hour	4-hour
Select product coverage that best augments your internal resources	Hardware	Hardware & Software	Hardware & Software
Have an issue? We are here for you by phone, chat and online	Local business hours	24/7/365	24/7/365

ProSupport Plus for Infrastructure

ProSupport Plus for Infrastructure is the ultimate solution for customers seeking preventative maintenance and optimal performance on their business-critical assets. The service caters to customers who require proactive, predictive, and personalized support for systems that manage critical business applications and workloads. When customers purchase PowerEdge server, we recommend ProSupport Plus, our proactive and preventative support service for business-critical systems. ProSupport Plus provides all the benefits of ProSupport, including the following "Top five reasons to buy ProSupport Plus (PSP)"

1. **Priority access to specialized support experts:** Immediate advanced troubleshooting from an engineer that understands Dell infrastructure solutions.
2. **Mission Critical Support:** When critical (Severity 1) support issues happen, the customer is assured that we do all that we can to get them back up and running as quickly as possible.
3. **Service Account Manager:** A customer's #1 support advocate, ensuring they get the best possible proactive and predictive support experience.
4. **Systems maintenance:** On a semiannual basis, we will keep a customer's ProSupport Plus system(s) up to date by installing the latest firmware, BIOS, and driver updates to improve performance and availability.
5. **Third-party software support:** Dell is a customer's single point of accountability for any eligible third-party software that is installed on their ProSupport Plus system, whether they purchased the software from us or not.

ProSupport for Infrastructure

Comprehensive 24x7 support for hardware and software – best for production, but not critical, workloads and applications. The ProSupport service offers highly trained experts around the clock and around the globe to address IT needs. We help minimize disruptions and maximize availability of PowerEdge server workloads with:

- 24x7 support through phone, chat and online
- A central point of accountability for all hardware and software issues
- Hypervisor, operating system, and application support
- Dell security advisories
- Onsite response service levels 4 hour or Next Business Day options

- Proactive issue detection with automated case creation
- Predictive hardware anomaly detection
- Incident Manager assigned for Severity 1 cases
- Collaborative third-party support
- Access to AIOps Platforms - (MyService360, TechDirect, and CloudIQ)
- Consistent experience regardless of where customers are located or what language that they speak.

Basic Hardware Support

Provides reactive hardware support during normal business hours, excluding local national holidays. No software support or software-related guidance. For improved levels of support, choose ProSupport or ProSupport Plus.

Specialty Support Services

Optional specialty support services complement the ProSupport Infrastructure Suite to provide additional proficiencies that are critical for modern data center operations.

Hardware coverage add-ons to ProSupport

- **Keep Your Hard Drive (KYHD), Keep Your Component (KYC), or Keep Your GPU (KYGPU):**

  Normally if a device fails under warranty, Dell replaces it using a one-for-one exchange process.KYHD/KYCC/KYGPU gives you the option to retain your device. It provides full control of sensitive data and minimizes security risk by letting you retain possession of failed drives, components, or GPU when receiving replacement parts without incurring additional cost.
- **Onsite Diagnosis Service:**

  Ideal for sites with non-technical staff. Dell field technician performs initial troubleshooting diagnosis onsite and transfers to Dell remote engineers to resolve the issue.
- **ProSupport Add-on for HPC:**

  Sold as an add-on to a ProSupport service contract, the ProSupport Add-on for HPC provides solution-aware support to cover the additional requirements that are required to maintain an HPC environment such as:

  - Access to senior HPC experts
  - Advanced HPC cluster assistance: Performance, interoperability, and configuration
  - Enhanced HPC solution level end-to-end support
  - Remote pre-support engagement with HPC Specialists during ProDeploy implementation
- **ProSupport Add-on for Telco (Respond & Restore):**

  An add-on service designed for the top 31 TELCO customers globally, Respond & Restore provides direct access to Dell solution experts who specialize in TELCO carrier-grade support. This add-on also provides a hardware uptime guarantee, meaning if a system fails, Dell has it installed and operational within 4 hours for Severity 1 issues. Dell incurs penalties and fees if SLAs are not met.

