

DELL EMC CLOUD FOR AZURE STACK

Dell EMC Cloud for Microsoft Azure Stack powered by hyper-converged infrastructure based on Dell EMC VxRack AS

Overview

The Dell EMC Cloud for Microsoft Azure Stack is an exclusive hyper-converged infrastructure appliance from Dell EMC and Microsoft, is the easiest and fastest way to create a seamless, hybrid, Azure™ ecosystem. Powered by Microsoft Windows 2016 software defined storage and networking capabilities, unparalleled Dell EMC hyper-converged infrastructure, and managed via the Microsoft Azure Stack interface, the Dell EMC Cloud for Azure Stack provides Azure customers an experience with which they are already familiar. The seamless integration with existing Dev/Ops and management tools lets customers leverage and extend their current Azure Public cloud tools and processes in a hybrid scenario.

The Dell EMC Cloud for Azure Stack architecture is a distributed system consisting of common modular building blocks that scale linearly from 4 to 12 (16 future) nodes in a cluster. It provides a simple, cost-effective hyper-converged solution that delivers multiple compute, memory, and capacity options to match any use case and cover a wide variety of cloud native applications and workloads.

Based Microsoft's Windows 2016 software defined architecture and built with new 5th generation Intel™ Xeon™ processors, the Dell EMC Azure Stack Appliance allows customers to start small and grow, scaling capacity and performance easily with minimal disruption. Scaling in predictable units provides a predictable, “pay-as-you-grow” approach for future growth as needed.

The Dell EMC Cloud for Azure Stack is also backed by world-class support with single call support for both hardware and software, and includes Dell EMC ESRS for call-home and proactive two-way remote connection for remote monitoring, diagnosis, and repair to ensure maximum availability.

Detailed specifications and a comparison of the Dell EMC Cloud Microsoft Azure Stack Appliance options follows.

BASE SYSTEM CONFIGURATION FOR Dell EMC Cloud for Microsoft Azure Stack

Components	Configuration
Compute	Compute nodes based on Dell EMC PowerEdge R740XD Servers Hardware Lifecycle Host – Dell EMC PowerEdge R640 Server
Storage	Hybrid internal storage (SSD Cache/HDD Capacity)
Networking	Integrated Top-of-Rack (ToR): 2x Dell Networking S4048T-ON switch (10GbE) Integrated network management: Dell Networking S3048-ON (1GbE)
Rack	Dell EMC Titan 40U storage rack Dimensions: Overall Rack width: 24.00+/-0.060 inches (609.6mm+/-1.52) External Rack depth: 39.37 inches (1,000.0mm) from the front filler panel or DEVICE bezel to the back surface of the rear door. 41.50 inches (1,054.0mm) from the front door (Optional) to the back surface of the rear door. (based on configuration).
Boot	RAID 1 Mirrored 480GB M.2 SATA SSD

SOLUTION SPECIFIC CONFIGURATION OPTIONS (CURRENT CONFIGURATIONS)

Scale Unit Configuration	4 Node	8 Node	12 Node
CORES	96-192	192-384	288-576
MEMORY	1.5 TB – 3 TB	3 TB – 6 TB	4.6 TB – 7.2 TB
CACHE	23 TB – 46 TB	46 TB – 92 TB	68 TB – 138 TB
DATA (RAW)	160 TB – 400 TB	320 TB – 800 TB	320 TB – 1200 TB

14G Configuration Totals for 200 AC Input Voltage and 35C Max Ambient

		4 node		8 node		12 node		16 node*	
		Watts	BTU/hr	Watts	BTU/hr	Watts	BTU/hr	Watts	BTU/hr
Input Power	Min	3395	11577	5979	20388	8563	29200	11147	38011
	Mid	3691	12586	6571	22407	9451	32228	12331	42049
	Max	3927	13391	7043	24017	10159	34642	13275	45268
Input Current (Amps)	Min	17.2		30.3		43.4		56.5	
	Mid	18.7		33.3		47.8		62.4	
	Max	19.9		35.6		51.4		67.1	
Weight (pounds)		790		1082		1374		1666	

Data Source – Legal Notice:

Results shown in the previous table are from Dell EMC Lab measurements and the EMC Power Calculator. The EMC Power Calculator is subject to change without notice and is provided "AS IS" without warranty of any kind, express or implied. EMC does not make any representations regarding the use, validity, accuracy or reliability of the tool or the results of the use of the tool. The entire risk arising out of the use of this tool remains solely with the customer. In no event shall EMC be liable for any direct, consequential, incidental, special, punitive or other damages, even if EMC is negligent or has been advised of the possibility of such damages, arising from the use the tool or the information provided herein.

Output values obtained from this tool are intended solely for customer facilities planning purposes and are approximate and conservative. Actual results may vary.

PDU Power Drop Requirements

Number of Scale		Power Drops Required	
Units (R740XD _s)	Single Phase	3 Phase Delta	3 Phase Y
4	2	2	2
8	4	2	2
12	6	2	2
16*	8	2	2

* Note: 16 Node expected to be supported by Microsoft in 2018



[Learn more](#) about Dell EMC Cloud for Microsoft Azure Stack



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