EMC²

VxRail

VCE VXRAIL™ APPLIANCE

The VCE VxRail™ Appliance, the exclusive hyper-converged infrastructure appliance from VCE|EMC and VMware, is the easiest and fastest way to stand up a fully virtualized Software-Defined Data Center (SDDC) environment. With the power of a whole Storage Area Network (SAN) in just two rack units, it provides a simple, cost-effective hyper-converged solution that delivers compute, network, storage, virtualization, and management for a wide variety of applications and workloads.

Built on the foundation of VMware Hyper-Converged software and managed through the familiar vCenter interface, the VxRail Appliance provides existing VMware customers an experience they are already familiar with. Seamless integration with existing VMware tools, such as vRealize Operations, lets customers leverage and extend their existing IT tools and processes. Additionally, the VxRail Appliance is discoverable and visible in VCE Vision™ Intelligent Operations for a comprehensive IT core to edge management ecosystem.

The VxRail Appliance is fully loaded with integrated mission-critical data services—including replication, backup, and cloud tiering—all at no additional charge. The VxRail Appliance incorporates data protection technology, including EMC RecoverPoint for VMs and VMware vSphere Data Protection. Integrated EMC CloudArray seamlessly extends the VxRail Appliance to public and private clouds to securely expand storage capacity without limits, providing an additional 10 TB of on-demand cloud tiering included per appliance.

The VxRail Appliance architecture is a distributed system consisting of common modular building blocks that scale linearly from 1 to 16 2U/4 node appliances, up to 64 nodes in a cluster. Multiple compute, memory, and storage options deliver configurations to match any use case.

A fully populated all-flash appliance supports up to 112 cores and up to 76 TB of raw storage. A 64-node all-flash cluster delivers 1,792 cores and 1,216 TB of raw storage, making it the industry's most powerful HCIA to date to maximize performance and scale for applications that demand low latency.

The VxRail Appliance is backed by a single point of world-class support for both hardware and software. The VxRail Appliance is available with EMC Enhanced and Premium support options, both of which include 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 VxRail Appliances follows.

VXRAIL APPLIANCE SPECIFICATIONS—HYBRID NODES

COMPONENTS	VXRAIL APPLIANCE 60	VXRAIL APPLIANCE 120	VXRAIL APPLIANCE 160	VXRAIL APPLIANCE 200
PROCESSOR CORES (PER NODE)	6	12	16	20
PROCESSOR (PER NODE)	1 Intel® Xeon® Processor E5-2603 v3 1.6 GHz	2 Intel® Xeon® Processor E5-2620 v3 2.4 GHz	2 Intel® Xeon® Processor E5-2630 v3 2.4 GHz	2 Intel® Xeon® Processor E5-2660 v3 2.6 GHz
MEMORY/RAM (PER NODE)	64 GB (4 x 16 GB)	128 GB (8 x 16 GB) or 192 GB (12 x 16 GB) or 256 GB (16 x 16 GB)	256 GB (16 x 16 GB) or 512 GB (16 x 32 GB)	256 GB (16 x 16 GB) or 512 GB (16 x 32 GB)
CACHING SSD (PER NODE)	200 GB	400 GB or 800 GB	400 GB or 800 GB	400 GB or 800 GB
STORAGE-RAW (PER NODE)	3.6 – 10 TB	3.6 – 10 TB	4.8 – 10 TB	4.8 – 10 TB
MINIMUM NODES PER CLUSTER	4	4	4	4
MAXIMUM NODES PER CLUSTER[1]	64	64	64	64
SCALING INCREMENTS (IN NODES)	1	1	1	1
CHASSIS	2U, 19" rack-mounted chassis supporting 4 hot swappable nodes and 2 hot swappable power supplies			
POWER SUPPLIES	2 1200W high-efficiency redundant PSUs, 110/220V AC 50/60Hz	2 1600W high-efficiency redundant PSUs, 220V AC 50/60Hz	2 1600W high-efficiency redundant PSUs, 220V AC 50/60Hz	2 1600W high-efficiency redundant PSUs, 220V AC 50/60Hz
COOLING	Dedicated cooling/node (no single point of failure) – 4 80X5M6 mm variable-speed fans			
MAX TOTAL POWER CONSUMPTION (FULLY LOADED APPLIANCE-VA)	1003	1337	1337	1486
MAX HEAT DISSIPATION (FULLY-LOADED APPLIANCE-BTU/HR)	3422.236	4561.844	4561.844	5070.232
NETWORK CONNECTION	4 x 1 GbE RJ45	2 x 10 GbE SFP+ or 2 x RJ45 ports	2 x 10 GbE SFP+ or 2 x RJ45 ports	2 x 10 GbE SFP+ or 2 x RJ45 ports
MANAGEMENT PORT (OPTIONAL, PER NODE)	1 x 100 Mbps RJ45 port	1 x 100 Mbps RJ45 port	1 x 100 Mbps RJ45 port	1 x 100 Mbps RJ45 port

[1]Scale to 64 nodes via approved RPQ only.