Personalized Support and Supplemental Site-wide Expertise

- **Technical Account Manager:**

  Designated technology lead who monitors and manages the performance and configuration of specific technology sets.
- **Designated Remote Support:**

  Personalized support expert who manages all troubleshooting and resolution of IT assets.
- **Multivendor Support Service:**

  Support your third-party devices as one service plan for servers, storage, and networking (includes coverage for: Broadcom, Cisco, Fujitsu, HPE, Hitachi, Huawei, IBM, Lenovo, NetApp, Oracle, Quanta, SuperMicro and others).

Services for large enterprises

- **ProSupport One for Data Center:**

  ProSupport One for Data Center offers flexible site-wide support for large and distributed data centers with more than 1,000 assets (combined total of server, storage, networking, so forth). This offering is built on standard ProSupport features that leverage our global scale and are tailored to specific customer needs. While not for everyone, this service option offers a truly unique solution for our largest customers with the most complex environments.

  - Team of assigned Services Account Managers with remote or onsite options
  - Assigned technical and field engineers who are trained on the customer's environment and configurations.
  - On-demand reporting and recommendations that are enabled by ProSupport AIOps tools (MyService360, TechDirect, and CloudIQ)
  - Flexible onsite support and parts options that fit their operational model
  - A tailored support plan and training for their operations staff
- **ProSupport One for CSPs (Cloud Serviced Providers)**

  ProSupport One for CSPs is a unique offer that is designed for a limited set of Dell accounts purchasing Gen AI computing solutions greater than 1,000 servers and $250M in sales. PS1 for CSPs improves the entire services experience combining support, deployment (rack integration), residency services, a designated support engineer and the LOIS parts locker as one holistic bundle. Special pricing has been determined to compete effectively against competitors and provide the best customer experience. PS1 for CSPs can only be sold with XE Servers and all networking platforms (Dell and NVIDIA). All other products would be eligible for the standard PS1DC not this special bundle offer. More details on PS1 for CSPs here.
- **Logistics Online Inventory Solution (LOIS)**

  Ideal for large organizations that have their own staff to support their data center. Dell offers a service that is called Logistics Online Inventory Solution which is an onsite parts locker that provides self-maintainers with a local inventory of common replacement components. Having access to these parts lockers allows the self-maintainer to replace a failed component immediately without delay. Each replacement part would automatically initiate a replenishment of the parts inventory that is shipped the next day or delivered onsite by Dell during a regular scheduled visit (called Scheduled Onsite Service). As part of the LOIS system, customers can integrate their systems directly to Dell TechDirect using APIs to help streamline the support management process.

End-of-Life Services

- **Post Standard Support (PSS)**

  Extend service life beyond the initial seven years of ProSupport, adding up to five more additional years of hardware coverage.
- **Data Sanitization & Data Destruction**

  Renders data unrecoverable on repurposed or retired products, ensuring security of sensitive data and enabling compliance and provides NIST-compliant certification.
- **Asset Recovery Services**

  Recycle, resale, and disposal of hardware. Helps you securely and responsibly retire IT assets that are no longer needed while protecting both your business and the planet.

ProDeploy Infrastructure Suite

ProDeploy Infrastructure Suite provides various deployment offerings that satisfy a customer's unique needs. It is made up of various sub-offers: Factory Configuration Services, Rack Integration, Basic Deployment, ProDeploy, ProDeploy Plus, and optionally ProDeploy FLEX which allows for some customization of the features listed.

