VMWARE CLOUD FOUNDATION
FOR HORIZON 7
Scale and Secure Your Data Center, Desktops, and Apps with Push-Button Simplicity

Horizon 7 on VMware Cloud Foundation Introduction
Many organizations implement desktop and application virtualization to improve client computing security, deliver greater enterprise mobility, and streamline management. Centralizing desktops and applications helps to secure enterprise data by offering data at rest encryption, preventing unauthorized application access, and providing a more efficient way to patch, maintain, and upgrade desktop images. With VMware Horizon® 7, virtualized or hosted desktops and applications can be delivered to end users with all of the resources they want, at the speed they expect, with the efficiency business demands.

However, desktop and application virtualization require a number of data center infrastructure layers—from storage and hypervisor to desktop broker—that must work together seamlessly and be managed throughout their lifecycle. To simplify Horizon 7 deployments, VMware Cloud Foundation™ delivers an enterprise cloud platform with integrated virtual desktop and application services. It combines software-defined infrastructure for compute, storage, networking, and security with the market-leading capabilities of VMware Horizon 7 for a complete, secure, and easy-to-operate desktop and application virtualization solution.

WHY HCI FOR VIRTUAL DESKTOPS?
• Superior desktop and app performance at scale to improve user experience
• Pay-as-you-grow affordability with granular scaling, letting you add storage performance and capacity in small, manageable increments
• Automated self-tuning that rebalances storage resources to align with desktop and application demand
• Integrated lifecycle management and automation.
• Full-stack monitoring, from the data center to end users.
• Simpler operations and reduced TCO with vSAN as the key storage component of Cloud Foundation
• Greater agility with infrastructure scalability and without data center complexity
• Reduced risk and lifecycle interoperability enablement through integrated and standardized deployment of cloud infrastructure

Push-Button Simple Management for Faster Time to Value
VMware Cloud Foundation for Horizon 7 delivers a complete solution for VDI deployments at scale. It simplifies planning and design with a standardized and tested solution fully optimized for VDI workloads. Cloud Foundation also reduces complexity with automated deployments, configuration, and provisioning.

At a Glance
VMware Cloud Foundation for Horizon delivers a complete solution for VDI deployments at scale—it simplifies planning and design with a standardized and tested solution fully optimized for VDI workloads. By delivering Horizon virtual desktops through Cloud Foundation, IT will accelerate desktop and application deployment by automating infrastructure, providing consistent infrastructure and operations across hybrid clouds, and scale rapidly with lower TCO to deliver the agility required by today’s businesses.

Figure 1 - Cloud Foundation Provides A Complete SDDC Stack for Desktop and Application Virtualization
vSAN or Cloud Foundation
vSAN delivers ‘Core HCI’ capabilities for immediate agility, and VMware Cloud Foundation (VCF) automates deployment and operations for a fully automated private cloud. VCF also serves as the foundation for your hybrid cloud because the same core software-defined infrastructure stack leveraged in private cloud deployments of VCF is also the underpinning technology of VMware-based public clouds like VMware Cloud on Amazon Web Services and other VMware Cloud Provider Program (VCPP) partners, as well as VMware Cloud on Dell EMC.

On average, Cloud Foundation customers have experienced 6–8x faster time to deployment. Thanks to its hyper-converged architecture, Cloud Foundation for desktop environments can accommodate thousands of desktops with elastically scalable infrastructure. Starting with as few as eight nodes, you can linearly scale capacity and performance one node at a time as needed. The built-in automation allows for rapid provisioning of virtual desktops in hours instead of weeks.

Simple Scalability for Changing VDI Demands
Horizon virtual desktops and applications on Cloud Foundation delivers highly scalable hyperconverged infrastructure with integrated lifecycle management and automation. Desktop virtualization success is ensured with contextual, personalized workspaces and integrated infrastructure management tools. Cloud Foundation empowers IT to meet changing demands in virtual desktop environments by simplifying and automating capacity expansion. With the building block nature of hyperconverged infrastructure, combined with the ease of deploying additional pools of virtual desktops through Horizon 7, VMware Cloud Foundation makes it easy for organizations to grow and scale on demand.

