DELL Technologies

Specification Sheet

Dell Cloud Platform for Microsoft Azure

Dell Cloud Platform for Microsoft Azure empowers organizations to unlock innovation with a consistent Azure experience across their IT environments. Through extensive integrations and numerous automations, the Dell Cloud Platform allows IT organizations to simplify app modernization and accelerate DevOps.

It was the pioneering offer for Premier Solutions, a category in the Azure Local catalog reserved for key partners with the greatest levels of engagement with Microsoft and deepest integrations into familiar Microsoft management tools.

The platform enhances Azure operations by providing consistent management and operations with centralized Azure tools, while mitigating security and compliance risks with an intrinsic approach to security that extends Azure governance across all deployment environments.

Collaboratively engineered by Dell and Microsoft to optimize Azure hybrid cloud

Key Features of the Dell Cloud Platform for Microsoft Azure

- Intelligently designed MC nodes from Dell offer:
  - Initial deployment automation, full-stack lifecycle management, and ongoing infrastructure operations through the Cloud Platform Foundation Software
  - Flexible configurations for varying application performance, capacity, or location needs – including ruggedized MC-4000
  - Azure Local instance scalability from 1 to 16 machines
  - Single-machine Azure Local instances for remote, edge or branch projects that can tolerate the resiliency of a single machine.

> "Microsoft and Dell are simplifying hybrid cloud management with an integrated solution that gives customers consistent operations across the Azure public cloud and their on-premises and edge environments. Dell Cloud Platform for Microsoft Azure provides native integration of Dell's differentiated infrastructure platforms and management software with Azure Arc and Arc-enabled services like Azure Local and AKS for a unified experience from cloud to edge."
>
> Bernardo Caldas
> Microsoft - Corporate Vice President, Azure Edge PM

- First offer in the Premier Solutions category to support linear scaling of storage resources independently from Azure Local compute and S2D with Dell PowerFlex software-defined storage.
- The Cloud Platform Foundation Software integrates with Microsoft Windows Admin Center and the Azure portal, leveraging familiar tools that provide a simple, consistent, centralized mechanism for operating on-premises, edge and public Azure deployments.
- Azure management and governance services enable fleet management at scale of many Dell Cloud Platform for Microsoft Azure deployments across distributed locations.
- Azure Arc-enabled services empower IT to simplify application modernization and innovate faster.
- Dell ProDeploy and Dell ProSupport services deliver professional onsite deployment and one contact technical support.

