

VMware Software Solution Product Guide

Product Guide

Lenovo and VMware have been collaborating for more than twenty years, helping customers solve their most complex problems in virtualization and digital transformation.

As an OEM reseller of VMware solutions, Lenovo offers a broad range of VMware based solutions in varying levels of integration to meet different customer requirements and business needs. Solutions range from the turnkey Lenovo ThinkAgile VX series of appliances to build-your-own Engineered Solutions based on Lenovo's proven reference architecture and VMware software only licenses.

VMware OEM licenses are sold as a license and your choice of 1 year, 3 year, or 5 year support & subscription with Lenovo hardware and are transferable to new servers. All Lenovo offerings come with VMware OEM licenses, L3 support provided by VMware and L1 and L2 support provided by Lenovo.



Did you know?

Lenovo XClarity Integrator integrates XClarity Administrator into VMware software, providing the functionality you need to manage Lenovo infrastructure right in the console of VMware software.

Lenovo offers XClarity Integrators for VMware vCenter, VMware vRealize Orchestrator and VMware vRealize Log Insight. For more information, please refer to the [Lenovo XClarity Administrator Product Guide](#).

Why buy VMware products from Lenovo?

Lenovo has proven experience in developing and delivering VMware-based solutions that help customers modernize and simplify their IT infrastructure to dramatically drive down operating costs and open the door to cutting-edge innovations. Built around the latest Lenovo ThinkSystem servers and networking hardware, the Lenovo solution with VMware provides businesses with an affordable, interoperable, and reliable industry-leading solution to manage their virtualized workloads.

Why purchase VMware solutions from Lenovo?

- Competitive pricing for VMware
- Lenovo certified/supported pre-built image
- Single point of support tracking for Lenovo hardware and Lenovo VMware
- World-class service delivering single point support for Lenovo servers and Lenovo OEM software
Easy ordering and delivery with Single SKU for license and Subscription and Support.

Enterprise licensing agreements (> US\$250K) are also available. Please contact your Lenovo sales person for more information.

VMware Enterprise License Agreement

The VMware Enterprise License Agreement (ELA) is a contract with your customer that allows for the purchase VMware products up front at an agreed-upon discount. The ELA is a type of agreement that allows the customer to deploy up to a specific number of licenses purchased during the ELA period.

Characteristics of an ELA include:

- Minimum total deal value US\$250K
- Minimum net new license revenue US\$150K (US\$100K Mid-Market)
- Mutually signed agreement / SRA – Legal (This is transparent with Lenovo)
- Enables Lenovo to sell VMware components not on our price list or catalog
- Provides client cost savings with additional discounts
- Ease and flexibility of deployment with one license key
- Additional discounts and price protection thru deal registration
- Typically includes VMware support, but Lenovo support can be optional

Adding products will result in VMware amending and extending the existing ELA.

Upgrades & Renewals

To upgrade from a product with “lesser” functionality to a product with a richer feature-set that includes the functionality of the lesser product, VMware has created specific SKUs that correspond to the allowable upgrade paths. With the exception of VMware View product Functionality Upgrades, no separate Support and Subscription Services (SnS) upgrade SKUs will be offered. Customers will order the full SnS SKU for the destination license along with the License upgrade. Any remaining SnS on the original license will be credited in the form of additional days on the new replacement license SnS.

All renewals are provided by VMware.

VMware vSphere

The models listed in this section offer the base product license with 1 year, 3 year, or 5 year physical or electronic entitlement.

For upgrade products, customers must have the original base product on a current Lenovo services contract and must have registered for Lenovo support on the original base product so that upgrade can be added to an existing service contract.

For more information, see the VMware licensing and pricing paper, available from:
<https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/products/vsphere/vmware-vsphere-pricing-whitepaper.pdf>

VMware vSphere Editions

vSphere editions are highly scalable virtualization solutions for midsize and enterprise organizations that want to optimize existing IT investments, streamline IT operations and deliver IT-as-a-service through private, public and hybrid cloud infrastructures:

- VMware vSphere Standard licensing supports features for server consolidation and business continuity.
- VMware vSphere Enterprise Plus include features for resource management, enhanced application availability and performance.

For a detailed comparison of vSphere Editions see the following document:
<https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/vsphere/vmw-flyr-comparevsphereeditions-uslet.pdf>

The following table lists the ordering information for vSphere editions.

Table 1. VMware vSphere editions ordering information

Description	License	1 Year	3 Year	5 Year
VMware vSphere 7 Standard for 1 processor	7S06036XWW	7S06036YWW	7S06036ZWW	7S060370WW
VMware vSphere 7 Enterprise Plus for 1 processor	7S06036BWW	7S06036CWW	7S06036DWW	7S06036EWW
VMware vSphere 7 Scale-Out bundle for 8 processor	7S06036TWW	7S06036UWW	7S06036VWW	7S06036WWW
Upgrade: VMware vSphere 7 Scale-Out to vSphere 7 Enterprise Plus for 1 Processor	7S06038WWW	7S06036CWW	7S06036DWW	7S06036EWW
Upgrade: VMware vSphere 7 Standard to vSphere 7 Enterprise Plus for 1 Processor	7S06038XWW	7S06036CWW	7S06036DWW	7S06036EWW

VMware vSphere Bitfusion

VMware vSphere Bitfusion is an add on to vSphere Enterprise Plus that decouples physical resources from servers within an environment. The platform can share GPU's in a virtualized infrastructure as a pool of network accessible resources.

Table 2. VMware vSphere Bitfusion ordering information

Description	License	1 Year	3 Year	5 Year
VMware vSphere 7 Bitfusion for 1 processor	7S06039VWW	7S06039WWW	7S06039XWW	7S06039YWW

VMware vSphere Essentials Kits

VMware vSphere Essentials kits are all-in-one solutions that combine virtualization for up to three physical servers (up to two processors each) with centralized management capabilities. The kits are self-contained solutions and may not be decoupled or combined with other VMware vSphere editions. The server hosts must be managed by the vCenter Server Essentials edition that is provided with this bundle, and that same vCenter Server Essentials edition cannot be used to manage other server hosts not included with this edition.

Table 3. VMware vSphere Essentials Kits ordering information

Description	License	1 Year	3 Year	5 Year
VMware vSphere 7 Essentials Kit for 3 hosts (Max 2 processors per host)	7S060371WW	7S060372WW	7S060373WW	7S060374WW
VMware vSphere 7 Essentials Plus Kit for 3 hosts (Max 2 processors per host)	7S060375WW	7S060376WW	7S060377WW	7S060378WW
Upgrade: VMware vSphere 7 Essentials Kit to vSphere 7 Enterprise Plus Acceleration Kit for 6 processors	7S06038YWW	7S06035WWW	7S06035XWW	7S06035YWW

VMware vSphere Acceleration Kits

vSphere Acceleration Kits are an all-in-one convenience bundle that provide a simple way for customers to purchase all the necessary components to set up a new VMware environment. Each kit consists of six processor licenses or vSphere and a license for one instance of vCenter Server Standard.

Unlike the Essentials Kits and VMware vSphere 6.x Acceleration Kits that function as single entity, vSphere Acceleration Kits decompose into their individual kit components after purchase. This allows customers to upgrade and renew SnS for each individual component on its own schedule.

Table 4. VMware vSphere Acceleration Kits ordering information

Description	License	1 Year	3 Year	5 Year
VMware vSphere 7 Enterprise Plus Acceleration Kit for 6 processors	7S06035VWW	7S06035WWW	7S06035XWW	7S06035YWW
VMware vSphere 7 Standard Acceleration Kit for 6 processors	7S06035ZWW	7S060360WW	7S060361WW	7S060362WW
VMware vSphere 7 Standard Acceleration Kit for 8 processors	7S060363WW	7S060364WW	7S060365WW	7S060366WW
Upgrade: VMware vSphere 7 Essentials plus Kit to vSphere 7 Standard Acceleration Kit for 6 processors	7S06038VWW	7S060360WW	7S060361WW	7S060362WW
Upgrade: VMware vSphere 7 Scale-Out to vSphere 7 Enterprise Plus for 1 Processor	7S06038WWW	7S06036CWW	7S06036DWW	7S06036EWW
Upgrade: VMware vSphere 7 Standard to vSphere 7 Enterprise Plus for 1 Processor	7S06038XWW	7S06036CWW	7S06036DWW	7S06036EWW

VMware vSphere Add On

Many organizations have remote offices and branch offices (ROBO) with a few servers running a few workloads. IT support for these offices has special challenges with a lack of local IT staff, inconsistent host configurations, limited budget and limited space. With vSphere ROBO you are able to manage your remote offices and branch offices with little or no local IT staff. Enable rapid provisioning of servers through virtualization, minimization of host configuration drift and enhanced visibility into regulatory compliance, across multiple sites.

VMware vSphere Desktop is used for deploying desktop virtualization. It provides the full range of features and functionalities of the vSphere Enterprise Plus edition allowing you to achieve scalability, high availability, and optimal performance for all your desktop workloads.

Table 5. VMware vSphere Add Ons ordering information

Description	License	1 Year	3 Year	5 Year
VMware vSphere 7 for Desktop (100 VM Pack)	7S060367WW	7S060368WW	7S060369WW	7S06036AWW
VMware vSphere 7 Enterprise Plus for 1 processor	7S06036BWW	7S06036CWW	7S06036DWW	7S06036EWW
VMware vSphere 7 Remote Office Branch Office Advanced (25 VM pack)	7S06036FWW	7S06036GWW	7S06036HWW	7S06036JWW
VMware vSphere 7 Remote Office Branch Office Enterprise (25 VM pack)	7S06036KWW	7S06036LWW	7S06036MWW	7S06036NWW

VMware vCenter

Gain centralized visibility, simplified and efficient management at scale, and extensibility across the hybrid cloud—all from a single console.

VMware vCenter Server

VMware vCenter Server provides a centralized platform for managing your VMware vSphere environments, allowing you to automate and deliver a virtual infrastructure across the hybrid cloud with confidence. VMware vCenter Server Foundation Manages 3 vSphere hosts and VMware vCenter Server Standard Manages unlimited vSphere hosts.

Table 6. VMware vCenter Server ordering information

Description	License	1 Year	3 Year	5 Year
VMware vCenter Server 7 Foundation for vSphere 7 up to 4 hosts (Per Instance)	7S060207WW	7S060208WW	7S060209WW	7S06020AWW
VMware vCenter Server 7 Standard for vSphere 7 (Per Instance)	7S06020BWW	7S06020CWW	7S06020DWW	7S06020EWW
Upgrade: VMware vCenter Server 7 Foundation to vCenter Server 7 Standard	7S060305WW	7S06020CWW	7S06020DWW	7S06020EWW

VMware vCenter Site Recovery Manager

VMware vCenter Site Recovery Manager is a business continuity and disaster recovery solution that helps you to plan, test, and run the recovery of virtual machines between a protected vCenter Server site and a recovery vCenter Server site.

Table 7. VMware vCenter Site Recovery Manager ordering information

Description	License	1 Year	3 Year	5 Year
VMware Site Recovery Manager 8 Standard (25 VM Pack)	7S06020FWW	7S06020GWW	7S06020HWW	7S06020JWW
VMware Site Recovery Manager 8 Enterprise (25 VM Pack)	7S06020KWW	7S06020LWW	7S06020MWW	7S06020NWW
Upgrade: VMware Site Recovery Manager 8 Standard to Site Recovery Manager Enterprise (25 VM Pack)	7S060306WW	7S06020LWW	7S06020MWW	7S06020NWW

VMware vSAN

VMware vSAN is a new software-defined storage tier, which pools compute and direct-attached storage resources, and clusters server disks and flash drives to create resilient shared storage. VMware vSAN creates a distributed shared data storage designed and optimized for virtual machines.

VMware vSAN Editions

vSAN license editions include Standard, Advanced, Enterprise, and Remote Office/Branch Office (ROBO) Standard, Advanced, and Enterprise.

- **Standard Edition:** Best suited for hybrid environments so customers can simplify and automate storage management with per-VM storage policies. The Standard license supports all-flash vSAN configurations.
- **Advanced Edition:** Standard Edition plus all-flash space efficiency features (deduplication, compression and erasure coding) provides the most cost-efficient performance to customers invested in all-flash.
- **Enterprise Edition:** Advanced Edition plus software-defined, data-at-rest encryption and stretched clusters delivers greater hardware choice and cost savings to customers. Any cluster with three or more physical hosts plus a witness host is a stretched cluster.
- **Remote Office Branch Office Edition:** vSAN for ROBO is best suited for remote locations with low consolidation ratios. It is sold as 25-VM packs based on vSAN Standard, Advanced or Enterprise Editions and is distributable across the different remote sites. It is limited to a maximum of 25 virtual machines per site. vSAN for ROBO are per-VM licenses available in a pack of 25.

For more details on the different vSAN editions see the vSAN licensing guide:

<https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/products/vsan/vmware-vsan-67-licensing-guide.pdf>

vSAN Standard, Advanced, and Enterprise licenses are per-CPU (socket) licenses. All hosts in the cluster must be licensed. A 2-host vSAN cluster with a witness host can be deployed with any license edition. vSphere and vSphere with Operations Management licenses do not include vSAN. Any type of workload—server and desktop—can be run on a vSAN cluster with these licensing editions.