Availability and Business Continuity
Cloud Foundation capacity can be made available within a single site or stretched between physical sites in a vSAN stretched cluster configuration for higher availability. Because Cloud Foundation be scaled quickly and efficiently in a highly-available topology, IT can respond to challenges posed by shifting workforce locations, business continuity concerns, and bursts in demand for virtual desktops.

End-to-End Security
The combination of Cloud Foundation and Horizon 7 means you can eliminate threats and malware from the endpoint to the data center. You can reduce data leakage from lost or stolen devices and ensure that every desktop or app is running from a pristine, trusted image in the data center. Security threats that do get through can be quarantined by VMware NSX network microsegmentation — “shrink-wrapped security” that uses distributed virtual firewalls to police traffic to and from each VM, eliminating unauthorized access between desktops and adjacent workloads. Lastly, you can enforce policy-driven access to apps and desktops across corporate and employee-owned devices, complete with VM data encryption.

Best-of-Breed VDI Stack
VMware Cloud Foundation and Horizon 7 give you risk-free deployments with the fastest time to value. Deliver the infrastructure performance VDI demands for a great user experience through kernel-level integration, while reducing risk and enabling lifecycle interoperability through an integrated and standardized deployment of cloud infrastructure with Horizon 7. Deploying with software defined infrastructure that is highly programmable, scalable, and hardware independent gives you up to 50 percent CapEx savings through hardware virtualization, and up to 55 percent OpEx savings over traditional VDI solutions.

Flexible Consumption Options
Cloud Foundation can be consumed through a vast partner, OEM and cloud provider ecosystem. The same underlying Cloud Foundation technologies are presented to cloud administrators regardless of where and how Cloud Foundation is provisioned.
VMware supports all major server suppliers on vSAN ReadyNodes. ReadyNodes offer the industry’s broadest choice of hardware with solutions that are jointly certified and supported with our OEM partners. Furthermore, VMware vSAN is the only HCI solution available for the Dell EMC MX, HPE Synergy, and Cisco ISR platforms.

VMware has jointly engineered an integrated system appliance, VxRail, with Dell EMC. These integrated systems uniquely offer VxRail Manager lifecycle management software, bundled Dell EMC data protection software, and Dell EMC support.

Other OEMs, including Fujitsu, HPE, and Lenovo, offer the full stack VMware Cloud Foundation offering as a bundled HCI offering to address the growing market for the complete Software Defined Datacenter.

VMware Cloud Foundation is supported by VMware Cloud Provider Program (VCPP) Partners, as well as in leading public cloud providers, like AWS, Azure, Google, Oracle, Rackspace, and IBM.

Customer Case Studies:
Niagara College enables students with virtual desktops on any device, running on vSAN
United States Senate Federal Credit Union modernizes IT with vSAN and Horizon for best-in-class banking
Braunschweig Municipal Hospital deploys HCI for end-user computing and IT agility
Noi-Tec modernizes IT for agility and digital workspaces running on vSAN and VCF

VMware vSAN customer case studies
VMware VCF customer case studies

Learn More
For more information about VMware Cloud Foundation for Horizon 7, visit the following sites:

**VMware Cloud Foundation**
VMware Cloud Foundation Product Page: vmware.com/go/cloudfoundation
Cloud Foundation Blog: blogs.vmware.com/cloud-foundation
Twitter: @VMwareVCF
LinkedIn: linkedin.com/company/vmwarevcf
YouTube: youtube.com/c/VMwareCloudFoundation
Community: vmware.com/go/cloudfoundationcommunity
Cloud Foundation Resource Center: vmware.com/go/vcfrc
Website: Horizon on VMware Cloud Foundation website

**vSAN**
VMware vSAN Product Page: vmware.com/go/vsan
vSAN Blog: blogs.vmware.com/virtualblocks/products/virtualsan
Twitter: @VMwarevSAN
LinkedIn: linkedin.com/company/vmware-vsan/
YouTube: youtube.com/c/VMwareStorage
Community: communities.vmware.com/community/vmtn/vsan
Instagram: instagram.com/vmwarevSAN
StorageHub: storagehub.vmware.com
Website: Horizon on vSAN website

**VMware Horizon**
VMware Horizon Product Page: vmware.com/go/horizon
Twitter: @VMwareHorizon