

**Solution Brief** 

# VMWARE CLOUD FOUNDATION 4.X ON VXRAIL 7.X

A simple and direct path to deliver Kubernetes at cloud scale with one, complete, automated platform

## Transformative hybrid cloud solution

- The only jointly-engineered HCI system with deep VMware Cloud Foundation integration.
- Delivers a simple and direct path to deliver Kubernetes at cloud scale with one, complete, automated platform, supporting both traditional and cloud-native applications.
- Drives cross-functional collaboration with more independence for developers and more control by operators
- Remote Cluster Support: Extends existing VMware Cloud Foundation operational capabilities to remote locations
- Integrated, end to end lifecycle management (LCM) delivers rapid, automated full stack patching and updating to ensure clusters are in a continuously validated state.
- Flexible deployments: consolidated architecture to start small and grow, and standard configuration for dedicated workload requirements.
- Flexible financial consumption models: Pay for technology as you grow it, as you use it, or as a subscription with Dell Technologies on Demand (DTOD)
- Single point of global support 24x7 for both the hardware and software through the entire lifecycle.
- Cyber resiliency built into the VCF on VxRail stack with additional enterprise-grade data protection solutions for VMs, Applications, and Kubernetes containers.

VMware Cloud Foundation on VxRail, a Dell Technologies Cloud Platform (DTCP), delivers a simple and direct path to modern apps and the hybrid cloud. Deep integration between VxRail and VMware Cloud Foundation delivers a simple and direct path to the hybrid cloud – and to deliver Kubernetes at cloud scale - with one, complete, automated platform. As part of a synchronous release commitment for vSphere software on VxRail, customers will be able to adopt and run latest updates after rigorous testing within 30 days of VMware general availability.



## Any application, anywhere

Enterprises can deploy, host, and manage traditional VMs alongside cloud native workloads across core, edge, and cloud environments. Streamlined operations help IT rapidly provision infrastructure to developers so they can create and deploy code faster to market and drive business innovation.

VMware Cloud Foundation 4.x with Tanzu on VxRail, including vSphere with Kubernetes, delivers a hybrid cloud platform that supports native Kubernetes workloads and management, as well as traditional VM-based workloads.

## **Drive Cross Functional Collaboration**

Provide independence to developers who can use familiar development tools and work at their speed while IT retains control of resources and the infrastructure. Increase developer productivity through faster resource provisioning with policy governance so they can focus on applications rather than infrastructure.

## **Deeply integrated**

VxRail is the only jointly-engineered HCI system with deep VMware Cloud Foundation integration. That deep integration delivers a unique experience with deployment and management of clusters from a single, familiar user interface, and automated end-to-end LCM management to ensure VxRail clusters remain in continuously validated states.

#### **Data Security and Enterprise-Grade Data Protection**

VMware Cloud Foundation on VxRail includes built-in cyber resiliency from top to bottom offering industry security best practices and compliance for vulnerability response, supply chain assurance, 2FA and more. For added data protection, Dell EMC Power Protect Data Manager brings enterprise protection solutions for VMs, applications and Kubernetes, on a single platform.

## **Flexible Deployment**

#### **Entry-level configuration**

VMware Cloud Foundation on VxRail can be deployed with a 4-node configuration, lowering the cost of entry level hybrid cloud with a more accessible consolidated architecture. This enables customers to start small and grow their cloud deployment over time. The Consolidated Architecture supports multi-cluster and scales to documented vSphere maximums. The Consolidated Architecture design targets smaller deployments for general purpose virtual server workloads, providing an entry point that requires both small infrastructure footprint as well as reduced cost.

## Standard configuration

Customers who prefer to utilize dedicated resources and role-based access control can choose to deploy a standard architecture, starting at 7 nodes; (however, 8 is recommended) 4 nodes in a dedicated management domain and a minimum of 3 nodes for the first virtual infrastructure compute workload domain. This deployment architecture design is preferred because it provides the most flexibility, scalability, and workload isolation for customers scaling their clouds in production. This deployment is perfect for customers with applications that require dedicated workload domains.

#### **Remote Cluster Support**

Available now, Remote Custer Support allows customers to extend existing VMware Cloud Foundation operational capabilities to remote locations, providing consistent operations and integrated full stack hardware and software upgrades across the core and edge. With this capability, customers can run both container based modern applications with Tanzu or traditional workloads at the edge.

## **Evolve Predictably**

VMware Cloud Foundation on VxRail is the first hyperconverged system fully integrated with VMware Cloud Foundation SDDC Manager, meaning both the hyperconverged infrastructure layer and the VMware Cloud software stack are managed as one, complete, automated platform. Deep integration between VMware SDDC Manager and VxRail Manager gives users consistent operations with familiar VMware tools to deploy and manage clusters and workloads across the hybrid cloud infrastructure.

VxRail HCI System Software intelligent lifecycle management helps customers confidently and non-disruptively execute upgrades without the need to do extensive research and testing. Simply choose the next VxRail version and VxRail automates upgrades of the fully integrated hardware and software stack, keeping clusters in continuously validated states. IT productivity sky-rockets with automated, non-disruptive upgrades no matter what hardware generation or node types are in the cluster!

VxRail supports vSphere updates within 30 days after VMware general availability, which involves rigorous testing and a single point of contact for support. Predictably evolve and expand your HCI footprint across the core, edge and cloud.

## **Services and Support**

Dell Technologies Services offer a full range of services to implement and maintain a hybrid cloud architecture for your datacenter, helping you to accelerate deployment, increase productivity, reduce downtime, and simplify operations.

Dell EMC ProSupport Enterprise Suite for VMware Cloud Foundation on VxRail includes single-source support for VMware Cloud Foundation even when you bring your own license. This includes support for hardware & software as well as providing remote upgrade support services for VMware Cloud Foundation core software and VxRail nodes.

### Single-vendor procurement and serviceability

VMware Cloud Foundation on VxRail includes SRS integration for proactive monitoring and problem resolution, ensuring a highlyavailable modern applications solution. For customers who want more choices for the way they consume cloud infrastructure, shifting spending from the traditional capital expenditure to an ongoing operating expense they have the option of DTCP with Subscription. Customers now have even more hardware choices with 3 new node configurations, allowing them to cover a wider range of workloads. They can also further customize the rack with more power options, delivering agility to meet their specific power needs.





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