Table 8. VMware vSAN Editions ordering information

Description	License	1 Year	3 Year	5 Year
VMware vSAN 7 Standard for 1 processor	7S0600NTWW	7S0600NUWW	7S0600NVWW	7S0600NWWW
VMware vSAN 7 Standard for Remote Office Branch Office (25 VM pack)	7S0600NPWW	7S0600NQWW	7S0600NRWW	7S0600NSWW
VMware vSAN 7 Advanced for 1 processor	7S0600MDWW	7S0600MEWW	7S0600MFWW	7S0600MGWW

Description	License	1 Year	3 Year	5 Year
VMware vSAN 7 Advanced for Remote Office Branch Office (25 VM pack)	7S0600NFWW	7S0600NGWW	7S0600NHWW	7S0600NJWW
VMware vSAN 7 Enterprise for 1 processor	7S0600MRWW	7S0600MSWW	7S0600MTWW	7S0600MUWW
VMware vSAN 7 Enterprise for Remote Office Branch Office (25 VM pack)	7S0600NKWW	7S0600NLWW	7S0600NMWW	7S0600NNWW
VMware vSAN 7 Enterprise Plus for 1 processor	7S0600NBWW	7S0600NCWW	7S0600NDWW	7S0600NEWW
Upgrade: VMware vSAN 7 Standard for 1 processor to vSAN 7 Advanced for 1 processor	7S06030KWW	7S0600MEWW	7S0600MFWW	7S0600MGWW
Upgrade: VMware vSAN 7 Standard for 1 processor to vSAN 7 Enterprise for 1 processor	7S06030LWW	7S0600MSWW	7S0600MTWW	7S0600MUWW
Upgrade: VMware vSAN 7 Standard for 1 processor to vSAN 7 Enterprise Plus for 1 processor	7S06030MWW	7S0600NCWW	7S0600NDWW	7S0600NEWW
Upgrade: VMware vSAN 7 Advanced for 1 processor to vSAN 7 Enterprise Plus for 1 processor	7S060307WW	7S0600NCWW	7S0600NDWW	7S0600NEWW
Upgrade: VMware vSAN 7 Advanced for 1 processor to vSAN 7 Enterprise for 1 processor	7S060308WW	7S0600MSWW	7S0600MTWW	7S0600MUWW
Upgrade: VMware vSAN 7 Enterprise for 1 processor to vSAN 7 Enterprise Plus for 1 processor	7S06030CWW	7S0600NCWW	7S0600NDWW	7S0600NEWW
Upgrade: VMware vSAN 7 Advanced for Remote Office Branch Office (25 VM pack) to VMware vSAN 7 Enterprise for Remote Office Branch Office (25 VM pack)	7S06030GWW	7S0600NLWW	7S0600NMWW	7S0600NNWW
Upgrade: VMware vSAN 7 Standard for Remote Office Branch Office (25 VM pack) to VMware vSAN 7 Advanced for Remote Office Branch Office (25 VM pack)	7S06030HWW	7S0600NGWW	7S0600NHWW	7S0600NJWW
Upgrade: VMware vSAN 7 Standard for Remote Office Branch Office (25 VM pack) to VMware vSAN 7 Enterprise for Remote Office Branch Office (25 VM pack)	7S06030JWW	7S0600NLWW	7S0600NMWW	7S0600NNWW

VMware vSAN:Desktop Editions

vSAN for Desktop licensing is available for customers using vSAN exclusively for virtual desktop infrastructure (VDI). It is priced per concurrent user (CCU) in a VDI environment and sold in packs of 10 and 100 licenses. vSAN for Desktop is also included in the Horizon Advanced and Enterprise bundles which have the vSAN Advanced license. Horizon Advanced and Enterprise customers who wish to upgrade to vSAN Enterprise can do so via an add-on vSAN for Desktop Enterprise SKU.

Table 9. VMware vSAN:Desktop Editions ordering information

Description	License	1 Year	3 Year	5 Year
VMware vSAN 7 Standard for Desktop 10 Pack (CCU)	7S0600NXWW	7S0600NYWW	7S0600NZWW	7S0600P0WW
VMware vSAN 7 Standard for Desktop 100 Pack (CCU)	7S0600P1WW	7S0600P2WW	7S0600P3WW	7S0600P4WW
VMware vSAN 7 Advanced for Desktop 10 Pack (CCU)	7S0600MHWW	7S0600MJWW	7S0600MKWW	7S0600MLWW
VMware vSAN 7 Advanced for Desktop 100 Pack (CCU)	7S0600MMWW	7S0600MNWW	7S0600MPWW	7S0600MQWW
VMware vSAN 7 Enterprise for Desktop 10 Pack (CCU)	7S0600MVWW	7S0600MWWW	7S0600MXWW	7S0600MYWW
VMware vSAN 7 Enterprise for Desktop 100 Pack (CCU)	7S0600MZWW	7S0600N0WW	7S0600N1WW	7S0600N2WW
VMware vSAN 7 Enterprise for Desktop - Horizon Add-on 10 Pack (CCU)	7S0600N3WW	7S0600N4WW	7S0600N5WW	7S0600N6WW
VMware vSAN 7 Enterprise for Desktop - Horizon Add-on 100 Pack (CCU)	7S0600N7WW	7S0600N8WW	7S0600N9WW	7S0600NAWW
Upgrade: VMware vSAN 7 Standard for Desktop to vSAN 7 Advanced for Desktop: 100 Pack (CCU)	7S060309WW	7S0600MNWW	7S0600MPWW	7S0600MQWW
Upgrade: VMware vSAN 7 Advanced for Desktop to vSAN 7 Enterprise for Desktop: 100 Pack (CCU)	7S06030AWW	7S0600N8WW	7S0600N9WW	7S0600NAWW
Upgrade: VMware vSAN 7 Standard for Desktop to vSAN 7 Enterprise for Desktop: 100 Pack (CCU)	7S06030BWW	7S0600N8WW	7S0600N9WW	7S0600NAWW
Upgrade: VMware vSAN 7 Advanced for Desktop to vSAN 7 Enterprise for Desktop: 10 Pack (CCU)	7S06030DWW	7S0600N4WW	7S0600N5WW	7S0600N6WW
Upgrade: VMware vSAN 7 Standard for Desktop to vSAN 7 Advanced for Desktop: 10 Pack (CCU)	7S06030EWW	7S0600MJWW	7S0600MKWW	7S0600MLWW
Upgrade: VMware vSAN 7 Standard for Desktop to vSAN 7 Enterprise for Desktop: 10 Pack (CCU)	7S06030FWW	7S0600N4WW	7S0600N5WW	7S0600N6WW

VMware HCI Kits Editions

VMware HCI Kit simplify the purchase of vSphere and vSAN licenses by combining VMware vSAN and vSphere. VMware HCI Kits offer one SKU for both vSAN and vSphere and provide the most cost-efficient and simplest way to adopt hyperconverged infrastructure powered by vSAN. VMware HCI Kit Standard includes vSphere Standard and vSAN Standard. VMware HCI Kit Advanced includes vSphere Enterprise Plus and vSAN Advanced.

Table 10. VMware HCI Kits Editions ordering information

Description	License	1 Year	3 Year	5 Year
VMware HCI Kit 6 Standard (Per CPU)	7S0600PRWW	7S0600PSWW	7S0600PTWW	7S0600PUWW
VMware HCI Kit 6 Advanced (Per CPU)	7S0600PHWW	7S0600PJWW	7S0600PKWW	7S0600PLWW
VMware HCI Kit 6 Enterprise (per CPU)	7S0600PMWW	7S0600PNWW	7S0600PPWW	7S0600PQWW
VMware HCI 6 Kit Essentials for 3 Nodes (Max 2 processors per node)	7S0600PVWW	7S0600PWWW	7S0600PXWW	7S0600PYWW
VMware HCI Kit 6 with Operations Management (per CPU)	7S0600PZWW	7S0600Q0WW	7S0600Q1WW	7S0600Q2WW
VMware HCI Kit 6 for Remote Office Branch Office Advanced (25 VM pack)	7S0600P9WW	7S0600PAWW	7S0600PBWW	7S0600PCWW
VMware HCI Kit 6 for Remote Office Branch Office Standard (25 VM pack)	7S0600PDWW	7S0600PEWW	7S0600PFWW	7S0600PGWW

VMware Horizon

VMware Horizon is a family of desktop and application virtualization solutions designed to deliver Windows and online services on premises. With Horizon 7, VMware extends the power of virtualization—from data centers to devices—to deliver desktop and application virtualization with great user experience and closed-loop manageability.

VMware Horizon 7 is available in three editions:

- Horizon Standard
- Horizon Advanced
- Horizon Enterprise

All three editions include all components needed for an end-to-end virtual desktop deployment. Compare VMware Horizon editions in the following document:

https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/products/horizon/vmware-horizon-perpetual-feature-comparison.pdf?src=WWW_HrzOld_Compare_FeatureComparison

VMware Horizon Standard Editions

Horizon 7 Standard Edition offers simple, powerful VDI with great user experience. Horizon 7 Standard Edition and its components are licensed per concurrent connection. Horizon 7 Standard Edition includes desktop virtualization, application virtualization and virtual infrastructure. Concurrent user license is designed for virtual environments with a high number of shift workers where machines are shared between workers throughout the day (e.g. students, shift workers).

Table 11. VMware Horizon Standard Editions

Description	License	1 Year	3 Year	5 Year
VMware Horizon 8 Standard: 10 Pack (CCU) License	7S06043HWW	7S06043JWW	7S06043KWW	7S06043LWW
VMware Horizon 8 Standard: 100 Pack (CCU) License	7S06043MWW	7S06043NWW	7S06043PWW	7S06043QWW
VMware Horizon 8 Standard Add-On: 10 Pack (CCU) License	7S06043RWW	7S06043SWW	7S06043TWW	7S06043UWW
VMware Horizon 8 Standard Add-On: 100 Pack (CCU) License	7S06043VWW	7S06043WWW	7S06043XWW	7S06043YWW
Upgrade: VMware View 5 Enterprise 10 Pack to Horizon 8 Standard (10 Pack CCU) License	7S06046FWW	7S06043JWW	7S06043KWW	7S06043LWW
Upgrade: VMware ThinApp New Year Bundle to Horizon 8 Standard (10 Pack CCU) License	7S06046GWW	7S06043JWW	7S06043KWW	7S06043LWW
Upgrade: VMware View Enterprise Add-On to Horizon 8 Standard (10 Pack CCU) License	7S06046HWW	7S06043JWW	7S06043KWW	7S06043LWW
Upgrade: VMware Horizon 8 Standard Add-On: 10 pack to VMware Horizon 8 Standard Edition: 10 Pack (CCU) License	7S06046JWW	7S06043JWW	7S06043KWW	7S06043LWW
Upgrade: VMware View 5 Enterprise 100 pack to Horizon 8 Standard (100 Pack CCU) License	7S06046KWW	7S06043NWW	7S06043PWW	7S06043QWW
Upgrade: VMware View Enterprise Add-On to Horizon 8 Standard (100 Pack CCU) License	7S06046LWW	7S06043NWW	7S06043PWW	7S06043QWW
Upgrade: VMware Horizon 8 Standard Add-On: 100 pack to VMware Horizon 8 Standard Edition: 100 Pack (CCU) License	7S06046MWW	7S06043NWW	7S06043PWW	7S06043QWW
Upgrade: VMware ThinApp 5 Suite to Horizon 8 Standard (100 Pack CCU) License	7S06046NWW	7S06043NWW	7S06043PWW	7S06043QWW
Upgrade: VMware View Enterprise Add-on to Horizon 8 Standard Add-On (10 Pack CCU) License	7S06046PWW	7S06043SWW	7S06043TWW	7S06043UWW
Upgrade: VMware ThinApp Client License to Horizon 8 Standard Add-On (10 Pack CCU) License	7S06046QWW	7S06043SWW	7S06043TWW	7S06043UWW
Upgrade: VMware View Enterprise Add-on to Horizon 8 Standard Add-On (100 Pack CCU)	7S06046RWW	7S06043WWW	7S06043XWW	7S06043YWW
Upgrade: VMware ThinApp Clients (100 Pack) to Horizon 8 Standard Add-On (100 Pack CCU) License	7S06046SWW	7S06043WWW	7S06043XWW	7S06043YWW

VMware Horizon Advanced Editions

Horizon 7 Advanced Edition provides a cost-effective delivery of desktops and applications through a unified workspace. Horizon 7 Advanced Edition includes published applications, unified workspace, virtual storage and central image management.

Horizon Advanced is available based on a per-named-user or a per-concurrent connection model:

- **Per Named User:** For virtual environments with staff that need dedicated access to a virtual machine throughout the day.

- **Per Concurrent Connection:** For virtual environments with a high number of shift workers where machines are shared between workers throughout the day (e.g. students, shift workers).