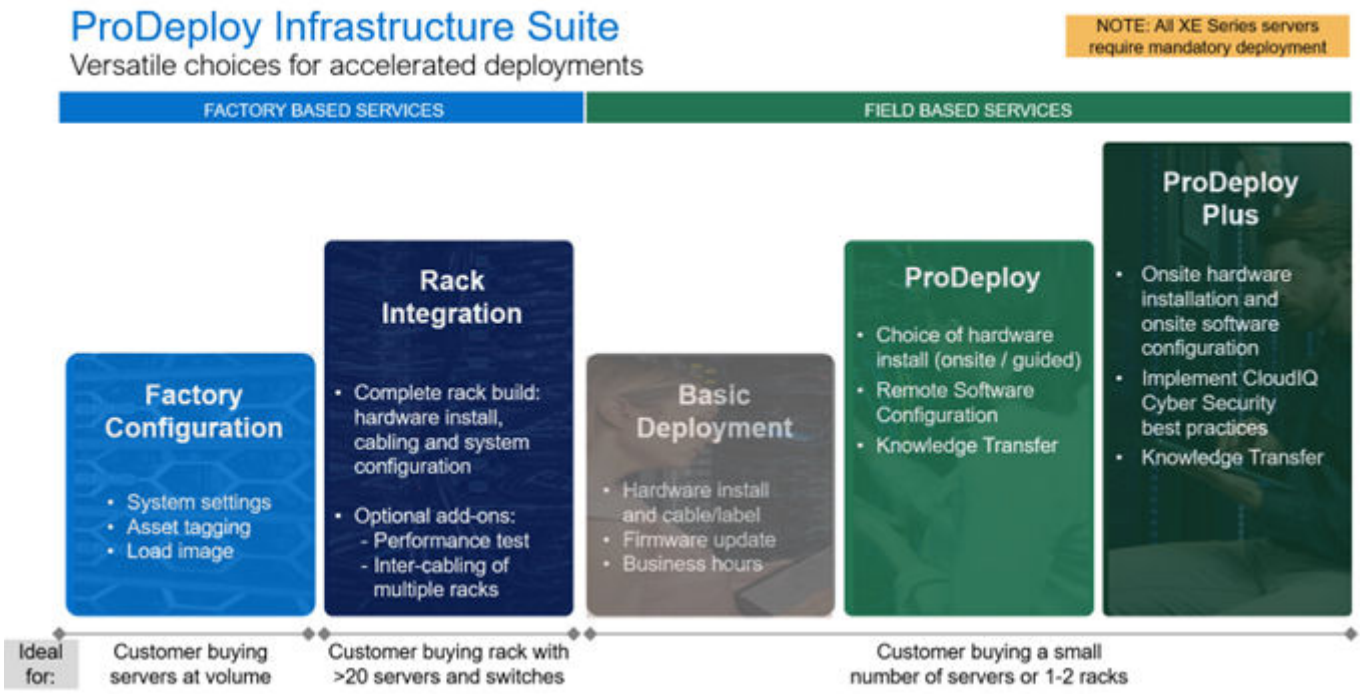

Figure 49. ProDeploy Infrastructure Suite

Factory-based Services

Pre-configured systems or complete racks, customized prior to shipping to the customer's site.

Rack Integration or ProDeploy FLEX Rack Integration

Ideal for customers buying servers in volume and seeking pre-configuration prior to shipping such as: custom image, system settings, and asset tagging so it arrives ready to use out of the box. Furthermore, servers are packaged and bundled to meet specific shipping and distribution requirements for each customer location to facilitate the rollout process. Once the server is onsite, Dell can install and configure the server to the environment using any of the field-based deployment services outlined in the next section.

- STANDARD SKUs for Rack Integration is available in then USA only and requires:
  - 20 or more devices (XE, R and C series servers, VxRail and all Dell or non-Dell switches).
  - Shipping to contiguous USA.
- USE CUSTOM QUOTE for Rack Integration scenarios that require:
  - Any Direct Liquid Cooling (DLC) implementation
  - Shipping to multiple locations or shipment to any country outside USA or shipping outside contiguous USA
  - Air-cooled racks containing less than 20 servers
  - Any rack that includes Storage

Factory Configuration

Ideal for customers buying servers in volume and seeking pre-configuration prior to shipping such as: custom image, system settings, and asset tagging so it arrives ready to use out of the box. Furthermore, servers are packaged and bundled to meet specific shipping and distribution requirements for each customer location to facilitate the rollout process. Once the server is onsite, Dell can install and configure the server to the environment using any of the field-based deployment services outlined in the next section.

ProDeploy Flex | Modular deployment (built in factory, onsite or remote)

Pre -deployment	Single point of contact for project management	●
	Expanded end-to-end project management	Selectable
	Site readiness review and implementation planning	●
Deployment	Deployment service hours	24/7
	Hardware installation options [1]	Onsite, factory[2,5] or remote[3]
	System software installation and configuration options [1]	Onsite, factory[2,5] or remote[3]
	Multivendor networking deployment [4]	Onsite, factory[2,5] or remote[3]
	Onsite Deployment in remote locations	Selectable
	Onsite Deployment in challenging environments	Selectable
	Onsite Deployment with special site-based protocols or requirements	Selectable
	Install connectivity software based on Secure Connect Gateway technology	●
	Dell NativeEdge Orchestrator deployment	Selectable
	Configure 3rd party software applications and workloads [4]	Selectable
Post -deployment	Deployment verification, documentation, and knowledge transfer	●
	Configuration data transfer to Dell support	●
Online collaboration	Online collaborative environment - Planning, managing and tracking delivery process	●

