

HYPER-CONVERGENCE INFRASTRUCTURE



Dell EMC VxRail

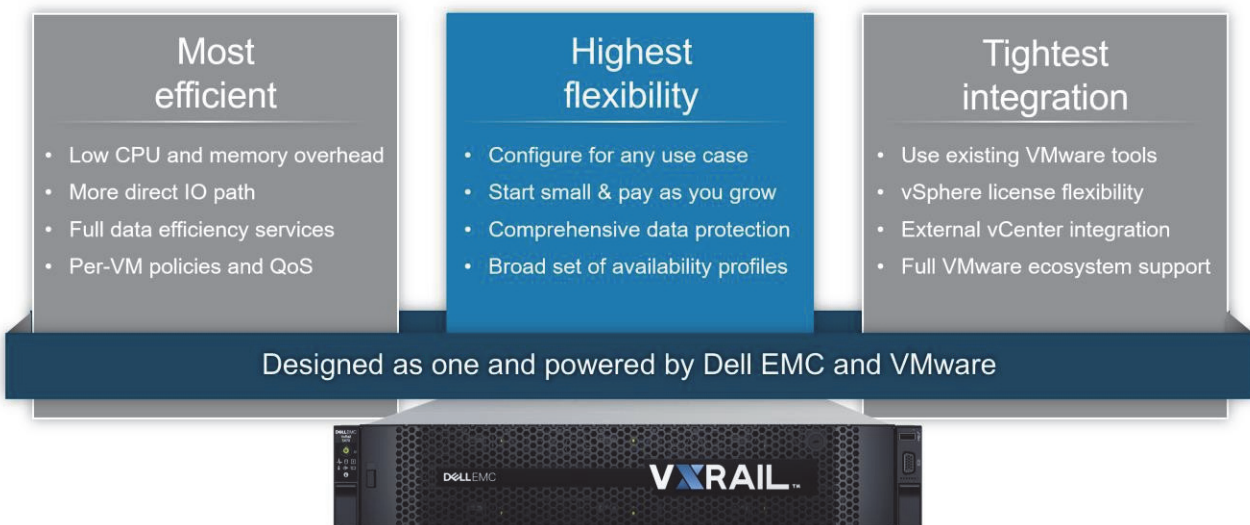
The Dell EMC VxRail™ Appliance, jointly developed by Dell EMC and VMware, is the only fully integrated, pre-configured, and tested hyper-converged infrastructure (HCI) appliance and is a fundamental building block of the modern data center. The Dell EMC VxRail Appliance provides existing VMware customers an experience with which they are already familiar and is available in either hybrid or flash storage configurations to meet the mission needs of all clients. Both versions come loaded with the following additional software capabilities at no additional charge:

- **RecoverPoint for VMs** provides replication, data protection, and advanced disaster recovery.
- **VMware vSphere Data Protection (VDP)** is a backup and recovery solution designed for vSphere environments. It is powered by Dell EMC Avamar and provides agentless, image-level virtual-machine backups to disk.
- **EMC CloudArray** seamlessly extends storage capacity from the appliance, with scalable cloud-based storage to the public cloud (Commercial or FedRAMP certified cloud service provider partners available upon request).

Key Capabilities:

- **Start small and grow** – The Dell EMC VxRail Appliance allows you to start with as few as three nodes, and scale one node at a time.
- **Accelerate with automation** - Save costs by automating more than 200 tasks and increase operational efficiency by spending less time on software and hardware life-cycle management (support includes non-disruptive one click updates).
- **Flexibility and Choice** – The Dell EMC VxRail Appliance provides configuration flexibility with purpose-built appliances that are designed to address any use case, including big data, analytics, 2D/3D visualization, or mixed workload virtualized applications.
- **Single Support Channel** – One number to call for hardware and software support.

The VxRail Starter Kits serve as a building block for your infrastructure needs and a path to a SDDC allowing you to start small and grow on demand. This proposal describes VxRail Starter Kits designed for the most common use cases, ranging from small to large deployments for each of our appliances. Please review the starter kit specifications below and reach out to your Transource account executive if there are any further questions.



VxRail Starter Kits – E-Series

E Series – Entry level, cost-effective IaaS appliances for small or remote site (tactical or expeditionary) deployments. Low-profile with one node per 1U chassis. Available in all-flash or hybrid configurations.