Table 12. VMware Horizon Advanced Editions ordering information

Description	License	1 Year	3 Year	5 Year
VMware Horizon 8 Advanced Add-on: 10 Pack (CCU). Does not include vSphere and vCenter License	7S06039ZWW	7S060400WW	7S060401WW	7S060402WW
VMware Horizon 8 Advanced Add-on: 100 Pack (CCU). Does not include vSphere and vCenter License	7S060403WW	7S060404WW	7S060405WW	7S060406WW
VMware Horizon 8 Advanced: 10 Pack (CCU) License	7S060407WW	7S060408WW	7S060409WW	7S06040AWW
VMware Horizon 8 Advanced: 100 Pack (CCU) License	7S06040BWW	7S06040CWW	7S06040DWW	7S06040EWW
VMware Horizon 8 Advanced: 10 Pack (Named Users) License	7S06040FWW	7S06040GWW	7S06040HWW	7S06040JWW
VMware Horizon 8 Advanced: 100 Pack (Named Users) License	7S06040KWW	7S06040LWW	7S06040MWW	7S06040NWW
VMware Horizon 8 Advanced Add-on: 10 Pack (Named Users). Does not include vSphere and vCenter License	7S06040PWW	7S06040QWW	7S06040RWW	7S06040SWW
VMware Horizon 8 Advanced Add-on: 100 Pack (Named Users). Does not include vSphere and vCenter License	7S06040TWW	7S06040UWW	7S06040VWW	7S06040WWW
VMware Horizon 8 Advanced : 10 Pack (Named Users) for VMware HCI Solution Bundle, for OEM Sales only License	7S06040XWW	7S06040YWW	7S06040ZWW	7S060410WW
VMware Horizon 8 Advanced : 100 Pack (Named Users) for VMware HCI Solution Bundle, for OEM Sales only License	7S060411WW	7S060412WW	7S060413WW	7S060414WW
Upgrade: VMware Horizon 8 Standard Add-on: 10 pack (CCU) to VMware Horizon 8 Advanced Add-on: 10 Pack (CCU). Does not include vSphere and vCenter License	7S06043ZWW	7S060400WW	7S060401WW	7S060402WW
Upgrade: VMware Horizon 8 Standard Add-on: 100 pack (CCU) to VMware Horizon 8 Advanced Add-on: 100 Pack (CCU). Does not include vSphere and vCenter License	7S060440WW	7S060404WW	7S060405WW	7S060406WW
Upgrade: VMware Mirage 5 to Horizon 8 Advanced (10 Pack CCU) License	7S060441WW	7S060408WW	7S060409WW	7S06040AWW
Upgrade: VMware Horizon Standard (10 Pack CCU) to Horizon 8 Advanced (10 Pack CCU) License	7S060442WW	7S060408WW	7S060409WW	7S06040AWW
Upgrade: VMware View Add-on to Horizon 8 Advanced (10 Pack CCU) License	7S060443WW	7S060408WW	7S060409WW	7S06040AWW
Upgrade: VMware Mirage for Physical to Horizon 8 Advanced (10 Pack CCU) License	7S060444WW	7S060408WW	7S060409WW	7S06040AWW

Description	License	1 Year	3 Year	5 Year
Upgrade: VMware Horizon 8 Standard Add-on: 100 pack (CCU) to VMware Horizon 8 Advanced Edition: 100 Pack (CCU) License	7S060445WW	7S06040CWW	7S06040DWW	7S06040EWW
Upgrade: VMware Horizon 8 Advanced Add-on: 100 pack (CCU) to VMware Horizon 8 Advanced Edition: 100 Pack (CCU) License	7S060446WW	7S06040CWW	7S06040DWW	7S06040EWW
Upgrade: VMware Horizon Standard (100 Pack CCU) to Horizon 8 Advanced (100 Pack CCU) License	7S060447WW	7S06040CWW	7S06040DWW	7S06040EWW
Upgrade: VMware Mirage for Physical to Horizon 8 Advanced (100 Pack CCU) License	7S060448WW	7S06040CWW	7S06040DWW	7S06040EWW
Upgrade: VMware Mirage 5 to Horizon 8 Advanced (100 Pack CCU) License	7S060449WW	7S06040CWW	7S06040DWW	7S06040EWW
Upgrade: VMware View Add-on to Horizon 8 Advanced (100 Pack CCU) License	7S06044AWW	7S06040CWW	7S06040DWW	7S06040EWW
Upgrade: VMware Mirage for Physical to Horizon 8 Advanced (10 Pack Named Users) License	7S06044BWW	7S06040GWW	7S06040HWW	7S06040JWW
Upgrade: VMware Horizon 8 Advanced Add-on: 10 pack (Named Users) to VMware Horizon 8 Advanced Edition: 10 Pack (Named Users) License	7S06044CWW	7S06040GWW	7S06040HWW	7S06040JWW
Upgrade: VMware Mirage 5 to Horizon 8 Advanced (10 Pack Named Users) License	7S06044DWW	7S06040GWW	7S06040HWW	7S06040JWW
Upgrade: VMware Workspace to Horizon 8 Advanced: 10 Pack (Named Users) License	7S06044EWW	7S06040GWW	7S06040HWW	7S06040JWW
Upgrade: VMware Horizon 8 Advanced Add-on: 100 pack (Named Users) to VMware Horizon 8 Advanced Edition: 100 Pack (Named Users) License	7S06044FWW	7S06040LWW	7S06040MWW	7S06040NWW
Upgrade: VMware Mirage 5 to Horizon 8 Advanced (100 Pack Named Users) License	7S06044GWW	7S06040LWW	7S06040MWW	7S06040NWW
Upgrade: VMware Mirage for Physical to Horizon 8 Advanced (100 Pack Named Users) License	7S06044HWW	7S06040LWW	7S06040MWW	7S06040NWW
Upgrade: VMware Workspace to Horizon 8 Advanced: 100 Pack (Named Users) License	7S06044JWW	7S06040LWW	7S06040MWW	7S06040NWW
Upgrade: VMware Horizon 8 Advanced Add-on: 10 pack (CCU) to VMware Horizon 8 Advanced Edition: 10 Pack (CCU) License	7S06044KWW	7S060408WW	7S060409WW	7S06040AWW
Upgrade: VMware Horizon 8 Standard Add-on: 10 pack (CCU) to VMware Horizon 8 Advanced Edition: 10 Pack (CCU) License	7S06044LWW	7S060408WW	7S060409WW	7S06040AWW

VMware Horizon Enterprise Editions

Horizon 7 Enterprise Edition provides desktop and application delivery with closed-loop management and automation. Horizon 7 Enterprise Edition includes virtual storage, monitoring and analytics, automated provisioning, just-in-time desktop and application delivery, user environment management and Linux desktops.

Horizon Enterprise is available based on a per-named-user or a per-concurrent connection model:

- **Per Named User:** For virtual environments with staff that need dedicated access to a virtual machine throughout the day.
- **Per Concurrent Connection:** For virtual environments with a high number of shift workers where machines are shared between workers throughout the day (e.g. students, shift workers).

Table 13. VMware Horizon Enterprise Editions ordering information

Description	License	1 Year	3 Year	5 Year
VMware Horizon 8 Enterprise Add-on: 10 Pack (CCU). Does not include vSphere and vCenter License	7S06042BWW	7S06042CWW	7S06042DWW	7S06042EWW
VMware Horizon 8 Enterprise Add-on: 100 Pack (CCU). Does not include vSphere and vCenter License	7S06042FWW	7S06042GWW	7S06042HWW	7S06042JWW
VMware Horizon 8 Enterprise: 10 Pack (CCU) License	7S06042KWW	7S06042LWW	7S06042MWW	7S06042NWW
VMware Horizon 8 Enterprise: 100 Pack (CCU) License	7S06042PWW	7S06042QWW	7S06042RWW	7S06042SWW
VMware Horizon 8 Enterprise: 10 Pack (Named Users) License	7S06042TWW	7S06042UWW	7S06042VWW	7S06042WWW
VMware Horizon 8 Enterprise: 100 Pack (Named Users) License	7S06042XWW	7S06042YWW	7S06042ZWW	7S060430WW
VMware Horizon 8 Enterprise Add-on: 10 Pack (Named Users). Does not include vSphere and vCenter License	7S060431WW	7S060432WW	7S060433WW	7S060434WW
VMware Horizon 8 Enterprise Add-on: 100 Pack (Named Users). Does not include vSphere and vCenter License	7S060435WW	7S060436WW	7S060437WW	7S060438WW
Upgrade: VMware Horizon 8 Standard Add-on: 10 pack (CCU) to VMware Horizon 8 Enterprise Add-on: 10 Pack (CCU). Does not include vSphere and vCenter License	7S06044ZWW	7S06042CWW	7S06042DWW	7S06042EWW
Upgrade: VMware Horizon 8 Advanced Add-on to Horizon 8 Enterprise Add-on: 10 Pack (CCU). Does not include vSphere and vCenter License	7S060450WW	7S06042CWW	7S06042DWW	7S06042EWW
Upgrade: VMware Horizon 8 Standard Add-on: 100 pack (CCU) to VMware Horizon 8 Enterprise Add-on: 100 Pack (CCU). Does not include vSphere and vCenter License	7S060451WW	7S06042GWW	7S06042HWW	7S06042JWW
Upgrade: VMware Horizon 8 Advanced Add-on to Horizon 8 Enterprise Add-on: 100 Pack (CCU). Does not include vSphere and vCenter License	7S060452WW	7S06042GWW	7S06042HWW	7S06042JWW
Upgrade: VMware Horizon 8 Advanced (10 Pack CCU) to Horizon 8 Enterprise (10 Pack CCU) License	7S060453WW	7S06042LWW	7S06042MWW	7S06042NWW
Upgrade VMware Horizon for Linux to Horizon 8 Enterprise (10 Pack CCU) License	7S060454WW	7S06042LWW	7S06042MWW	7S06042NWW

Description	License	1 Year	3 Year	5 Year
Upgrade: VMware Horizon 8 Enterprise (10 Pack Named Users) to Horizon 8 Enterprise (10 Pack CCU) License	7S060455WW	7S06042LWW	7S06042MWW	7S06042NWW
Upgrade: VMware Horizon Standard (10 Pack CCU) to Horizon 8 Enterprise (10 Pack CCU) License	7S060456WW	7S06042LWW	7S06042MWW	7S06042NWW
Upgrade: VMware Horizon 8 Advanced Add-on: 10 pack (CCU) to VMware Horizon 8 Enterprise Edition: 10 Pack (CCU) License	7S060457WW	7S06042LWW	7S06042MWW	7S06042NWW
Upgrade: VMware View Add-on to Horizon 8 Enterprise (10 Pack CCU) License	7S060458WW	7S06042LWW	7S06042MWW	7S06042NWW
Upgrade: VMware Dynamic Environment Manager to Horizon 8 Enterprise: 10 Pack (CCU) License	7S060459WW	7S06042LWW	7S06042MWW	7S06042NWW
Upgrade: VMware App Volumes Advanced to Horizon 8 Enterprise Edition: 10 Pack (CCU) License	7S06045AWW	7S06042LWW	7S06042MWW	7S06042NWW
Upgrade: VMware App Volumes Enterprise to Horizon 8 Enterprise Edition: 10 Pack (CCU) License	7S06045BWW	7S06042LWW	7S06042MWW	7S06042NWW
Upgrade: VMware App Volumes Standard to Horizon 8 Enterprise Edition: 10 Pack (CCU) License	7S06045CWW	7S06042LWW	7S06042MWW	7S06042NWW
Upgrade: VMware Horizon Apps Standard, v8 to Horizon 8 Enterprise: 10 Pack (CCU) License	7S06045DWW	7S06042LWW	7S06042MWW	7S06042NWW
Upgrade: VMware Horizon Apps Advanced, v8 to Horizon 8 Enterprise: 10 Pack (CCU) License	7S06045EWW	7S06042LWW	7S06042MWW	7S06042NWW
Upgrade: VMware Horizon 8 Enterprise Add-on: 10 pack (CCU) to VMware Horizon 8 Enterprise Edition: 10 Pack (CCU) License	7S06045FWW	7S06042LWW	7S06042MWW	7S06042NWW
Upgrade: VMware Horizon 8 Enterprise (100 Pack Named Users) to Horizon 8 Enterprise (100 Pack CCU) License	7S06045GWW	7S06042QWW	7S06042RWW	7S06042SWW
Upgrade: VMware Horizon Standard (100 Pack CCU) to Horizon 8 Enterprise (100 Pack CCU) License	7S06045HWW	7S06042QWW	7S06042RWW	7S06042SWW
Upgrade VMware Horizon for Linux to Horizon 8 Enterprise (100 Pack CCU) License	7S06045JWW	7S06042QWW	7S06042RWW	7S06042SWW
Upgrade: VMware Horizon 8 Advanced (100 Pack CCU) to Horizon 8 Enterprise (100 Pack CCU) License	7S06045KWW	7S06042QWW	7S06042RWW	7S06042SWW
Upgrade: VMware View Add-on to Horizon 8 Enterprise (100 Pack CCU) License	7S06045LWW	7S06042QWW	7S06042RWW	7S06042SWW
Upgrade: VMware Dynamic Environment Manager to Horizon 8 Enterprise: 100 Pack (CCU) License	7S06045MWW	7S06042QWW	7S06042RWW	7S06042SWW