[1] Hardware and Software delivery methods can be independently chosen; selecting Rack integration for software requires hardware Rack integration to also be selected.
[2] Factory Rack Integration for server and VxRail; includes associated Dell network switches; final onsite rack installation available.
[3] Remote hardware option includes project specific instructions, documentation and live expert guidance for hardware installation.
[4] Select 3rd party multivendor networking and software applications.
[5] Pair with Field Onsite Hardware service for final installation.

Figure 50. ProDeploy Flex modular services

Field-based services

Put PowerEdge servers to work faster with Dell field-based deployment services. Whether we are deploying one server to one thousand – we have you covered. Dell provides versatile delivery options to fit every budget and operating model.

- **ProDeploy Plus:** Elevate Infrastructure deployments with our most complete service from planning through onsite hardware installation and software configuration including the implementation of cybersecurity best practices. ProDeploy Plus provides the skill and scale that is needed to successfully execute demanding deployments in today's complex IT environments. The deployment starts with a site readiness review and implementation plan. Certified deployment experts perform the software configuration to include setup of leading operating systems and hypervisors. Dell will also configure PowerEdge software tools to include iDRAC and OpenManage system utilities as well as support AIOps platforms: MyService360, TechDirect, and CloudIQ. Unique to ProDeploy Plus, the cybersecurity implementation helps customers understand potential security risks and make recommendations for reducing product attack surfaces. The system is tested, validated prior to completion. The customer will also receive full project documentation and knowledge transfer to complete the process.
- **ProDeploy:** ProDeploy provides remote software configuration and choice of hardware installation (onsite or guided). ProDeploy is great for customers who are price sensitive or willing to participate in some portion of the deployment to include providing remote access to their network. The ProDeploy remote software includes everything mentioned in ProDeploy Plus except it does not include the added value, cybersecurity implementation, and implementatiod best practices.
- **Basic Deployment:** Basic Deployment delivers worry-free professional installation by experienced technicians. This service is often sold to Competency Enabled Partners who will have Dell do the hardware installation while they complete the software configuration. Furthermore, Basic Deployment tends to be purchased by large enterprises who have smart technical staff. These companies just need Dell to install the hardware, and they will perform the software configuration. The last use case for Basic Deployment is when paired with Factory Configuration services. The servers are preconfigured in the factory, and the basic deployment service will install the system into the rack to finalize the deployment.