Name	Number of Nodes	Appliance Model	Disk Type	Total Cores	Total Memory (GB)	Raw Storage (TB)	Useable Storage (TB)	# of VMs	Use Case	Estimated Pricing
E-Series Small	4	E460	Hybrid	32	256	14.4	7.2	60	SMB, ROBO	\$71,000
E-Series Large	4	E460F	All Flash	64	1024	30	17.25	128	VDI, Cloud, High Performance DB	\$166,000

Per Node Specifications

Processor Options	RAM	Network Options	Drives
Single or Dual socket, up to 20 cores/CPU	Up to 1,536 GB RAM	2 x 10 GbE 4 x 1 GbE Optional: Up to 6 x 10 GbE	10 x 12G SAS Drive Slots (2.5") Max Capacity: 30.7 TB SSD or 16 TB HDD

- VM sizing assumes a VM is 2vCPU, 4 GB RAM, 60 GB VMDK, 4vCPU/Core, FTT=1
- Bundles inclusive of 36 month Enhanced Support (24x7xNDB), 36 month Parts Retention
- Customer may use existing VMware ELA; VMware vSphere licensing excluded
- All Flash Configurations requires 10 GbE (SFP+ or RJ45); please specify network connection type when ordering
- PS & Implementation costs estimated for remote configuration; PS for customers requiring onsite configuration (cleared resources, inaccessible networks, etc) requires custom scoped services
- 5 RecoverPoint for VM licenses per appliance included



Entry Level

VxRail Starter Kits – V-Series

V-Series – VDI-optimized graphics ready appliances with support for up to 2 graphics accelerators for specialized use cases such as high-end 2D/3D visualization. Each appliance has one node per 2U chassis. Available in all-flash or hybrid configurations. The V-Series contains the capability to add up to 2 PCIe GPUs.

Name	Number of Nodes	Appliance Model	Disk Type	Total Cores	Total Memory (GB)	Raw Storage (TB)	Useable Storage (TB)	# of VMs	Use Case	Estimated Pricing
V-Series Small	4	S470	Hybrid	80	512	14.4	7.2	100	SMB, ROBO	\$125,000
V-Series Large	4	S470F	All Flash	72	1024	30.8	15.4	144	VDI, Cloud, High Performance DB	\$244,000

Per Node Specifications

Processor Options	RAM	Network Options	Drives
Dual socket only, up to 20 cores/CPU	Up to 1,536 GB RAM	2 x 10 GbE Optional: Up to 6 x 10 GbE	16 x 12G SAS Drive Slots (2.5") Max Capacity: 46 TB SSD or 24 TB HDD

- VM sizing assumes a VM is 2vCPU, 4 GB RAM, 60 GB VMDK, 4vCPU/Core, FTT=1
- Bundles inclusive of 36 month Enhanced Support (24x7xNDB), 36 month Parts Retention
- Customer may use existing VMware ELA, VMware vSphere licensing excluded
- All Flash Configurations require 10 GbE (SFP+ or RJ45); please specify network connection type when ordering
- PS & Implementation costs estimated for remote configuration; PS for customers requiring onsite configuration (cleared resources, inaccessible networks, etc) requires custom scoped services
- 5 RecoverPoint for VM licenses per appliance included
- Customers must obtain and configure GPU software and drivers
- vCPU requires vSphere Enterprise +



VDI Optimized

VxRail Starter Kits – S-Series

S-Series – Storage dense appliances, capacity-optimized for demanding applications such as virtualized Microsoft SharePoint, Microsoft Exchange, big data, and analytics. Each appliance has one node per 2U chassis. Available in hybrid storage configurations only.