Description	License	1 Year	3 Year	5 Year
Upgrade: VMware Horizon Apps Advanced, v8 to Horizon 8 Enterprise: 100 Pack (CCU) License	7S06045NWW	7S06042QWW	7S06042RWW	7S06042SWW
Upgrade: VMware App Volumes Advanced to Horizon 8 Enterprise Edition: 100 Pack (CCU) License	7S06045PWW	7S06042QWW	7S06042RWW	7S06042SWW
Upgrade: VMware App Volumes Enterprise to Horizon 8 Enterprise Edition: 100 Pack (CCU) License	7S06045QWW	7S06042QWW	7S06042RWW	7S06042SWW
Upgrade: VMware App Volumes Standard to Horizon 8 Enterprise Edition: 100 Pack (CCU) License	7S06045RWW	7S06042QWW	7S06042RWW	7S06042SWW
Upgrade: VMware Horizon Apps Standard, v8 to Horizon 8 Enterprise: 100 Pack (CCU) License	7S06045SWW	7S06042QWW	7S06042RWW	7S06042SWW
Upgrade: VMware Horizon 8 Advanced Add-on: 100 pack (CCU) to VMware Horizon 8 Enterprise Edition: 100 Pack (CCU) License	7S06045TWW	7S06042QWW	7S06042RWW	7S06042SWW
Upgrade: VMware Horizon 8 Enterprise Add-on: 100 pack (CCU) to VMware Horizon 8 Enterprise Edition: 100 Pack (CCU) License	7S06045UWW	7S06042QWW	7S06042RWW	7S06042SWW
Upgrade: VMware Horizon 8 Advanced (10 Pack Named Users) to Horizon 8 Enterprise (10 Pack Named Users) License	7S06045VWW	7S06042UWW	7S06042VWW	7S06042WWW
Upgrade: VMware Horizon 8 Enterprise Add-on: 10 pack (Named Users) to VMware Horizon 8 Enterprise Edition: 10 Pack (Named Users) License	7S06045WWW	7S06042UWW	7S06042VWW	7S06042WWW
Upgrade: VMware App Volumes Standard to Horizon 8 Enterprise Edition: 10 Pack (Named Users) License	7S06045XWW	7S06042UWW	7S06042VWW	7S06042WWW
Upgrade: VMware App Volumes Enterprise to Horizon 8 Enterprise Edition: 10 Pack (Named Users) License	7S06045YWW	7S06042UWW	7S06042VWW	7S06042WWW
Upgrade: VMware App Volumes Advanced to Horizon 8 Enterprise Edition: 10 Pack (Named Users) License	7S06045ZWW	7S06042UWW	7S06042VWW	7S06042WWW
Upgrade: VMware Dynamic Environment Manager to Horizon 8 Enterprise: 10 Pack (Named Users) License	7S060460WW	7S06042UWW	7S06042VWW	7S06042WWW
Upgrade: VMware Horizon Apps Standard, v8 to Horizon 8 Enterprise: 10 Pack (Named Users) License	7S060461WW	7S06042UWW	7S06042VWW	7S06042WWW
Upgrade: VMware Horizon Apps Advanced, v8 to Horizon 8 Enterprise: 10 Pack (Named Users) License	7S060462WW	7S06042UWW	7S06042VWW	7S06042WWW
Upgrade: VMware Horizon 8 Advanced Add-on: 10 pack (Named Users) to VMware Horizon 8 Enterprise Edition: 10 Pack (Named Users) License	7S060463WW	7S06042UWW	7S06042VWW	7S06042WWW

Description	License	1 Year	3 Year	5 Year
Upgrade: VMware Horizon 8 Advanced (100 Pack Named Users) to Horizon 8 Enterprise (100 Pack Named Users) License	7S060464WW	7S06042YWW	7S06042ZWW	7S060430WW
Upgrade: VMware Dynamic Environment Manager to Horizon 8 Enterprise: 100 Pack (Named Users) License	7S060465WW	7S06042YWW	7S06042ZWW	7S060430WW
Upgrade: VMware Horizon 8 Advanced Add-on: 100 pack (Named Users) to VMware Horizon 8 Enterprise Edition: 100 Pack (Named Users) License	7S060466WW	7S06042YWW	7S06042ZWW	7S060430WW
Upgrade: VMware App Volumes Standard to Horizon 8 Enterprise Edition: 100 Pack (Named Users) License	7S060467WW	7S06042YWW	7S06042ZWW	7S060430WW
Upgrade: VMware App Volumes Advanced to Horizon 8 Enterprise Edition: 100 Pack (Named Users) License	7S060468WW	7S06042YWW	7S06042ZWW	7S060430WW
Upgrade: VMware App Volumes Enterprise to Horizon 8 Enterprise Edition: 100 Pack (Named Users) License	7S060469WW	7S06042YWW	7S06042ZWW	7S060430WW
Upgrade: VMware Horizon Apps Standard, v8 to Horizon 8 Enterprise: 100 Pack (Named Users) License	7S06046AWW	7S06042YWW	7S06042ZWW	7S060430WW
Upgrade: VMware Horizon Apps Advanced, v8 to Horizon 8 Enterprise: 100 Pack (Named Users) License	7S06046BWW	7S06042YWW	7S06042ZWW	7S060430WW
Upgrade: VMware Horizon 8 Enterprise Add-on: 100 pack (Named Users) to VMware Horizon 8 Enterprise Edition: 100 Pack (Named Users) License	7S06046CWW	7S06042YWW	7S06042ZWW	7S060430WW
Upgrade: VMware Horizon 8 Advanced Add-on to Horizon 8 Enterprise Add-on: 10 Pack (Named Users). Does not include vSphere and vCenter License	7S06046DWW	7S060432WW	7S060433WW	7S060434WW
Upgrade: VMware Horizon 8 Advanced Add-on to Horizon 8 Enterprise Add-on: 100 Pack (Named Users). Does not include vSphere and vCenter License	7S06046EWW	7S060436WW	7S060437WW	7S060438WW

VMware Horizon Apps

VMware Horizon Apps delivers virtualized Windows apps alongside SaaS apps and mobile apps, through a single consolidated workspace to end users. These RDS (Microsoft Remote Desktop Services)-published apps run securely in the data center and can all be accessed from one digital workspace from any device, anywhere.

Based on Horizon 7, Horizon Apps is offered in two editions—Standard and Advanced. Both provide reliable and secure published application delivery with tools and features that simplify management and provide a great user experience. Horizon Apps Advanced additionally streamlines app management with just-in time app delivery powered by VMware Instant Clone Technology.

Both editions of Horizon Apps are available based on a per-named-user or a per-concurrent connection model.

- **Per Named User:** For virtual environments with staff that need dedicated access to a virtual machine throughout the day.
- **Per Concurrent Connection:** For virtual environments with a high number of shift workers where machines are shared between workers throughout the day (e.g. students, shift workers).

Table 14. VMware Horizon Apps

Description	License	1 Year	3 Year	5 Year
VMware Horizon Apps Advanced, v8: 10 Pack (CCU) License	7S060415WW	7S060416WW	7S060417WW	7S060418WW
VMware Horizon Apps Advanced, v8: 100 Pack (CCU) License	7S060419WW	7S06041AWW	7S06041BWW	7S06041CWW
VMware Horizon Apps Advanced, v8: 10 Pack (Named User) License	7S06041DWW	7S06041EWW	7S06041FWW	7S06041GWW
VMware Horizon Apps Advanced, v8: 100 Pack (Named User) License	7S06041HWW	7S06041JWW	7S06041KWW	7S06041LWW
VMware Horizon Apps Standard, v8: 10 Pack (CCU) License	7S06041MWW	7S06041NWW	7S06041PWW	7S06041QWW
VMware Horizon Apps Standard, v8: 100 Pack (CCU) License	7S06041RWW	7S06041SWW	7S06041TWW	7S06041UWW
VMware Horizon Apps Standard, v8: 10 Pack (Named User) License	7S06041VWW	7S06041WWW	7S06041XWW	7S06041YWW
VMware Horizon Apps Standard, v8: 100 Pack (Named User) License	7S06041ZWW	7S060420WW	7S060421WW	7S060422WW
VMware Horizon Apps Standard, v8 : 100 Pack (Named User) for VMware HCI Solution Bundle, for OEM Sales only License	7S060423WW	7S060424WW	7S060425WW	7S060426WW
VMware Horizon Apps Standard, v8 : 10 Pack (Named User) for VMware HCI Solution Bundle, for OEM Sales only License	7S060427WW	7S060428WW	7S060429WW	7S06042AWW
Upgrade: Upgrade: VMware Horizon Apps Standard, v8: 10 Pack (CCU) to VMware Horizon Apps Advanced, v8: 10 Pack (CCU) License	7S06044MWW	7S060416WW	7S060417WW	7S060418WW
Upgrade: Upgrade: VMware App Volumes Standard to Horizon Apps Advanced, v8: 10 Pack (CCU) License	7S06044NWW	7S060416WW	7S060417WW	7S060418WW
Upgrade: VMware App Volumes Advanced to Horizon Apps Advanced, v8: 10 Pack (CCU) License	7S06044PWW	7S060416WW	7S060417WW	7S060418WW
Upgrade: Upgrade: VMware Horizon Apps Standard, v8: 100 Pack (CCU) to VMware Horizon Apps Advanced, v8: 100 Pack (CCU) License	7S06044QWW	7S06041AWW	7S06041BWW	7S06041CWW
Upgrade: VMware App Volumes Advanced to Horizon Apps Advanced, v8: 100 Pack (CCU) License	7S06044RWW	7S06041AWW	7S06041BWW	7S06041CWW
Upgrade: Upgrade: VMware App Volumes Standard to Horizon Apps Advanced, v8: 100 Pack (CCU) License	7S06044SWW	7S06041AWW	7S06041BWW	7S06041CWW

Description	License	1 Year	3 Year	5 Year
Upgrade: Upgrade: VMware App Volumes Standard to Horizon Apps Advanced, v8: 10 Pack (Named Users) License	7S06044TWW	7S06041EWW	7S06041FWW	7S06041GWW
Upgrade: VMware App Volumes Advanced to Horizon Apps Advanced, v8: 10 Pack (Named Users) License	7S06044UWW	7S06041EWW	7S06041FWW	7S06041GWW
Upgrade: Upgrade: VMware Horizon Apps Standard, v8: 10 Pack (Named User) to VMware Horizon Apps Advanced, v8: 10 Pack (Named User) License	7S06044VWW	7S06041EWW	7S06041FWW	7S06041GWW
Upgrade: Upgrade: VMware App Volumes Standard to Horizon Apps Advanced, v8: 100 Pack (Named Users) License	7S06044WWW	7S06041JWW	7S06041KWW	7S06041LWW
Upgrade: VMware App Volumes Advanced to Horizon Apps Advanced, v8: 100 Pack (Named Users) License	7S06044XWW	7S06041JWW	7S06041KWW	7S06041LWW
Upgrade: Upgrade: VMware Horizon Apps Standard, v8: 100 Pack (Named User) to VMware Horizon Apps Advanced, v8: 100 Pack (Named User) License	7S06044YWW	7S06041JWW	7S06041KWW	7S06041LWW

Other Horizon offerings

VMware Horizon 7 for Linux enables you to deliver, manage and access Linux virtual desktops without the need to license commercial operating systems. Horizon 7 for Linux provides full support for Linux desktops and single sign on access to office, 3D graphics and developer applications. Horizon 7 for Linux is ideal for software developers, CAD/CAM developers, government workers, cost sensitive deployments and organizations who want to take advantage of the cost savings, security and customizations available with Linux. You can get Horizon 7 for Linux as part of Horizon 7 Enterprise Edition.

VMware Horizon FLEX is a policy-based, containerized desktop solution that allows IT administrators to create, secure, and manage local desktops to meet the needs of workers with their own computers, road warriors, and Mac users in the enterprise

Table 15. Other Horizon offerings

Description	License	1 Year	3 Year	5 Year
VMware Horizon 8 for Linux: 10 Pack (CCU) License	7S060439WW	7S06043AWW	7S06043BWW	7S06043CWW
VMware Horizon 8 for Linux: 100 Pack (CCU) License	7S06043DWW	7S06043EWW	7S06043FWW	7S06043GWW

VMware vRealize

vRealize Suite is a hybrid cloud management platform that helps IT enable developers to quickly build applications in any cloud with secure and consistent operations. It provides developer-friendly infrastructure (supporting VMs and containers) and a common approach to hybrid and multi-cloud, supporting major public clouds such as Amazon Web Services, Azure, and Google Cloud Platform.

VMware vRealize Automation

VMware vRealize Automation accelerates the deployment and management of applications and compute services, thereby improving business agility and operational efficiency.

Table 16. VMware vRealize Automation ordering information

Description	License	1 Year	3 Year	5 Year
VMware vRealize Automation 8 Enterprise (25 OSI Pack)	7S060239WW	7S06023AWW	7S06023BWW	7S06023CWW
VMware vRealize Automation 8 Advanced (25 OSI Pack)	7S060235WW	7S060236WW	7S060237WW	7S060238WW
Upgrade: VMware vRealize Automation 8 Advanced (25 OSI) to VMware vRealize Suite 2019 Enterprise (Per PLU)	7S060318WW	7S06022YWW	7S06022ZWW	7S060230WW

VMware vRealize Log Insight

VMware vRealize Log Insight delivers real-time log management, with machine learning-based Intelligent Grouping, high-performance search and better troubleshooting across physical, virtual and cloud environments.