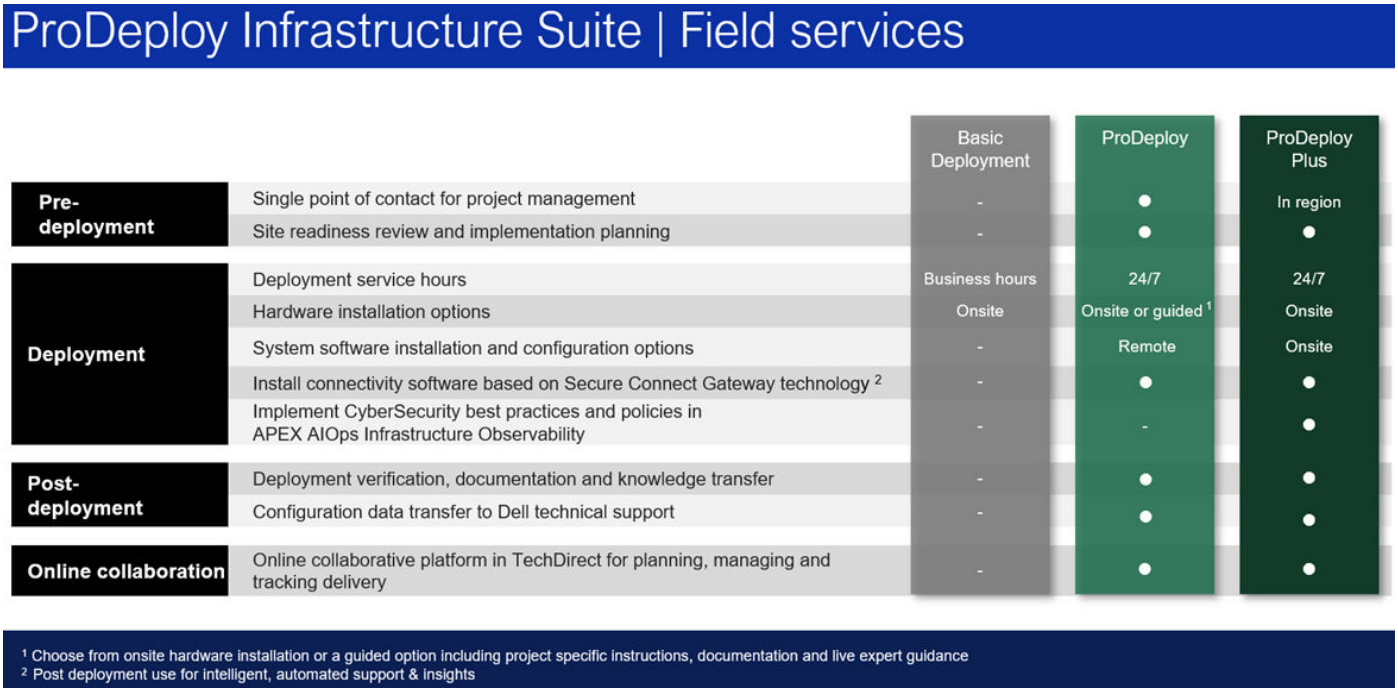

Figure 51. ProDeploy Infrastructure Suite - Field services

Supplemental Deployment Services

Additional ways to expand scope or deploy for unique scenarios.

Two Host Adder (requires PD/PDP)

Deploying new storage, compute, or networking devices may require interconnection to other servers (also called hosts). The Dell delivery team will set up four hosts per device as part of every ProDeploy service. For example, if the customer is buying two storage arrays the ProDeploy service will automatically include connectivity of four hosts each (4x2=8 total hosts per project since there are two devices). This supplemental "Two Host Adder" service provides for the configuration of additional hosts above what is already provided as part of the ProDeploy service. In many cases, customers can work with us while we set up the included hosts, so they may understand how to do the rest themselves. Always ask the customer how many hosts are being connected and sell the host adder depending on the customer's technology skillset. Note that this service applies to the connectivity of Dell devices not 3rd party devices.

Additional Deployment Services (ADT) – sold with or without PD/PDP

You can expand the scope of a ProDeploy engagement leveraging Additional Deployment Time (ADT). ADT covers additional tasks above the normal deliverables of the ProDeploy offers. ADT can also be used as a standalone service without ProDeploy. SKUs are available for both Project Management and Technical Resource Expertise. SKUs are sold as blocks of four hours remote or eight hours onsite. The delivery team can help in scoping the number of hours required for additional tasks.

Data Migration Services

Migrating data sets is no easy task. Our experts use proven tools and process to streamline data migrations and avoid compromising data. A customer project manager works with our experienced team of experts to create a migration plan. Data migration is part of every technology upgrade, platform change, and shift to the cloud. You can rely on Dell data migration services to perform a seamless transition.

Residency Services

Certified technical professionals act like an extension of your IT staff to enhance internal capabilities and resources and help you realize faster adoption and maximized ROI of new technology. Residency Services help customers transition to new capabilities quickly by leveraging specific technology skill sets. Residency experts can provide post implementation management and knowledge transfer that is related to a new technology acquisition or day-to-day operational management of the IT infrastructure.

- Global experts available to serve in-person (onsite) or virtual (remote)
- Engagements starting at 2 weeks with flexibility to adjust
- Residency is available for project management needs, and many different technology skills sets such as: Server, storage, Gen AI, networking, security, multi-cloud, data mgmt., and modern workforce application residents

Unique Deployment Scenarios

Custom Deployment Services

When a deployment is beyond the scope of the ProDeploy Infrastructure Suite, you can turn to the custom deployment services team to address complex implementation scenarios and customer unique requirements. The Dell custom deployment team is staffed with solution architects who will assist with customer scoping calls to define the project and develop the statement of work. Custom services can handle a wide range of deployments that can be performed in the factory or onsite. All custom engagement services are requested through SFDC.