MC-760

Storage Configuration	All Flash		Hybrid	
	All Flash (All-SSD)	All Flash (All-NVMe)	Hybrid (SSD + HDD)	Hybrid (NVMe + HDD)
Chassis Configurations	24 drives: 24 x 2.5” front or 28 drives: 24 x 2.5” front bay + 4 x 2.5” rear	24 x 2.5” front bay drives (switched)	16 drives:12 x 3.5” HDDs + 4 x 2.5” SAS (rear)	16 drives:12 x 3.5” HDDs + 4 x 2.5” NVMe (rear)
Processors	Two 4th Gen (Sapphire Rapids) or 5th Gen (Emerald Rapids) Intel Xeon Scalable processors with up to 64 cores per processor			
Memory	128 GB to 8 TB (Up to 32 x DDR5 RDIMMs, speeds up to 5600 MT/s)			
Storage controller	Internal HBA 355i 12Gbps SAS HBA Controller (NON-RAID)	None	Internal HBA 355i 12Gbps SAS HBA Controller (NON-RAID)	Internal HBA 355i 12Gbps SAS HBA Controller (NON-RAID)
Storage - OS Boot	BOSS N1 with dual hot-plug M.2 NVMe 960GB in RAID1			
Drive Count and Storage for Cache Min/Max	-	-	Min: 2 x 800GB = 1.6 TB Max: 4 x 1.6TB = 6.4 TB	Min: 2 x 1.6TB = 3.2 TB Max: 4 x 6.4TB = 25.6 TB
Drive Count and Storage for Capacity Min/Max	Min: 2 x 800GB = 1.6 TB Max: 28 x 7.68TB = 215 TB	Min: 2 x 960 TB = 1.92 TB Max: 24 x 15.36TB = 369 TB	Min: 4 x 4 TB = 16 TB Max: 12 x 20 TB = 240 TB	Min: 4 x 4 TB = 16 TB Max: 12 x 20 TB = 240 TB
Network cards	Form factors: - PCIe (required): 1-4 - OCP 3.0 (optional) - Integrated LOM: 2 x 1GbE Broadcom 5720 (used for factory imaging only, not supported for customer use cases) Vendors: Broadcom, Intel and NVIDIA Port Count: Dual-port and quad-port Operational speeds: 10, 25, and 100GbE RDMA protocol support: iWARP, RoCE			
GPU DW = Double Wide SW = Single Wide	(GPUs are not supported on All flash chassis with rear storage or MC nodes populated with 256GB DIMMs.) - NVIDIA Ampere A2 SW, 60W, 16GB Passive, up to 6 - NVIDIA Ampere A16 DW, 250W, 64GB Passive, up to 2 - NVIDIA Ampere A30 DW, 165W, 24GB Passive, up to 2 - NVIDIA Ampere A40 DW, 300W, 48GB Passive, up to 2 - NVIDIA Ada Lovelace, L4, SW, 72W, 24GB Passive, up to 4 - NVIDIA Ada Lovelace, L40, DW, 300W, 48GB Passive, up to 2 - NVIDIA Ada Lovelace, L40S, DW, 350W, 48GB Passive, up to 2		Not supported	Not supported
Operating System	Azure Local, version 2503 or later (factory staged)			
Out of Band Management	Integrated Dell Remote Access Controller (iDRAC) 9 Enterprise or Datacenter IPMI 2.0 compliant			
Integrations	Cloud Platform Foundation Software Cloud Platform extension in Microsoft Windows Admin Center			
Services	ProDeploy, ProDeploy Plus, ProSupport, ProSupport Plus, optional Dell Infrastructure and Consulting services Call-routing, phone home, remote support, and automated case creation supported with Secure Connect Gateway			
Security	Trusted Platform Module 2.0			
Power Supplies	Dual, Hot-plug, Redundant Power Supply (1+1), 1100/1400/1800/2400/2800 W			
Form Factor	2U Rack, Dell Cloud Platform MC-760 Hardware Requirements and Specifications			

PowerFlex Integration	If connecting to a PowerFlex Cluster, refer to the Design Guide.

MC-660

Storage Configuration	All Flash (All-SSD)	All Flash (All-NVMe)
Chassis Configurations	10 x 2.5” SAS Chassis Up to 10 SSD front drives (SAS/vSAS)	10 x 2.5” NVMe Chassis Up to 10 NVMe front drives
Processors	Two 4th Gen (Sapphire Rapids) or 5th Gen (Emerald Rapids) Intel Xeon Scalable processors with up to 52 cores per processor	
Memory	128 GB to 8 TB (Up to 32 x DDR5 RDIMMs, speeds up to 5600 MT/s)	
Storage controller	Internal HBA 355i 12Gbps SAS HBA Controller (NON-RAID)	None
Storage - OS Boot	BOSS N1 with dual hot-plug M.2 NVMe 960GB in RAID1	
Drive Count and Storage for Cache Min/Max	-	-
Drive Count and Storage for Capacity Min/max	Minimum: 2 x 800GB = 1.6 TB Maximum: 10 x 7.68TB = 76.8 TB	Minimum: 2 x 960GB = 1.92 TB Maximum: 10 x 15.36TB = 153.6 TB
Network cards	Form factors: - PCIe (required): 1-3 - OCP 3.0 (optional) - Integrated LOM: 2 x 1GbE Broadcom 5720 (used for factory imaging only, not supported for customer use cases) Vendors: Broadcom, Intel and NVIDIA Port Count: Dual-port and quad-port Operational speeds: 10, 25, and 100GbE RDMA protocol support: iWARP, RoCE	
GPU DW = Double Wide SW = Single Wide	GPU capable of up to 2 x SW GPU - NVIDIA Ampere A2 SW, PCIe, 60W, 16GB Passive - NVIDIA Ada Lovelace, L4, SW, 72W, 24GB Passive	
Operating System	Azure Local, version 2503 or later (factory staged)	
Out of Band Management	Integrated Dell Remote Access Controller (iDRAC) 9 Enterprise or Datacenter IPMI 2.0 compliant	
Integrations	Cloud Platform Foundation Software Cloud Platform extension in Microsoft Windows Admin Center	
Services	ProDeploy, ProDeploy Plus, ProSupport, ProSupport Plus, optional Dell Infrastructure and Consulting services Call-routing, phone home, remote support, and automated case creation supported with Secure Connect Gateway	
Security	Trusted Platform Module 2.0	
Power Supplies	Dual, Hot-plug, Redundant Power Supply (1+1), 1100/1400/1800 W	
Form Factor	1U Rack, Dell Cloud Platform MC-660 Hardware Requirements and Specifications	