Table 17. VMware vRealize Log Insight

Description	License	1 Year	3 Year	5 Year
VMware vRealize Log Insight 8 per CPU	7S06022KWW	7S06022LWW	7S06022MWW	7S06022NWW
VMware vRealize Log Insight 8 (25 OSI Pack)	7S06022PWW	7S06022QWW	7S06022RWW	7S06022SWW
Upgrade: VMware vRealize Log Insight 8 (Per CPU) to VMware vRealize Suite 2019 Advanced (Per PLU)	7S060315WW	7S06022UWW	7S06022VWW	7S06022WWW
Upgrade: VMware vRealize Log Insight 8 (25 OSI) to VMware vRealize Suite 2019 Advanced (Per PLU)	7S060316WW	7S06022UWW	7S06022VWW	7S06022WWW
Upgrade: VMware vRealize Log Insight 8 (Per CPU) to VMware vRealize Suite 2019 Enterprise (Per PLU)	7S060319WW	7S06022YWW	7S06022ZWW	7S060230WW
Upgrade: VMware vRealize Log Insight 8 (25 OSI) to VMware vRealize Suite 2019 Enterprise (Per PLU)	7S06031AWW	7S06022YWW	7S06022ZWW	7S060230WW
Upgrade: VMware vRealize Log Insight 8 (Per CPU) to VMware vRealize Suite 2019 Standard (Per PLU)	7S06031JWW	7S060232WW	7S060233WW	7S060234WW

VMware vRealize Operations

This product has features around increased intelligent operations, policy-based automation and unified management:

- Unified Management across vSphere and non-vSphere domains
- Smart alerts that correlate multiple symptoms and provide recommendations Automated remediation of problems
- Customizable content including dashboards, views and reports, Proactive management via policies

- Predictive Capacity project modeling across virtual and physical stack Scale-out, resilient operations platform
- User and access control management SDKs for partners
- Domain-specific management packs

VMware vRealize Operations Standard

VMware vRealize Operations Standard is sold in 25 Virtual Machines packs. This edition of the vRealize Operations provides operations management for vSphere environments. It performs capacity optimization, performance analytics and policy management and provides customizable UIs and operations dashboards.

Table 18. VMware vRealize Operations Standard

Description	License	1 Year	3 Year	5 Year
VMware vRealize Operations 8 Standard (Per CPU)	7S06023ZWW	7S060240WW	7S060241WW	7S060242WW
VMware vRealize Operations 8 Standard (25 VM Pack)	7S060243WW	7S060244WW	7S060245WW	7S060246WW
Upgrade: VMware vRealize Operations 8 Standard (Per CPU) to VMware vRealize Suite 2019 Enterprise (Per PLU)	7S06031DWW	7S06022YWW	7S06022ZWW	7S060230WW
Upgrade: VMware vRealize Operations 8 Standard (25 VM Pack) to VMware vRealize Suite 2019 Enterprise (Per PLU)	7S06031EWW	7S06022YWW	7S06022ZWW	7S060230WW
Upgrade: VMware vRealize Operations 8 Standard - vSOM Entitlement (Per CPU) to VMware vRealize Suite 2019 Enterprise (Per PLU)	7S06031FWW	7S06022YWW	7S06022ZWW	7S060230WW
Upgrade: VMware vRealize Operations 8 Standard (Per CPU) to VMware vRealize Suite 2019 Standard (Per PLU)	7S06031LWW	7S060232WW	7S060233WW	7S060234WW
Upgrade: VMware vRealize Operations 8 Standard (25 VM Pack) to VMware vRealize Suite 2019 Standard (Per PLU)	7S06031MWW	7S060232WW	7S060233WW	7S060234WW
Upgrade: VMware vRealize Operations 8 Standard - vSOM Entitlement (Per CPU) to VMware vRealize Suite 2019 Standard (Per PLU)	7S06031NWW	7S060232WW	7S060233WW	7S060234WW
Upgrade: VMware vRealize Operations 8 Standard (Per CPU) to VMware vRealize Operations 8 Advanced (Per CPU)	7S06031QWW	7S06023EWW	7S06023FWW	7S06023GWW
Upgrade: VMware vRealize Operations 8 Standard (Per CPU) to VMware vRealize Operations 8 Enterprise (Per CPU)	7S06031RWW	7S06023SWW	7S06023TWW	7S06023UWW
Upgrade: VMware vRealize Operations 8 Standard (25 VM Pack) to vRealize Operations 8 Enterprise (25 OSI Pack)	7S06031TWW	7S06023WWW	7S06023XWW	7S06023YWW
Upgrade: VMware vRealize Operations 8 Standard (Per CPU) to VMware vRealize Suite 2019 Advanced (Per PLU)	7S060310WW	7S06022UWW	7S06022VWW	7S06022WWW

Description	License	1 Year	3 Year	5 Year
Upgrade: VMware vRealize Operations 8 Standard (25 VM Pack) to VMware vRealize Suite 2019 Advanced (Per PLU)	7S060311WW	7S06022UWW	7S06022VWW	7S06022WWW
Upgrade: VMware vRealize Operations 8 Standard - vSOM Entitlement (Per CPU) to VMware vRealize Suite 2019 Advanced (Per PLU)	7S060312WW	7S06022UWW	7S06022VWW	7S06022WWW

VMware vRealize Operations Advanced

VMware vRealize Operations Advanced is sold in 25 Operating System Instances packs. This edition of the vRealize Operations provides operations management across physical, virtual, and cloud infrastructures, supported by 3rd party management packs. It performs capacity optimization, performance analytics, policy management, dependency mapping, storage visibility and OS monitoring. It also provides customizable UIs, operations dashboards and a resilient platform.

Table 19. VMware vRealize Operations Advanced

Description	License	1 Year	3 Year	5 Year
VMware vRealize Operations 8 Advanced (Per CPU)	7S06023DWW	7S06023EWW	7S06023FWW	7S06023GWW
VMware vRealize Operations 8 Advanced (25 OSI Pack)	7S06023HWW	7S06023JWW	7S06023KWW	7S06023LWW
Upgrade: VMware vRealize Operations 8 Advanced (Per CPU) to VMware vRealize Suite 2019 Advanced (Per PLU)	7S060314WW	7S06022UWW	7S06022VWW	7S06022WWW
Upgrade: VMware vRealize Operations 8 Advanced (Per CPU) to VMware vRealize Suite 2019 Enterprise (Per PLU)	7S06031BWW	7S06022YWW	7S06022ZWW	7S060230WW
Upgrade: VMware vRealize Operations 8 Advanced (25 OSI) to VMware vRealize Suite 2019 Enterprise (Per PLU)	7S06031CWW	7S06022YWW	7S06022ZWW	7S060230WW
Upgrade: VMware vRealize Operations 8 Advanced (Per CPU) to VMware vRealize Suite 2019 Standard (Per PLU)	7S06031KWW	7S060232WW	7S060233WW	7S060234WW
Upgrade: VMware vRealize Operations 8 Advanced (25 OSI Pack) to vRealize Operations 8 Enterprise (25 OSI Pack)	7S06031SWW	7S06023WWW	7S06023XWW	7S06023YWW

VMware vRealize Operations Enterprise

VMware vRealize Operations Enterprise is sold in 25 Operating System Instances packs. This edition of the vRealize Operations provides operations management across physical, virtual, and cloud infrastructures and business-critical applications, supported by 3rd party management packs. It performs capacity optimization, performance analytics, policy management, dependency mapping, storage visibility, OS monitoring and application monitoring. It also provides customizable UIs, operations dashboards, a resilient platform and OS Regulatory compliance functionality.

Table 20. VMware vRealize Operations Enterprise

Description	License	1 Year	3 Year	5 Year
VMware vRealize Operations 8 Enterprise (Per CPU)	7S06023RWW	7S06023SWW	7S06023TWW	7S06023UWW
VMware vRealize Operations 8 Enterprise (25 OSI Pack)	7S06023VWW	7S06023WWW	7S06023XWW	7S06023YWW
Upgrade: VMware vRealize Operations 8 Enterprise (Per CPU) to VMware vRealize Suite 2019 Enterprise (Per PLU)	7S060317WW	7S06022YWW	7S06022ZWW	7S060230WW

VMware vRealize Operations Addons

VMware vRealize Operations Addons provide additional functionality for your environment.

Table 21. VMware vRealize Operations Addons

Description	License	1 Year	3 Year	5 Year
VMware vRealize Operations for Horizon: 10 Concurrent User Pack	7S060247WW	7S060248WW	7S060249WW	7S06024AWW
VMware vRealize Operations for Horizon: 100 Concurrent User Pack	7S06024BWW	7S06024CWW	7S06024DWW	7S06024EWW
VMware vRealize Operations for Horizon: 100 Concurrent User Pack	7S06024QWW	7S06024RWW	7S06024SWW	7S06024TWW
VMware vRealize Operations for Horizon: 10 Concurrent User Pack	7S06024UWW	7S06024VWW	7S06024WWW	7S06024XWW
VMware vRealize Business for Cloud 7 Advanced (Per CPU)	7S06024YWW	7S06024ZWW	7S060250WW	7S060251WW
VMware vRealize Business for Cloud 7 Advanced (25 OSI)	7S060252WW	7S060253WW	7S060254WW	7S060255WW
VMware vRealize Code Stream 2 (Per CPU)	7S060256WW	7S060257WW	7S060258WW	7S060259WW
VMware vRealize Code Stream 2 (Per OSI)	7S06025AWW	7S06025BWW	7S06025CWW	7S06025DWW
VMware Integrated OpenStack 6 Carrier Edition for 1 Processor	7S06024FWW	7S06024GWW	7S06024HWW	7S06024JWW
VMware Integrated OpenStack 6 Data Center Edition for 1 processor	7S06024KWW	7S06024MWW	7S06024NWW	7S06024PWW
VMware Integrated OpenStack 6 - Data Center Edition - Add-on (per CPU) for VMware vRealize Suite	7S06024LWW	7S06024MWW	7S06024NWW	7S06024PWW

VMware vRealize Suite

VMware vRealize Suite provides management stack for IT services on VMware vSphere, other hypervisors and external clouds such as VMware vCloud Air and Amazon Web Services, all with a unified management experience.

Table 22. VMware vRealize Suite

Description	License	1 Year	3 Year	5 Year
VMware vRealize Suite 2019 Advanced (Per PLU)	7S06022TWW	7S06022UWW	7S06022VWW	7S06022WWW
VMware vRealize Suite 2019 Enterprise (Per PLU)	7S06022XWW	7S06022YWW	7S06022ZWW	7S060230WW
VMware vRealize Suite 2019 Standard (Per PLU)	7S060231WW	7S060232WW	7S060233WW	7S060234WW
Upgrade: VMware vRealize Suite 2019 Standard (Per PLU) to VMware vRealize Suite 2019 Advanced (Per PLU)	7S060313WW	7S06022UWW	7S06022VWW	7S06022WWW
Upgrade: VMware vRealize Suite 2019 Advanced (Per PLU) to VMware vRealize Suite 2019 Enterprise (Per PLU)	7S06031GWW	7S06022YWW	7S06022ZWW	7S060230WW

VMware vCloud Suite

VMware vCloud Suite is an enterprise-ready private cloud software that brings together the industry-leading VMware vSphere hypervisor and VMware vRealize Suite cloud management platform. vRealize Suite provides developer-friendly infrastructure (supporting VMs and containers) and a common approach to hybrid and multicloud, supporting major public clouds, such as Amazon Web Services, Azure, and Google Cloud Platform.

Table 23. VMware vCloud Suite

Description	License	1 Year	3 Year	5 Year
VMware vCloud Suite 2019 Advanced	7S06019HWW	7S06019JWW	7S06019KWW	7S06019LWW
VMware vCloud Suite 2019 Enterprise	7S06019MWW	7S06019NWW	7S06019PWW	7S06019QWW
VMware vCloud Suite 2019 Standard	7S06019RWW	7S06019SWW	7S06019TWW	7S06019UWW

VMware User and Development Packs

These packs allow the administrator to personalize the experience of users across virtual, physical, and cloud-based Windows desktop environments.

Table 24. VMware User and Development Packs

Description	License	1 Year	3 Year	5 Year
VMware Dynamic Environment Manager: 10 Pack (CCU)	7S060215WW	7S060216WW	7S060217WW	7S060218WW
VMware Dynamic Environment Manager: 100 Pack (CCU)	7S060219WW	7S06021AWW	7S06021BWW	7S06021CWW
VMware Dynamic Environment Manager: 10 Pack (Named Users)	7S06021DWW	7S06021EWW	7S06021FWW	7S06021GWW
VMware Dynamic Environment Manager: 100 Pack (Named Users)	7S06021HWW	7S06021JWW	7S06021KWW	7S06021LWW
VMware ThinApp 5 Client Licenses 100 Pack	7S060223WW	7S060224WW	7S060225WW	7S060226WW
VMware ThinApp 5 Suite	7S060227WW	7S060228WW	7S060229WW	7S06022AWW

VMware NSX

Enable your virtual cloud network to connect and protect applications across your data center, multi-cloud, bare metal, and container infrastructure. VMware NSX Data Center delivers a complete L2-L7 networking and security virtualization platform — providing you with the agility, automation, and dramatic cost savings that come with a software-only solution.