Deployment of AI or HPC

Dell provides a number of deploy options for Artificial Intelligence (AI) or High-Performance Computing (HPC) implementations. These complex environments require specialists that understand advanced feature sets. Dell deploys and understands the complexities to optimize the environment. AI and HPC deployments are always scoped as custom service engagements.

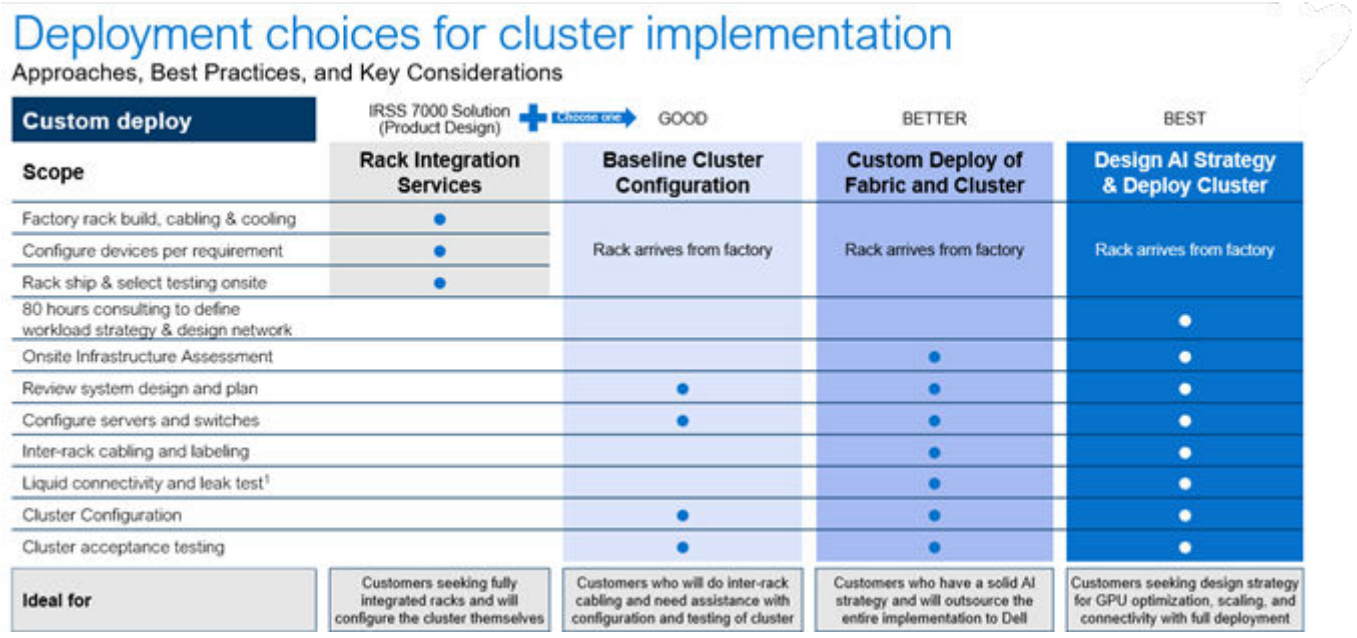

Figure 52. Deployment choices for cluster implementation

DAY 2 – Automation Services with Ansible

Dell solutions are built as “automation ready” with integrated APIs (Application Programming Interfaces) to allow customers to programmatically call actions on the product through code. Although Dell has published Anisble automation use cases,

some customers need additional assistance with GitOps. By the end of the service, the customer will have the foundational components required to accelerate automation and understand how the programming works together: Day 1 and Day 2 use case automation scripts (ansible modules), CI/CD tool (Jenkins), and Version control (Git).

Dell Technologies Consulting Services

Our expert consultants help customers transform faster, and quickly achieve business outcomes for the high-value workloads Dell PowerEdge systems can handle. From strategy to full-scale implementation, Dell Technologies Consulting can help you determine how to perform IT, workforce, or application transformation. We use prescriptive approaches and proven methodologies that are combined with the portfolio and partner ecosystem of Dell Technologies to help achieve real business outcomes. From multicloud, applications, DevOps, and infrastructure transformations, to business resiliency, data center modernization, analytics, workforce collaboration, and user experiences-we are here to help.