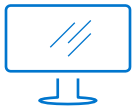
PowerFlex Integration	If connecting to a PowerFlex Cluster, refer to the Design Guide.

MC-4000x | MC-4510c & MC-4520c

Model	MC-4510c – All-NVMe (1U sled)	MC-4520c – All-NVMe (2U sled)
Chassis Configurations	MC-4000r (Rackable): 1-4 sleds MC-4000z (Flexible/Stackable): 1-2 sleds	MC-4000r (Rackable): 1-2 sleds MC-4000z (Flexible/Stackable): 1 sled
Processors	Single Socket Intel Xeon Ice Lake D 3rd Generation (8/16/20 cores)	
Memory	64 GB to 512 GB (Up to 4 x 128GB DDR5 3200MT/s)	
Storage controller	None	
Storage - OS Boot	BOSS N1 Modular ET (embedded) with dual M.2 NVMe 960GB in RAID1	
Drive Count and Storage for Cache Min/Max	-	-
Drive Count and Storage for Capacity Min/Max	Minimum: 2 x 800GB = 1.6 TB Maximum: 4 x 3.84TB = 15.36 TB	Minimum: 6 x 800GB = 4.8 TB Maximum: 12 x 3.84TB = 46.08 TB

Network cards	- Integrated LOM
	  - Intel E823-C LOM quad port 10/25 GbE
	- PCIe: None
		- Integrated LOM
		  - Intel E823-C LOM quad port 10/25 GbE
		- PCIe: 1-2
		  - Vendors: Broadcom, Intel and NVIDIA
		  - Port Count: Dual-port and quad-port
		  - Operational speeds 10, 25, and 100GbE
		  - RDMA protocol support: iWARP, RoCE

GPU DW = Double Wide SW = Single Wide	NA	GPU capable: up to 2 x SW or 1 x DW - NVIDIA Ampere A2 SW, 60W, 16GB Passive, up to 2 - NVIDIA Ampere A30 DW, 165W, 24GB Passive, up to 1
Operating System	Azure Local, version 2503 or later (factory staged)	
Out of Band Management	Integrated Dell Remote Access Controller (iDRAC) 9 Enterprise or Datacenter	
Integrations	Cloud Platform Foundation Software Cloud Platform extension in Microsoft Windows Admin Center	
Services	ProDeploy, ProDeploy Plus, ProSupport, ProSupport Plus, optional Dell Infrastructure and Consulting services Call-routing, phone home, remote support, and automated case creation supported with Secure Connect Gateway	
Security	Trusted Platform Module 2.0	
Power Supplies	Dual, Hot-plug, Redundant Power Supply (1+1), 1100/1400/1800 W	
Environmental	Purpose-built and ruggedized for edge deployments: • Operate in temp ranges from -5C to 55C. Rated to MIL 810H and NEBS Level 3. • 'Stackable' and 'rackable' chassis with options to mount on walls or place on shelves when space is at a premium. • Withstand dusty and harsh environments while providing extra physical security with an optional lockable intelligent filtered bezel.	
Form Factor	1U Rack	2U Rack
	Dell Cloud Platform MC-4000x | MC-4510c & MC-4520c Hardware Requirements and Specifications	
PowerFlex Integration	**If connecting to a PowerFlex Cluster, refer to the Design Guide.**	



Learn more about Dell Cloud Platform for Microsoft Azure

Contact a Dell Expert
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