Table 25. VMware NSX ordering information

Description	License	1 Year	3 Year	5 Year
VMware NSX Data Center Standard per Processor	7S0600J7WW	7S0600J8WW	7S0600J9WW	7S0600JAWW
VMware NSX Data Center Professional per Processor	7S0600JBWW	7S0600JCWW	7S0600JDWW	7S0600JEWW
VMware NSX Data Center Advanced per Processor	7S0600JFWW	7S0600JGWW	7S0600JHWW	7S0600JJWW
VMware NSX Data Center Enterprise Plus per Processor	7S0600JKWW	7S0600JLWW	7S0600JMWW	7S0600JNWW
NSX Data Center Acceleration Kit for 6 processors	7S0600JPWW	7S0600JQWW	7S0600JRWW	7S0600JSWW
VMware NSX Data Center Advanced for Desktop: 10 Pack (CCU)	7S0600JTWW	7S0600JUWW	7S0600JVWW	7S0600JWWW
VMware NSX Data Center Advanced for Desktop: 100 Pack (CCU)	7S0600JXWW	7S0600JYWW	7S0600JZWW	7S0600K0WW
VMware NSX Data Center Enterprise Plus for Desktop: 10 Pack (CCU)	7S0600K1WW	7S0600K2WW	7S0600K3WW	7S0600K4WW
VMware NSX Data Center Enterprise Plus for Desktop: 100 Pack (CCU)	7S0600K5WW	7S0600K6WW	7S0600K7WW	7S0600K8WW
VMware NSX Data Center for Remote Office Branch Office (25 VM)	7S0600K9WW	7S0600KAWW	7S0600KBWW	7S0600KCWW
VMware vRealize Network Insight Enterprise Add-on to VMware NSX Data Center Enterprise Plus (Per Processor)	7S0600KDWW	7S0600KEWW	7S0600KFWW	7S0600KGWW
VMware vRealize Network Insight Enterprise Add-on to VMware NSX Data Center Enterprise Plus for Desktop: 10 Pack (CCU)	7S0600KHWW	7S0600KJWW	7S0600KKWW	7S0600KLWW
VMware vRealize Network Insight Enterprise Add-on to VMware NSX Data Center Enterprise Plus for Desktop: 100 Pack (CCU)	7S0600KMWW	7S0600KNWW	7S0600KPWW	7S0600KQWW
Upgrade: VMware NSX Data Center Standard to NSX Data Center Professional per Processor	7S06030NWW	7S0600JCWW	7S0600JDWW	7S0600JEWW
Upgrade: VMware NSX Data Center Standard to NSX Data Center Advanced per Processor	7S06030PWW	7S0600JGWW	7S0600JHWW	7S0600JJWW
Upgrade: VMware NSX Data Center Professional to NSX Data Center Advanced per Processor	7S06030QWW	7S0600JGWW	7S0600JHWW	7S0600JJWW
Upgrade: VMware NSX Data Center Advanced and VMware vRealize Network Insight Advanced to VMware NSX Data Center Enterprise Plus per Processor	7S06030RWW	7S0600JLWW	7S0600JMWW	7S0600JNWW

Description	License	1 Year	3 Year	5 Year
Upgrade: VMware NSX Data Center Professional to NSX Data Center Enterprise Plus per Processor	7S06030SWW	7S0600JLWW	7S0600JMWW	7S0600JNWW
Upgrade: VMware NSX Enterprise per Processor to NSX Data Center Enterprise Plus per Processor	7S06030TWW	7S0600JLWW	7S0600JMWW	7S0600JNWW
Upgrade: VMware NSX Data Center Advanced to NSX Data Center Enterprise Plus per Processor	7S06030UWW	7S0600JLWW	7S0600JMWW	7S0600JNWW
Upgrade: VMware NSX Data Center Standard to NSX Data Center Enterprise Plus per Processor	7S06030VWW	7S0600JLWW	7S0600JMWW	7S0600JNWW
Upgrade: VMware NSX Enterprise for Desktop to NSX Data Center Enterprise Plus for Desktop: 10 pack (CCU)	7S06030WWW	7S0600K2WW	7S0600K3WW	7S0600K4WW
Upgrade: VMware NSX Data Center Advanced for Desktop to NSX Data Center Enterprise Plus for Desktop: 10 pack (CCU)	7S06030XWW	7S0600K2WW	7S0600K3WW	7S0600K4WW
Upgrade: VMware NSX Enterprise for Desktop to NSX Data Center Enterprise Plus for Desktop: 100 pack (CCU)	7S06030YWW	7S0600K6WW	7S0600K7WW	7S0600K8WW
Upgrade: VMware NSX Data Center Advanced for Desktop to NSX Data Center Enterprise Plus for Desktop: 100 pack (CCU)	7S06030ZWW	7S0600K6WW	7S0600K7WW	7S0600K8WW

VMware Cloud Foundation

VMware Cloud Foundation is an integrated software stack that bundles compute virtualization (VMware vSphere), storage virtualization (VMware vSAN), network virtualization (VMware NSX), and cloud management and monitoring (VMware vRealize Suite) into a single platform that can be deployed on premises as a private cloud or run as a service within a public cloud. Cloud Foundation helps to break down the traditional administrative silos in data centers, merging compute, storage, network provisioning, and cloud management to facilitate end-to-end support for application deployment.

Table 26. VMware Cloud Foundation ordering information

Description	License	1 Year	3 Year	5 Year
VMware Cloud Foundation 4 Starter (Per CPU)	7S0600TVWW	7S0600TWWW	7S0600TXWW	7S0600TYWW
VMware Cloud Foundation 4 Standard (Per CPU)	7S0600TMWW	7S0600TNWW	7S0600TPWW	7S0600TQWW
VMware Cloud Foundation 4 Standard for External Storage (Per CPU)	7S0600TRWW	7S0600TSWW	7S0600TTWW	7S0600TUWW
VMware Cloud Foundation 4 Enterprise (Per CPU)	7S0600STWW	7S0600SUWW	7S0600SVWW	7S0600SWWW
VMware Cloud Foundation 4 Enterprise for External Storage (Per CPU)	7S0600SXWW	7S0600SYWW	7S0600SZWW	7S0600T0WW
VMware Cloud Foundation 4 Advanced (Per CPU)	7S0600TZWW	7S0600U0WW	7S0600U1WW	7S0600U2WW

Description	License	1 Year	3 Year	5 Year
VMware Cloud Foundation 4 Advanced for External Storage (Per CPU)	7S0600U3WW	7S0600U4WW	7S0600U5WW	7S0600U6WW
VMware SDDC Manager 4 for vSAN (Per CPU)	7S0600T9WW	7S0600TAWW	7S0600TBWW	7S0600TCWW
VMware SDDC Manager 4 (Per CPU)	7S0600TDWW	7S0600TEWW	7S0600TFWW	7S0600TGWW
VMware SDDC Manager 4 for Desktop 10 pack (Per CCU)	7S0600T1WW	7S0600T2WW	7S0600T3WW	7S0600T4WW
VMware SDDC Manager 4 for Desktop 100 pack (Per CCU)	7S0600T5WW	7S0600T6WW	7S0600T7WW	7S0600T8WW
VMware Cloud Foundation for VDI: SDDC Manager, NSX DC ADV, and Horizon ENT 10 pack (Per CCU)	7S0600V1WW	7S0600V2WW	7S0600V3WW	7S0600V4WW
VMware Cloud Foundation for VDI: SDDC Manager, NSX DC ADV, and Horizon ENT 100 pack (Per CCU)	7S0600V5WW	7S0600V6WW	7S0600V7WW	7S0600V8WW
VMware Cloud Foundation for VDI: SDDC Manager and NSX DC ADV w/o Horizon ENT 10 pack (per CCU)	7S0600VZWW	7S0600W0WW	7S0600W1WW	7S0600W2WW
VMware Cloud Foundation for VDI: SDDC Manager and NSX DC ADV w/o Horizon ENT 100 pack (per CCU)	7S0600W3WW	7S0600W4WW	7S0600W5WW	7S0600W6WW
VMware Cloud Foundation for VDI: SDDC Manager and NSX DC ENT+ w/o Horizon ENT 10 pack (Per CCU)	7S0600WTWW	7S0600WUWW	7S0600WVWW	7S0600WVWW
VMware Cloud Foundation for VDI: SDDC Manager and NSX DC ADV and vSAN ADV w/o Horizon ENT 10 pack (Per CCU)	7S06039DWW	7S06039EWW	7S06039FWW	7S06039GWW
VMware Cloud Foundation for VDI: SDDC Manager and NSX DC ADV and vSAN ADV w/o Horizon ENT 100 pack (Per CCU)	7S06039HWW	7S06039JWW	7S06039KWW	7S06039LWW
VMware Cloud Foundation for VDI: SDDC Manager and NSX DC EPL and vSAN ENT w/o Horizon ENT 10 pack (Per CCU)	7S06039MWW	7S06039NWW	7S06039PWW	7S06039QWW
VMware Cloud Foundation for VDI: SDDC Manager and NSX DC EPL and vSAN ENT w/o Horizon ENT 100 pack (Per CCU)	7S06039RWW	7S06039SWW	7S06039TWW	7S06039UWW
Add on to VMware vSphere 7 to complete VMware Cloud Foundation 4 Advanced Stack (Per CPU)	7S0600U7WW	7S0600U8WW	7S0600U9WW	7S0600UAWW
Add on to VMware vSphere 7 to complete VMware Cloud Foundation 4 Advanced Stack for External Storage (Per CPU)	7S0600UBWW	7S0600UCWW	7S0600UDWW	7S0600UEWW
Add on to VMware vSphere 7 to complete VMware Cloud Foundation 4 Enterprise Stack (Per CPU)	7S0600UFWW	7S0600UGWW	7S0600UHWW	7S0600UJWW
Add on to VMware vSphere 7 to complete VMware Cloud Foundation 4 Enterprise Stack for External Storage (Per CPU)	7S0600UKWW	7S0600ULWW	7S0600UMWW	7S0600UNWW

Description	License	1 Year	3 Year	5 Year
Add on to VMware vSphere 7 to complete VMware Cloud Foundation 4 Standard Stack (Per CPU)	7S0600UPWW	7S0600UQWW	7S0600URWW	7S0600USWW
Add on to VMware vSphere 7 to complete VMware Cloud Foundation 4 Standard Stack for External Storage (Per CPU)	7S0600UTWW	7S0600UUWW	7S0600UVWW	7S0600UWWW
Add on to VMware vSphere 7 to complete VMware Cloud Foundation 4 Starter Stack (Per CPU)	7S0600UXWW	7S0600UYWW	7S0600UZWW	7S0600V0WW
Add on to VMware vSphere 7 to complete VMware Cloud Foundation 4 Advanced Stack (Per CPU)	7S0600U7WW	7S0600U8WW	7S0600U9WW	7S0600UAWW
Add on to (VMware vSphere 7 and VMware NSX) to complete VMware Cloud Foundation 4 Advanced Stack (Per CPU)	7S0600V9WW	7S0600VAWW	7S0600VBWW	7S0600VCWW
Add on to (VMware vSphere 7 and VMware NSX) to complete VMware Cloud Foundation 4 Advanced Stack for External Storage (Per CPU)	7S0600VDWW	7S0600VEWW	7S0600VFWW	7S0600VGWW
Add on to (VMware vSphere 7 and VMware NSX) to complete VMware Cloud Foundation 4 Enterprise Stack (Per CPU)	7S0600VHWW	7S0600VJWW	7S0600VKWW	7S0600VLWW
Add on to (VMware vSphere 7 and VMware NSX) to complete VMware Cloud Foundation 4 Enterprise Stack for External Storage (Per CPU)	7S0600VMWW	7S0600VNWW	7S0600VPWW	7S0600VQWW
Add on to (VMware vSphere 7 and VMware NSX) to complete VMware Cloud Foundation 4 Standard Stack (Per CPU)	7S0600VRWW	7S0600VSWW	7S0600VTWW	7S0600VUWW
Add on to (VMware vSphere 7 and VMware NSX) to complete VMware Cloud Foundation 4 Starter Stack (Per CPU)	7S0600VWWW	7S0600VWWW	7S0600VXWW	7S0600VYWW
Add on to (VMware vSphere 7 and VMware NSX) to complete VMware Cloud Foundation 4 Advanced Stack (Per CPU)	7S0600V9WW	7S0600VAWW	7S0600VBWW	7S0600VCWW
Add on to (VMware vSphere 7 and vRealize Suite 2019) to complete VMware Cloud Foundation 4 Advanced Stack (Per CPU)	7S0600W7WW	7S0600W8WW	7S0600W9WW	7S0600WAWW
Add on to (VMware vSphere 7 and vRealize Suite 2019) to complete VMware Cloud Foundation 4 Advanced Stack for External Storage (Per CPU)	7S0600WBWW	7S0600WCWW	7S0600WDWW	7S0600WEWW
Add on to (VMware vSphere 7 and vRealize Suite 2019) to complete VMware Cloud Foundation 4 Enterprise Stack (Per CPU)	7S0600WFWW	7S0600WGWW	7S0600WHWW	7S0600WJWW
Add on to (VMware vSphere 7 and vRealize Suite 2019) to complete VMware Cloud Foundation 4 Enterprise Stack for External Storage (Per CPU)	7S0600WKWW	7S0600WLWW	7S0600WMWW	7S0600WNWW

Description	License	1 Year	3 Year	5 Year
Add on to (VMware vSphere 7 and vRealize Suite 2019) to complete VMware Cloud Foundation 4 Starter Stack (Per CPU)	7S0600WPWW	7S0600WQWW	7S0600WRWW	7S0600WSWW
Add on to (VMware vSphere 7, VMware NSX, and vRealize Suite 2019) to complete VMware Cloud Foundation 4 Advanced Stack (Per CPU)	7S0600X1WW	7S0600X2WW	7S0600X3WW	7S0600X4WW
Add on to (VMware vSphere 7, VMware NSX, and vRealize Suite 2019) to complete VMware Cloud Foundation 4 Advanced Stack for External Storage (Per CPU)	7S0600X5WW	7S0600X6WW	7S0600X7WW	7S0600X8WW
Add on to (VMware vSphere 7, VMware NSX, and vRealize Suite 2019) to complete VMware Cloud Foundation 4 Enterprise Stack (Per CPU)	7S0600XAWW	7S0600X9WW	7S0600XBWW	7S0600XCWW
Add on to (VMware vSphere 7, VMware NSX, and vRealize Suite 2019) to complete VMware Cloud Foundation 4 Enterprise Stack for External Storage (Per CPU)	7S0600XDWW	7S0600XEWW	7S0600XFWW	7S0600XGWW
Add on to (VMware vSphere 7, VMware NSX, and vRealize Suite 2019) to complete VMware Cloud Foundation 4 Starter Stack (Per CPU)	7S0600XHWW	7S0600XJWW	7S0600XKWW	7S0600XLWW

Services

Lenovo provides an array of services focused on fulfillment, hardware compatibility and support.