VXRAIL APPLIANCE SPECIFICATIONS—ALL-FLASH NODES

COMPONENTS	VXRAIL 120F	VXRAIL 160F	VXRAIL 200F	VXRAIL 240F	VXRAIL 280F
PROCESSOR CORES (PER NODE)	12	16	20	24	28
PROCESSOR (PER NODE)	2 Intel® Xeon® Processor E5-2620 v3 2.4GHz / 15M Cache	2 Intel® Xeon® Processor E5-2630 v3 2.4GHz / 20M Cache	2 Intel® Xeon® Processor E5-2660 v3 2.6GHz / 25M Cache	2 Intel® Xeon® Processor E5-2680 v3 2.5GHz / 30M Cache	2 Intel® Xeon® Processor E5-2683 v3 2.0GHz / 35M Cache
MEMORY / RAM (PER NODE)	256GB (16 x 16GB)	256GB (16 x 16GB) or 512GB (16 x 32GB)	256GB (16 x 16GB) or 512GB (16 x 32GB)	256GB (16 x 16GB) or 512GB (16 x 32GB)	256GB (16 x 16GB) or 512GB (16 x 32GB)
CACHING SSD (PER NODE)	400GB or 800GB	400GB or 800GB	400GB or 800GB	400GB or 800GB	400GB or 800GB
STORAGE-RAW (PER NODE)	3.8 – 19 TB	3.8 – 19 TB	3.8 – 19 TB	3.8 – 19 TB	3.8 – 19 TB
MINIMUM NODES PER CLUSTER	4	4	4	4	4
MAXIMUM NODES PER CLUSTER[1]	64	64	64	64	64
SCALING INCREMENTS (IN NODES)	1	1	1	1	1
CHASSIS	2U, 19" rack-mounted chassis supporting 4 hot swappable nodes and 2 hot swappable power supplies				
POWER SUPPLIES	2 1600W high-efficiency redundant PSUs, 220V AC 50/60Hz	2 1600W high-efficiency redundant PSUs, 220V AC 50/60Hz	2 1600W high efficiency redundant PSUs, 220V AC 50/60Hz	2 1600W high-efficiency redundant PSUs, 220V AC 50/60Hz	2 1600W high-efficiency redundant PSUs, 220V AC 50/60Hz
COOLING	Dedicated cooling/node (no single point of failure) – 4 80X5M6 mm variable-speed fans				
MAX TOTAL POWER CONSUMPTION (FULLY LOADED APPLIANCE-VA)	1240	1240	1389	1500	1500
MAX HEAT DISSIPATION (FULLY-LOADED APPLIANCE-BTU/HR)	4230.88	4230.88	4739.268	5118	5118
NETWORK CONNECTION	2 x 10GbE SFP+ or RJ45 ports	2 x 10GbE SFP+ or RJ45 ports	2 x 10GbE SFP+ or RJ45 ports	2 x 10GbE SFP+	2 x 10GbE SFP+
NETWORK PORT (OPTIONAL, PER NODE)	1 x 100Mbps RJ45 port	1 x 100Mbps RJ45 port	1 x 100Mbps RJ45 port	1 x 100Mbps RJ45 port	1 x 100Mbps RJ45 port

[1]Scale to 64 nodes via approved RPQ only.

PHYSICAL SPECIFICATIONS

COMPONENTS	HEIGHT (MM/IN)	WIDTH (MM/IN)	DEPTH (MM/IN)	WEIGHT (MAX KG/LB)
APPLIANCE	87.3mm/3.44"	447mm/17.6IN	774.7mm/30.5"	41.42KG / 91.31LB

OPERATING RANGE

AMBIENT OPERATING TEMPERATURE	O° to 40° C
OPERATING AND STORAGE RELATIVE HUMIDITY	10% to 85% (non-condensing)
STORAGE TEMPERATURE RANGE	- 40°C to + 65°C
TRANSPORTATION TEMPERATURE RANGE	- 40C to + 70C (short-term storage)
OPERATING ALTITUDE WITH NO DERATINGS	3200m (about 10656ft)

CERTIFICATIONS

VxRail complies with the following certifications: UL, CE, EMC, FCC (Note: VxRail UL certification covers both US and Canada, therefore CSA certification is not required)

CONFIGURE AND QUOTE VXRAIL

Compare features, see options, get pricing at
store.emc.com/vxrail

ABOUT VCE

VCE, an EMC Federation Company, is the world market leader in converged infrastructure and converged solutions. VCE accelerates the adoption of converged infrastructure and cloud-based computing models that reduce IT costs while improving time to market. VCE delivers the industry's only fully integrated and virtualized cloud infrastructure systems, allowing customers to focus on business innovation instead of integrating, validating, and managing IT infrastructure. VCE solutions are available through an extensive partner network, and cover horizontal applications, vertical industry offerings, and application development environments, allowing customers to focus on business innovation instead of integrating, validating, and managing IT infrastructure.

For more information, go to vce.com.