Dell Managed Services

Some customers prefer Dell to manage the complexity and risk of daily IT operations, Dell-Managed Services uses proactive, AI enabled delivery operations and modern automation to help customers realize desired business outcomes from their infrastructure investments. With these technologies, our experts run, update, and fine-tune customer environments that are aligned with service levels, while providing environment-wide and down-to-the-device visibility. There are two types of managed service offers. First the outsourcing model or CAPEX model where Dell manages the customer-owned assets using our people and tools. The second is the as-a-Service model or OPEX model called APEX. In this service, Dell owns all technology and all the management of it. Many customers will have a blend of the two management types depending on the goals of the organization.

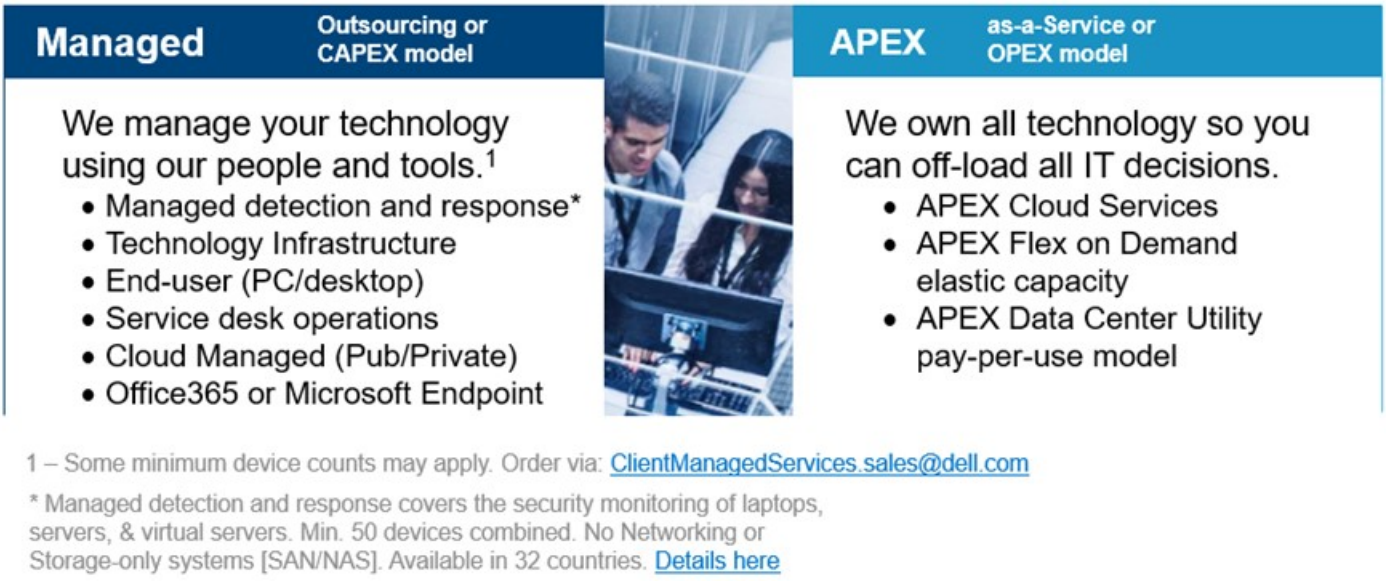

Figure 53. Dell Managed Services

Managed Detection and Response (MDR)

Dell Technologies Managed Detection and Response (MDR) is powered by Secureworks Taegis XDR software platform. MDR is a managed service that secures the customer's IT environment against malicious actors and provides remediation if and when a threat is identified. When a customer purchases MDR, they receive the following features from our team:

- Dell badge resources
- Agent rollout assistance to help deploy the Secureworks Endpoint Agent
- 24x7 threat detection & investigation
- Up to 40 hrs per quarter of response and active remediation activities
- If the customer experiences a breach, we will provide up to 40 hrs per year of Cyber incident response initiation
- Quarterly reviews with the customer to review the data

Dell Technologies Education Services

Build the IT skills required to influence the transformational outcomes of the business. Enable talent and empower teams with the right skills to lead and perform transformational strategy that drives competitive advantage. Leverage the training and certification that is required for real transformation.

Dell Technologies Education Services offers PowerEdge server training and certifications that are designed to help customers achieve more from their hardware investment. The curriculum delivers the information and the practical, firsthand skills that their team must confidently install, configure, manage, and troubleshoot Dell servers.

To learn more or register for a class today, see Education.Dell.com.

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Resources

Service for powerEdge