Fulfillment

License activation of the VMware products purchased from Lenovo is fulfilled using Lenovo Features on Demand (FoD) website. An authorization code with instructions for activating the feature or license will be mailed to the person provided as contact in the purchase order. The authorization code is a 22-character alphanumeric string that is the proof of purchase and entitles you to upgrade or activate the VMware product that you purchased.

At the FoD website, you can generate FoD activation keys from FoD authorization codes, retrieve authorization codes and activation keys that you received, reassign keys to new hardware (for example, in case of hardware replacement), and obtain 90-day trial keys to try out new capabilities.

For more information and to register for the FoD website, visit the FoD website, <https://fod.lenovo.com>

Server Compatibility

The Lenovo Server Operating System Interoperability Guide (OSIG) is a comprehensive source of information about operating system compatibility with Lenovo servers. It includes servers in the ThinkSystem, ThinkAgile, System x, ThinkServer, NeXtScale, Flex System and BladeCenter product families and covers servers that are currently supported by Lenovo under warranty.

To use the OSIG application, go to <http://lenovopress.com/osig>

Use the dropdown menus to filter and fine tune your search. In each of the search results, the support statement column contains clickable links that opens a popup window with details about the support.

Option Compatibility

The ServerProven program validates selected products for compatibility with ThinkSystem, System x, BladeCenter and Flex System servers. Through the ServerProven Program, Lenovo works with industry leaders to test their equipment with Lenovo products.

To search the ServerProven list, go to <http://www.lenovo.com/us/en/serverproven>

For more details, click on the Lenovo product. For compatibility with OS, click on the green + button to expand the section.

L1-L2 Support

VMware software from Lenovo includes the option of 1, 3, or 5 years of 24x7 unlimited global support and subscription services. With this support, customers receive installation, configuration and troubleshooting assistance. The Lenovo support team provides L1 and L2 support for all VMware solutions purchased from Lenovo - there is no need to call a third party. This ensures a better level of service and faster resolution. Lenovo does extensive testing on the interoperability of the software and the compatibility with the rest of the system.

Lenovo Data Center support: <https://datacentersupport.lenovo.com/>

Systems Management

Lenovo XClarity Integrator offerings for VMware provides IT administrators with the ability to integrate the management features of Lenovo XClarity Administrator with VMware vCenter and VMware vRealize solutions. Lenovo XClarity Administrator is a centralized resource management solution that reduces complexity, speeds up response, and enhances the availability of Lenovo ThinkSystem infrastructure and ThinkAgile solutions. For more information on the XClarity family of software tools, visit <https://www.lenovo.com/us/en/data-center/software/management/>

Lenovo XClarity Integrator extends the virtualization management capabilities of VMware with Lenovo hardware management functionality, providing affordable foundational, basic management of physical and virtual environments to reduce the time and effort required for routine system administration.

Lenovo XClarity Integrator integrates XClarity Administrator into VMware software, providing the functionality you need to manage Lenovo infrastructure right in the console of VMware software. Lenovo offers XClarity Integrators for VMware vCenter, VMware vRealize Orchestrator and VMware vRealize Log Insight.

XClarity integrated with vRealize and VMware vCenter management provides the following benefits:

- A single pane of glass management for virtualization management, workflow provisioning, and Lenovo server infrastructure
- Automates deployment and streamlines management reducing deployment time by 48%
- Deep VMware integration enables more precise insight and control into all layers than with other systems

For more information, please refer to the Lenovo XClarity Administrator Product Guide: <https://lenovopress.com/tips1200-lenovo-xclarity-administrator>

For more information about Lenovo XClarity Integrator for VMware and for links to online documentation, see the following web page: <https://support.lenovo.com/us/en/documents/lnvo-vmware>

Lenovo XClarity Integrator for VMware vCenter

The Lenovo XClarity Integrator for VMware vCenter provides the following features and benefits:

- Extends Lenovo XClarity Administrator features to the virtualization management console
- Enables management of legacy infrastructure from the virtualization management console
- Reduces workload downtime by dynamically triggering workload migration in clustered environments during rolling server reboots or firmware updates, and predicted hardware failures

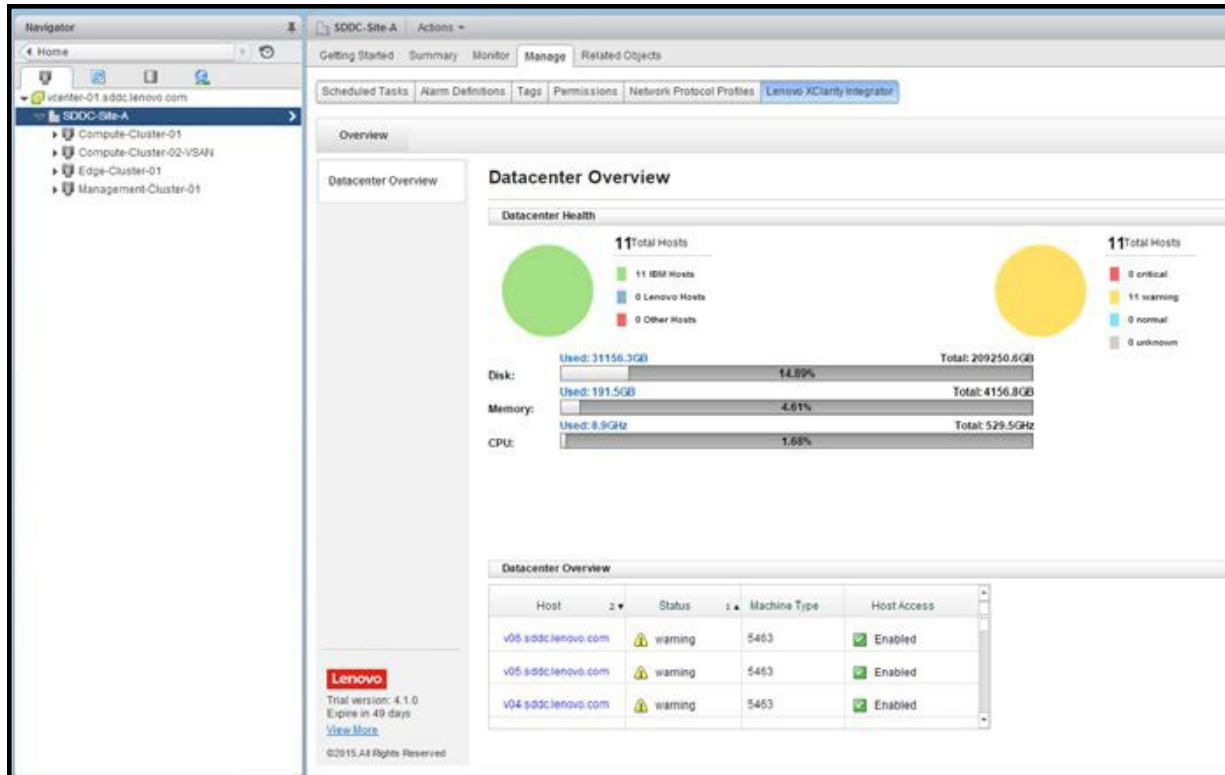


Figure 1. Lenovo XClarity Integrator for VMware vCenter

Lenovo XClarity Integrator for VMware vRealize Orchestrator

The Lenovo XClarity Integrator for VMware vRealize Orchestrator provides IT administrators with the ability to coordinate physical server provisioning features of Lenovo XClarity Pro with broader vRealize Orchestrator workflows. Lenovo XClarity Integrator for VMware vRealize Orchestrator provides a library of simple yet robust and customizable workflow routines and actions designed to automate complex, repetitive IT infrastructure tasks such as system discovery and configuration, hypervisor installation, and addition of new hosts to vCenter.

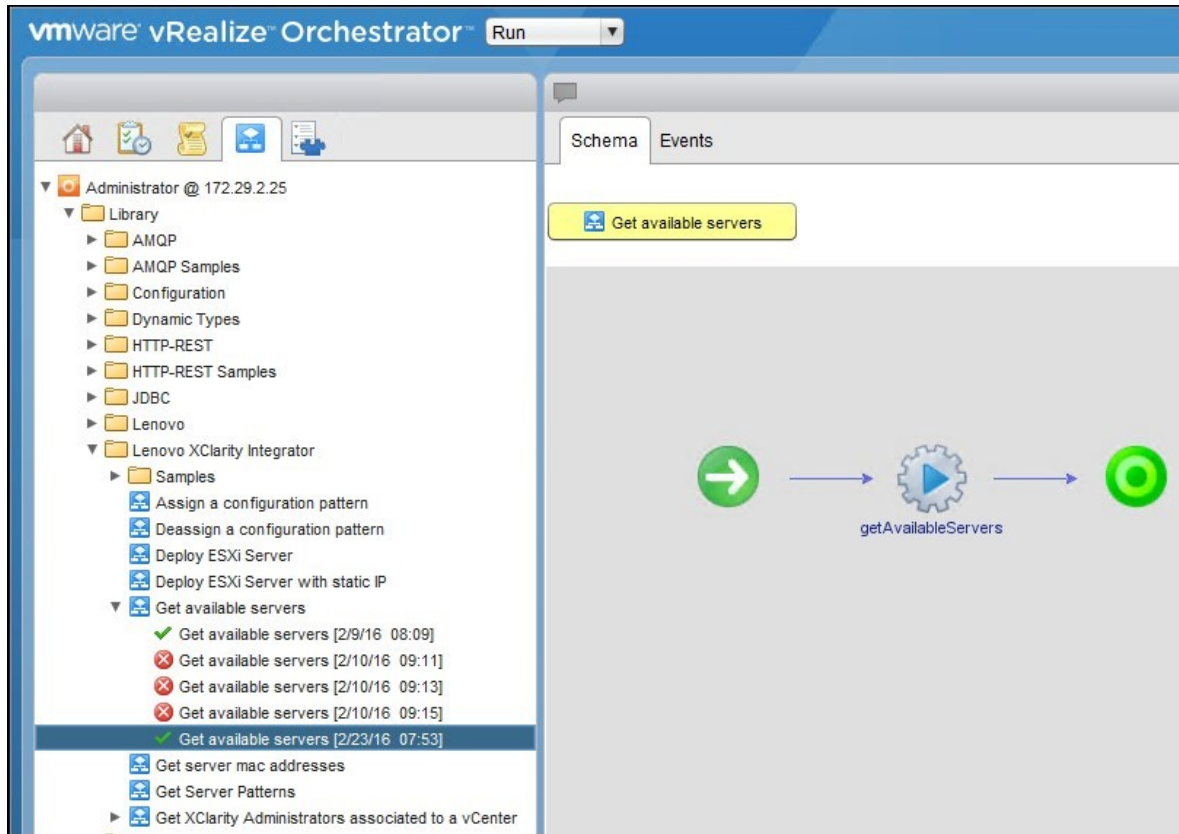


Figure 2. Lenovo XClarity Integrator for VMware vRealize Orchestrator

Lenovo XClarity Integrator for VMware vRealize Log Insight

The Lenovo XClarity Administrator Content Pack for VMware vRealize Log Insight simplifies the collection and forwarding of Lenovo XClarity Administrator logs to VMware vRealize Log Insight for powerful processing and analytics, and displaying insightful information in an intuitive format.

