

VMware EVO:RAIL

Overview

Q. What is Hyper-Converged Infrastructure (HCI)?

A. Hyper-Converged Infrastructure (HCI) leverages the hypervisor to deliver compute, networking and shared storage from a single x86 server platform. The software-driven architecture allows the convergence of physical storage onto commodity x86 servers, enabling a building block approach with scale-out capabilities. The use of commodity x86 server and storage hardware allows data centers to operate with agility on a highly scalable, cost-effective infrastructure.

Q. What Is EVO:RAIL?

A. VMware EVO:RAIL™ combines compute, networking, storage and management resources into a hyper-converged infrastructure appliance to create a simple, easy to manage, all-in-one solution. Thanks to its unique engine, EVO:RAIL is the simplest entry point to the software-defined data center. Its architecture ensures business continuity, streamlined operations, and a lower Total Cost of Ownership (TCO). VMware's EVO:RAIL reduces IT operating costs by allowing for faster deployments, automatic scaling, and non-disruptive update of all VMware software. Moreover, it reduces capital expenditures by efficiently utilizing the on board server side storage which has been optimized for the EVO:RAIL software stack, allowing customers to pay as they grow.

Q. Why EVO:RAIL?

- A. EVO:RAIL delivers the following benefits:
- **Radically Simple.** Meet accelerated business demands by simplifying infrastructure design with predictable sizing and scaling. From planning, design and procurement, to deployment and management, EVO:RAIL radically simplify your data center operations.
 - **Resilient and Secure.** Designed with four independent hosts, distributed Virtual SAN™ datastore, built-in VM security policies, and leveraging best in class VMware availability capabilities, EVO:RAIL ensures zero application downtime during planned maintenance or during disk, network or host failure.
 - **Trusted and Proven.** Powered by VMware's industry leading infrastructure virtualization technology including VMware vSphere®, vCenter Server™ and VMware Virtual SAN, EVO:RAIL delivers the first hyper-converged infrastructure appliance designed, powered and validated by VMware.

Product Details

Q. What are EVO:RAIL capabilities?

ELEMENT	DESCRIPTION	CAPABILITY
EVO:RAIL Appliance	Nodes per Appliance	4
	Max VM's per Appliance	800*
EVO:RAIL Cluster	Max Appliances per cluster	16
	Max VM's per Cluster	12,800*
EVO:RAIL Hardware	Hardware form factor	2U
	Configurations	Flexible hardware configurations with up to 100 options

* Depending on your hardware configuration and VM profile

Q. How does EVO:RAIL compare to traditional data center infrastructure?

- A. VMware EVO:RAIL lowers TCO significantly:
- EVO:RAIL optimizes the entire data center life cycle, from planning, design and procurement, to deployment and management.
 - EVO:RAIL Engine automates the manual process of creating a network, adding virtual machines, and creating a Virtual SAN datastore.
 - EVO:RAIL integration with vSphere Distributed Resource Scheduler™ (DRS), High Availability, and vSphere vMotion® ensures better resiliency and higher availability.
 - EVO:RAIL provides automated update mechanism for VMware software, removing interoperability concerns and lowering operating cost.

Describe EVO:RAIL Architecture

EVO:RAIL software is integrated into a pre-specified and optimized 2U/4 node hardware platform to deliver a transformational and dramatically simplified hardware experience.

Proven Software

EVO:RAIL offers best-in-class VMware HA capabilities (such as vSphere HA, vMotion, DRS) with built-in Virtual Machine security policies. The EVO:RAIL software is preloaded into the appliance by the EVO:RAIL partner.

EVO:RAIL Software	<ul style="list-style-type: none"> • EVO:RAIL Engine • vSphere Enterprise Plus* • Virtual SAN • vCenter Server • vRealize™ Log Insight™
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* As part of the vSphere Loyalty program, EVO:RAIL customers can leverage existing vSphere Enterprise Plus licenses.

Flexible Hardware

EVO:RAIL 2U chassis are tightly prescribed by VMware, and are pre-built and tested by EVO:RAIL partners. Each appliance has four servers, to ensure resiliency and is optimized for performance and flexibility. EVO:RAIL offers flexible hardware configurations, enabling you to customize the appliance to your specific needs.

EVO:RAIL Hardware	Processor	8 x Intel E5 Processors, Ivy Bridge or Haswell (48, 64, 80, 96 or 144 cores)
	Memory	512, 768, 1024, 1536 or 2048 GB
	Storage	16 or 27.2 TB Hybrid Storage (HDD/SSD)
	Network	<ul style="list-style-type: none"> • 8 x 10 GbE NIC port (copper or fiber) • 4 x 1 GbE for BMC port

Q. Can EVO:RAIL be integrated into my existing VMware environment?

A. Yes, EVO:RAIL is interoperable and optimized for the entire VMware software stack, including Horizon®, VMware NSX™ vCloud® Air™ and vRealize Operations™.

Q. How is my data protected with EVO:RAIL?

A. EVO:RAIL includes VMware vSphere Data Protection™ Advanced (VDPA) for backup protection and vSphere Replication™, for replication. EVO:RAIL data can also be protected by any third-party back-up product that supports vSphere Enterprise Plus.

Where to Buy and Additional Information

Q. How can I Purchase and get support for EVO:RAIL?

A. VMware EVO:RAIL can be purchased through VMware Qualified EVO:RAIL Partners (QEP's).

- Qualified EVO:RAIL Partners (QEP's): Purchase EVO:RAIL appliance hardware and software as single SKU from your preferred QEP. QEP's offer single point of support for EVO:RAIL and may also offer value added services, software and other capabilities. Click [here](#) to find a QEP.

Visit the EVO:RAIL site to find a partners (<http://www.vmware.com/products/evorail/pricing.html>)

Q. Can I use an existing vSphere license for EVO:RAIL?

A. Customers with EVO:RAIL version 1.2 or later are eligible to leverage existing stand-alone vSphere Enterprise Plus licenses or vSphere Enterprise Plus licenses that are part of vSphere with Operations Management Enterprise Plus, vCloud Suite® or the Horizon Suite for the EVO:RAIL appliance as long as vSphere is version 5.x or above. Please confirm eligibility with your partner.

Q. Where can learn more about EVO:RAIL?

- VMware website: [vmware.com/products/evorail](http://www.vmware.com/products/evorail)
- Hands On Lab: [vmware.com/go/evorail-lab](http://www.vmware.com/go/evorail-lab)
- Product Walkthrough: <https://featurewalkthrough.vmware.com/#!/evo:rail>
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