Name	Number of Nodes	Appliance Model	Disk Type	Total Cores	Total Memory (GB)	Raw Storage (TB)	Useable Storage (TB)	# of VMs	Use Case	Estimated Pricing
S-Series Small	4	S470	Hybrid	24	256	48	24	48	SMB, ROBO	\$80,000
S-Series Large	4	S470	Hybrid	64	512	64	32	100	Cloud, Capacity	\$111,000

Per Node Specifications

Processor Options	RAM	Network Options	Drives
Single or dual socket up to 18 cores/CPU	Up to 1,536 GB RAM	2 x 10 GbE 4 x 1 GbE Optional: Up to 6 x 10 GbE	12 x 3.5" + 2 x 2.5" 12G SAS Drive Slots (2.5") Max Capacity: 48 TB HDD

- VM sizing assumes a VM is 2vCPU, 4 GB RAM, 60 GB VMDK, 4vCPU/Core, FTT=1
- Bundles inclusive of 36 month Enhanced Support (24x7xNDB), 36 month Parts Retention
- Customer may use existing VMware ELA, VMware vSphere licensing excluded
- All Flash Configurations requires 10 GbE (SFP+ or RJ45); please specify network connection type when ordering
- PS & Implementation costs estimated for remote configuration; PS for customers requiring onsite configuration (cleared resources, inaccessible networks, etc) Capacity Optimized requires custom scoped services
- 5 RecoverPoint for VM licenses per appliance included



Capacity Customized

VxRail Starter Kits – P-Series

P-Series – Storage dense appliances capacity-optimized for demanding applications such as virtualized Microsoft SharePoint, Microsoft Exchange, big data, and analytics. Each appliance has one node per 2U chassis. Available in hybrid configurations only.

Name	Number of Nodes	Appliance Model	Disk Type	Total Cores	Total Memory (GB)	Raw Storage (TB)	Useable Storage (TB)	# of VMs	Use Case	Estimated Pricing
P-Series Small	4	P470	Hybrid	32	512	14.4	7.2	64	SMB, ROBO	\$131,000
P-Series Large	4	P470F	All Flash	72	1024	30.8	15.4	144	VDI, Cloud, High Performance DB	\$244,000

Per Node Specifications

Processor Options	RAM	Network Options	Drives
Dual socket, up to 22 cores/CPU	Up to 1,536 GB RAM	2 x 10 GbE Optional: Up to 6 x 10 GbE	16 x 12G SAS Drive Slots (2.5") Max Capacity: 46 TB SSD or 24 TB HDD

- VM sizing assumes a VM is 2vCPU, 4 GB RAM, 60 GB VMDK, 4vCPU/Core, FTT=1
- Bundles inclusive of 36 month Enhanced Support (24x7xNDB), 36 month Parts Retention
- Customer may use existing VMware ELA, VMware vSphere licensing excluded
- All Flash Configurations requires 10 GbE (SFP+ or RJ45); please specify network connection type when ordering
- PS & Implementation costs estimated for remote configuration; PS for customers requiring onsite configuration (cleared resources, inaccessible networks, etc) requires custom scoped services
- 5 RecoverPoint for VM licenses per appliance included



Performance Optimized

VxRail Professional Services Description

Service: EMC Installation for VxRail Single Appliance

Estimated Engagement Length: 28 hours

Model Number: PS-BAS-HCIAINS

Description: This service offering provides onsite installation and remote configuration of one VxRail appliance with up to 4 nodes. Implementation of VxRail Appliance includes a Pre-Installation Site Checklist, validating that customer network and vCenter meets VxRail requirements, cluster configuration, ESRS setup, and a post-installation knowledge transfer on essential operational management procedures for VxRail appliance.

VxRail Test Drive Program



VxRail Test Drive™ for Technical Decision Makers

Lessons

Lesson 1: Hyper-convergence

- Why HCI
- Usage Scenarios

Lesson 2: vSAN

- What is vSAN
- What is SDDC
- Why vSAN
- Hardware Requirements
- Failure and Expansion Scenarios
- Features
- Versions

Lesson 3: VxRail Hardware

- Models
- Networking Considerations
- Data Services
- Scalability
- Support

Lesson 4: VxRail vs vSAN Ready Nodes

- Advantages of VxRail

Lesson 5: VxRail Deployment and Operations

- System Planning
- Concepts to Know
- VxRail Manager
- Daily vCenter Management

Labs

- Lab 1: First Build
- Lab 2: Logical and Physical Health
- Lab 3: Cluster Expansion - Scalling Out
- Lab 4: QoS IOPS limit
- Lab 5: Fault Domains
- Lab 6: Erasure Coding
- Lab 7: Snapshot Creation and Management
- Lab 8: Deduplication and Compression

This program is available upon request and will be coordinated with your **Transource** representative; please reach out to them for more details.

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Dell PowerEdge Servers Run on on Intel® Xeon® Processors

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