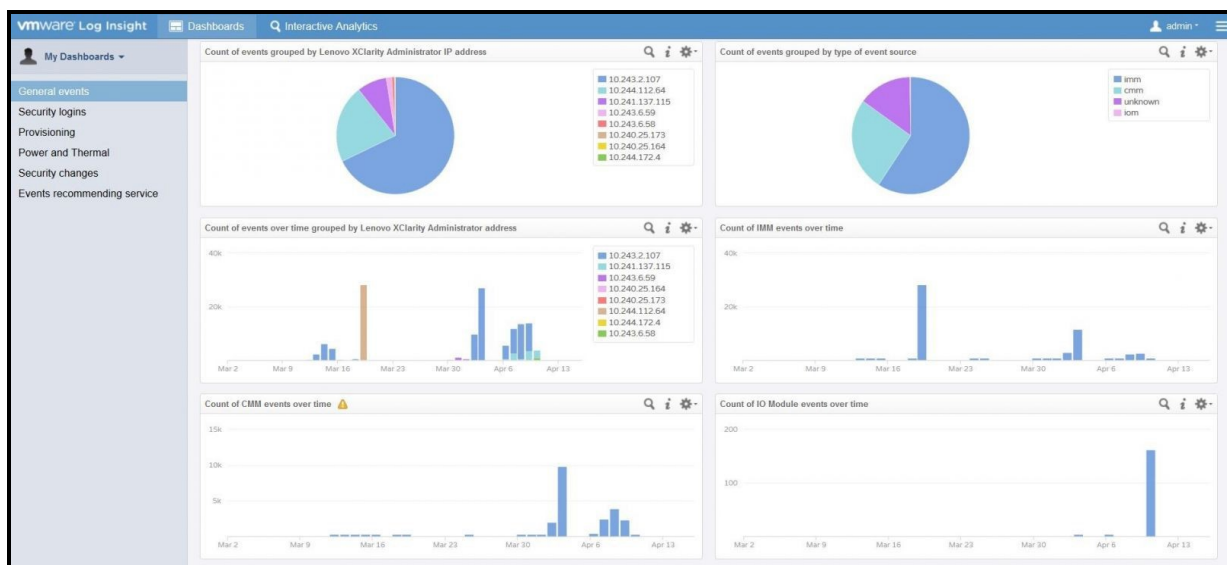


Figure 3. Lenovo XClarity Integrator for VMware vRealize Log Insight

The VMs for VMware vCenter, vRealize Orchestrator, Lenovo XClarity Administrator and Lenovo XClarity Administrator Integrator should have access to the management network used for managing servers, storage and networking.

Lenovo XClarity Integrator for VMware vRealize Automation

Lenovo XClarity Integrator for vRealize Automation provides cloud administrators with pre-built, reusable vRealize service blueprints for end-to-end infrastructure provisioning and management. XClarity blueprints enable you to deliver hosts, clusters, and virtual resource pools on demand, as a service. Well-coordinated automation of complex, repetitive tasks help you put more focus on innovation, spend less time on infrastructure, and compress application development times.

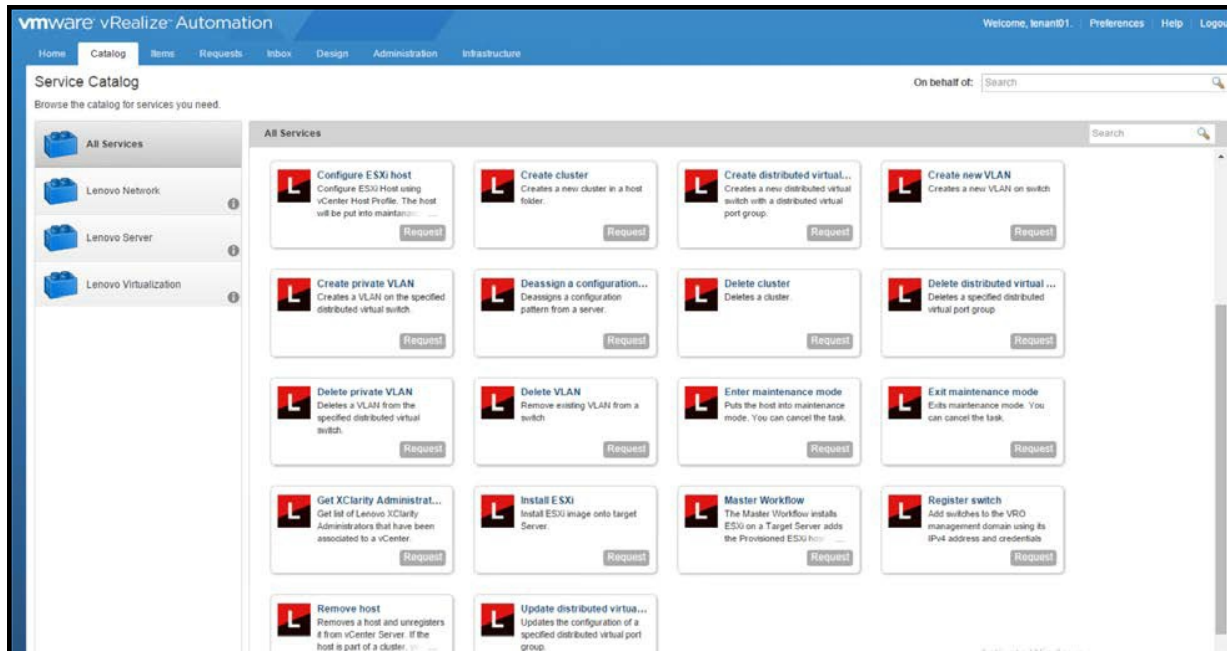


Figure 4. Lenovo XClarity Integrator for VMware vRealize Automation

Firmware and Drivers

The [Lenovo OS Support Center for VMware](#) web page provides quick and easy access to supported firmware and drivers for VMware. Lenovo maintains this repository of all qualified drivers with links to firmware and utilities qualified in conjunction with these drivers.

Custom Image

The Lenovo VMware ESXi custom image is tested across Lenovo's server and adapter portfolio with the same ServerProven® support guarantee as VMware's base release. The image enables support of Lenovo's tools, including ToolCenter that give the customer the ability to flash server firmware such as: UEFI, XCC, and vendor firmware for supported IO adapters. The image includes the latest drivers that align with VMware's release schedule. These updated drivers support Lenovo's portfolio.

For additional information on VMware customized images and download links, visit: https://download.lenovo.com/servers_pdf/customized_image_reference_guide.pdf

VUM Repository

Lenovo VMware Update Manager (VUM) Repository is a one-stop repository that provides access to Lenovo developed bundles along with device drivers that are part of the Lenovo Customized VMware images.

The Lenovo VUM Repository is at <https://vmware.lenovo.com/content/>

These bundles and associated VIBs (vSphere Installation Bundles) can be used with VMware applications and tools like VMware Update Manager (VUM), ESXCLI & PowerCLI. To learn more about these tools, refer to the VMware documentation.

VMware Solutions from Lenovo

Lenovo offers a broad range of VMware based solutions in varying levels of integration to meet different customer requirements and business needs. Solutions range from the turnkey factory-integrated, pre-configured ready-to-go Lenovo ThinkAgile VX series of appliances to build-your-own Engineered Solutions based on Lenovo's proven reference architecture and everything in between.

ThinkAgile VX Appliance

Lenovo ThinkAgile VX Series appliances are designed to help you simplify IT infrastructure, reduce costs, and accelerate time to value. These offerings are factory-integrated, pre-configured ready-to-go appliances and are based on Lenovo ThinkSystem servers and VMware vSAN Hyper-Converged Infrastructure (HCI) software. VMware offers a unique, software-defined approach to hyper convergence, leveraging the hypervisor to deliver compute, storage and management in a tightly integrated software stack. If you have an existing VMware environment, VX Series can integrate into it easily.

Key attributes include:

- Only VMware certified components
- Firmware controlled
- Lifecycle managed
- Single Lenovo point of support

ThinkAgile VX Series comes in a wide range of platforms and provides the flexibility to configure the system you need to meet any use-case. Both all-flash and hybrid platforms are supported.

- VX-1000 series – General-purpose 1U 1-node single-socket platform for small businesses or remote sites.

- VX 2000 Series—General-purpose 1U 1-node platform optimized small and medium businesses.
- VX 3000 Series—General-purpose 1U and 2U 1-node platform and 2U 4-node platform optimized for compute-heavy applications, such as VDI. The VX3520-G 2U 1-node platform is available with GPU hardware for accelerating graphics-intensive VDI deployments.
- VX 5000 Series—Storage-dense 2U 1-node platform optimized for long-term, high-capacity storage requirements
- VX 7000 Series—2U 1-node platform optimized for the highest-performance workloads, such as databases and collaboration.

For more information, refer to the ThinkAgile VX Series data sheet:

<https://lenovopress.com/datasheet/ds0023-lenovo-thinkagile-vx-series>

Lenovo ThinkAgile VX Series appliances include Lenovo ThinkAgile Advantage, a unique Lenovo Service that helps to ensure your systems are up and running quickly and easily. Lenovo Services will set up and configure your new solution and provide any training needed to get the system operational. Lenovo ThinkAgile Advantage includes a direct phone line to a team of experts who support only ThinkAgile solutions. The experts will rapidly diagnose any hardware or software issues and remain as your single-point-of contact throughout the entire support process.

ThinkAgile VX Certified Node

Lenovo ThinkAgile VX Certified Nodes allow customers to purchase VMware-certified hardware from Lenovo that does not include the software licensing or deployment services bundled in. ThinkAgile VX Certified Nodes include VMware software preloaded at the factory. Hardware firmware, drivers, and software updates are tested for interoperability and release with the product. ThinkAgile Certified Nodes are assigned Lenovo part numbers for ease of ordering. Lenovo ThinkAgile VX Series Certified Nodes include Lenovo ThinkAgile Advantage but customers have the flexibility of calling VMware directly for software support in cases where the software licenses are purchased from VMware.

Key attributes include:

- Only VMware certified components
- Firmware controlled
- Lifecycle managed
- Requires specialized IT skills
- Single point of contact

Lenovo ThinkAgile VX with VCF

Lenovo VMware Cloud Foundation ReadyNodes bring together VMware's vSphere, vSan and NSX virtualization into a natively integrated stack that can be deployed on premise or run as a service from the public cloud. Lenovo VMware Cloud Foundation ReadyNodes provide a simple path to hybrid cloud through an integrated software platform that is the foundation for both private and public cloud environments.

VMware Cloud Foundation Overview:

<https://docs.vmware.com/en/VMware-Cloud-Foundation/2.1.3/vcf-21-ovdeploy-guide.pdf>

VMware Cloud Foundation FAQ:

<https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/datasheet/products/vmware-cloud-foundation-faq.pdf>

Lenovo vSAN ReadyNodes

Lenovo vSAN ReadyNodes offer pre-tested configurations for faster implementation.

Key attributes include:

- Defined Configurations
- No firmware control
- Do your own lifecycle management
- Requires specialized IT skills
- Multiple support organizations for hardware and software

Lenovo vSAN ReadyNodes are Lenovo systems that have been pre-configured, tested and certified for VMware Hyper-Converged Infrastructure Software. Lenovo vSan ReadyNode is optimally configured for vSAN with the required amount of CPU, memory, network, I/O controllers and storage (SSDs, HDDs or flash devices). With Lenovo vSAN ReadyNodes you can rapidly deploy pre-engineered, tested and scalable storage to meet growing performance and capacity needs. Lenovo vSAN ReadyNodes are delivered in a range of all-flash and hybrid nodes to meet a broad array of workload, performance, and budget needs.

List of Lenovo vSan ReadyNodes:

<http://https://datacentersupport.lenovo.com/us/en/solutions/ht505293>

vSan Hardware Quick Reference Guide from VMware:

https://www.vmware.com/resources/compatibility/pdf/vi_vsan_profile.pdf

Engineered Solutions

For customers that prefer to build their own, Lenovo provides Engineered Solutions to speed deployment, optimize performance and ensure scalability of industry-leading enterprise applications on Lenovo hardware infrastructure. Lenovo Engineered Solutions are a range of pre-configured, tested, and validated best practice configurations, system-level appliances, rack-based appliances, and professional services offerings designed to reduce TCO, risk, and complexity. Guidance is provided in reference architectures, configuration guides, and solution guides.

Lenovo Engineered Solutions for VMware offerings include:

- Lenovo Cloud Validated Design for VMware Software Defined Data Center:
 - Reference architecture: <https://lenovopress.com/lp0661>
- Lenovo Validated Design for VMware vCloud Suite with ThinkSystem Servers
 - Reference architecture: <https://lenovopress.com/lp0660>
- Lenovo Client Virtualization (LCV) with ThinkSystem Servers:
 - Reference architecture: <https://lenovopress.com/lp0756>
- Lenovo Solutions for VMware Horizon
 - Solution Brief: <https://en.resources.lenovo.com/solution-brief-documents/lenovo-client-virtualization-solutions-for-vmware-horizon>
- Lenovo Client Virtualization Validated Design for VMware Horizon with VMware vSAN
 - Reference architecture: <https://lenovopress.com/lp0663>
- Lenovo Client Virtualization Validated Design for VMware Horizon on ThinkAgile HX:
 - Reference architecture: <https://lenovopress.com/lp0665>
 - Design brief: <https://en.resources.lenovo.com/solution-brief-documents/lenovo-validated-designs-for-thinkagile-hx-appliances>

Related publications and links

For more information, see these resources:

- VMware compatibility guide:
<https://www.vmware.com/resources/compatibility/search.php>
- VMware Cloud Foundation FAQ
<https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/datasheet/products/vmware-cloud-foundation-faq.pdf>
- Firmware/Drivers for Lenovo ThinkSystem and System x:
<https://support.lenovo.com/us/en/solutions/ht506028>
- Lenovo Repository for VMware Update Manager (VUM):
<https://vmware.lenovo.com/content/>
- Lenovo OS Interoperability Guide:
<https://lenovopress.com/osig>
- Lenovo Server Proven Compatibility:
<https://www.lenovo.com/us/en/serverproven>
- Lenovo vSAN Certified Devices:
<https://datacentersupport.lenovo.com/solutions/HT505293>

Related product families

Product families related to this document are the following:

- [VMware vSphere](#)
- [VMware Alliance](#)

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