

Dell EMC PowerEdge M640 and M630 server comparison matrix

The PowerEdge M640 system has the following features compared with the M630 system.

Feature	PowerEdge M640	PowerEdge M630
Processor	Up to two Intel® 2nd Generation Xeon® Scalable processors with up to 28 cores per processor	Intel® Xeon® processor E5-2600 v4 product family with up to 22 cores
Chipset	Intel® C620 chipset	Intel® C610 chipset
Memory		
DIMM Speed	Up to 2933MT/s	Up to 2400MT/s
Memory Type	RDIMM	RDIMM
	LRDIMM	LRDIMM
Memory Module Slots	16 DDR4 DIMM slots	24 DDR4 DIMM slots
Maximum RAM	RDIMM 1TB	RDIMM 768GB
	LRDIMM 2TB	LRDIMM 1.5TB
Storage		
Front Bays	Up to 2 x 2.5" SAS/SATA (HDD/SSD), max 12.8TB	Up to 4 x 1.8" SAS/SATA (HDD), max 6GB
		2 x 2.5" PCIe SSD, max 12GB
Storage Controllers		
Internal Controllers	H330	H330
	H730P	H730
	H740P	H730P
External Controllers	H840	NA
Software RAID	S140	S130
Internal Boot	Boot Optimized Storage Subsystem (BOSS): HW RAID 2 x M.2 SSDs 240GB or 480GB	NA
	Internal USB	Internal USB
	Internal Dual SD Module* NOTE: *ESXi (only OS supported)	Internal Dual SD Module* NOTE: *ESXi (only OS supported)
Operating Systems	Canonical® Ubuntu® LTS	Citrix® Hypervisor®
	Citrix® Hypervisor®	Microsoft Windows Server® 2016
	Microsoft® Windows Server® LTSC with Hyper-V	Novell SUSE® Linux Enterprise Server
	Red Hat® Enterprise Linux	Red Hat® Enterprise Linux
	SUSE® Linux Enterprise Server	VMware vSphere® ESXi™

Feature	PowerEdge M640	PowerEdge M630	
	VMware vSphere® ESXi™		
Security	Cryptographically signed firmware	Cryptographically signed firmware	
	Secure Boot	Secure Erase	
	Secure Erase	System Lockdown (requires iDRAC)	
	System Lockdown (requires OpenManage Enterprise)		
Management			
Embedded/At-the-Server	iDRAC9	iDRAC8 with Lifecycle Controller	
	iDRAC Direct	iDRAC8 Express	
	iDRAC RESTful API with Redfish	iDRAC8 Enterprise	
	Chassis Management Controller (CMC)		
Consoles	OpenManage Enterprise	OpenManage Enterprise	
	OpenManage Enterprise Power Manager	OpenManage Enterprise Power Manager	
Mobility	OpenManage Mobile	OpenManage Mobile	
Tools	Dell EMC Repository Manager	Dell EMC Repository Manager	
	Dell EMC System Update	Dell EMC System Update	
	Dell EMC Server Update Utility	Dell EMC Server Update Utility	
	Dell EMC Update Catalogs	Dell EMC Update Catalogs	
	iDRAC Service Module	iDRAC Service Module	
	OpenManage Server Administrator	OpenManage Server Administrator	
OpenManage Integrations	BMC® Truesight	Dell OpenManage Integration Suite for Microsoft® System Center	
	Microsoft® System Center	Dell OpenManage Integration for VMware® vCenter®	
	VMware® vCenter		
OpenManage Connections	Micro Focus® Operations Manager I	HP Operations Manager	
	Nagios® Core	IBM Tivoli® Netcool®	
	Nagios® XI		CA Network and Systems Management
			Dell OpenManage Plug-in for Oracle® Database Manager
Power Supply	2700W Platinum	2700W Platinum	
	3000W Titanium	3000W Titanium	
	Up to 9 fans with full redundancy	Up to 9 fans with full redundancy	
Ports			
Network Options	2 x 10GbE	2 x 10GbE	
	4 x 1GbE	4 x 1GbE	
	4 x 10GbE	4 x 10GbE	
Front Ports	1 x USB 2.0	1 x USB 2.0	
	1 x USB 3.0	1 x USB 3.0	
	1 x Power button		

Feature	PowerEdge M640	PowerEdge M630
	1 x System ID / Status LED	
Rear Ports	1 x Dedicated iDRAC network	1 x Dedicated iDRAC network
	1 x Serial	1 x Serial
	1 x VGA	1 x VGA
Internal Ports	1 x USB 3.0	1 x USB 3.0
Slots		
PCIe	3 x Gen3 slots (3 x8)	2 x Gen3 slots (2 x8)
	2 x Gen3 slots (2 x4)	
Video Card	1 x VGA	1 x VGA
Bezel	Attached to chassis	Attached to chassis
Form Factor	Half-height blade server supported on the PowerEdge M1000e enclosure.	Half-height blade server supported on the PowerEdge M1000e and PowerEdge VRTX enclosure.
Dimensions and Weight		
Height	198mm (7.79")	197.9mm (7.8")
Width	50mm (1.98")	50.35mm (2")
Depth	565mm (22.24")	544.32mm (21.4")
Weight	6.4kg (14.11lb)	6.4kg (14.11lb)

© 2019 Dell Inc. or its subsidiaries. All rights reserved.