



VMware vSphere Foundation

Specific Program Documentation (“SPD”)

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Program Name: *VMware vSphere Foundation (VVF)*

1. DEFINITIONS.

All terms defined in the Broadcom Software Glossary located at legaldocs.broadcom.com apply to this SPD unless specified herein.

“**BIOS**” means the Basic Input Output System, a set of routines that boots the operating system and sets up the hardware of the Processor.

“**Cloud Services**” means computing infrastructure and platform services (such as compute resources, storage capabilities, databases or virtual machines and other computing infrastructure and platforms services) that a third party makes available for consumption by customers.

“**Cluster**” is a software grouping of Servers running vSphere and/or vSAN for the purpose of resource sharing.

“**ClusterClass**” means a collection of resources that define a Kubernetes cluster topology and configuration.

“**Core**” means a single physical computational unit of the Processor.

“**Instance**” means a single installation of the Software on a physical server or Virtual Machine.

“**Internally Developed Application**” means a computer application that: i) Customer has created or developed for use by third parties as ancillary to one of Customer’s products or services, ii) is deployed on Software but the third party users cannot access the Software or benefit from the Software’s features and functionalities directly, iii) is not ancillary to or a part of a product or services that directly or indirectly is related to, or competitive with, the features or functionalities of the Software (including the management, delivery or hosting thereof), and iv) is unrelated to the internal use of the third party users. Examples of Internally Developed Applications include a financial institution building an application for its retail banking customers to obtain information about their bank accounts, a grocery chain building an application that operates their in-store point of sale machines, an airline company building an application that operates the self-check in kiosks in airports etc.

“**iSCSI Support**” means using the vSAN datastore as an iSCSI target to present storage to a Server not in the Cluster running vSAN.

“**Processor**” means a single, physical chip that houses at least one Core that can execute computer programs.

“**Server**” means a hardware system capable of running the server software. A hardware partition or blade is considered a separate hardware system.

“**Standard Packages**” means optional open source packages available independently for use with a given Tanzu Kubernetes release.

“**TiB**” means a unit of physical storage capacity that is equal to 2⁴⁰ bytes.

“**Virtual Machine**” means a software container that can run its own operating system and execute applications like a physical machine.

“**vSphere IaaS Control Plane**” means those components that support or form part of the features and capabilities for running containerized applications in vSphere including but not limited to the Supervisor, the TKG Service, Tanzu Kubernetes releases (Tkr), Standard Packages, and associated CLI Plugins.

2. USE RIGHTS AND LIMITATIONS.

License Metrics

- VMware vSphere Foundation (“VVF”) is subscription software licensed on a per Core license metric with a minimum licensing requirement of 16 Cores per Processor.
- Each Core on the Server where Software is installed must be licensed, including Cores deactivated by the BIOS. The required number of Core licenses equals the number of Cores on the Server, subject to the minimum of 16 Core licenses per Processor.
- VVF is sold as a single product; the integrated components and capabilities can only be utilized on the same physical Cores where the vSphere in VVF Core license is deployed.
- Customer may use VVF on a Server with up to the number of Cores for which Customer has paid the applicable license fees.
- Customer may use its license to VVF as a Migration License (as defined in the Agreement) by using VVF’s embedded evaluation mode feature for a maximum period of what VVF’s said feature then allows.

Use Rights and Limitations

- **Component Specific License Notes.** The following table describes additional component specific license entitlement rights and limitations of VVF:

#	VVF Component	Metric Entitlement	Entitlement Details
1	Aria Suite Standard	1 Core	Aria Suite Standard entitlement contained in VVF can only be used to monitor VVF Cores.
2	vSAN	0.25 TiB	Customer is entitled to 0.25 TiB of vSAN capacity for each Core licensed for VVF. vSAN can only be aggregated and utilized across Cores where the vSphere in VVF is deployed.
3	vCenter Server	1 Instance	vCenter Server may be used to provide centralized management capabilities to any licensed VMware by Broadcom infrastructure environments with an active subscription to Support and Subscription Services.

- **iSCSI Support.** Customer may only use the iSCSI Support feature in vSAN with physical, non-virtualized Servers. The iSCSI Support feature supports Microsoft clustering with shared disks. Initiators can be either from virtual machines or physical servers. For guest initiators in virtual machines, those virtual machines can be residing on:
 - The same vSAN Cluster that provides this iSCSI Support feature; or
 - An external vSAN or vSphere Cluster.

The iSCSI Support is limited to a maximum of 128 sessions per Server, a maximum of 128 targets per Cluster, and a maximum of 1024 logical unit numbers (LUNs) per cluster. Raw device mapping (RDMS) for Microsoft Windows Server Failover Clustering (WSFC) using iSCSI target service is not officially supported on vSAN.

- **vSAN Cluster Expansion or Renewal Exception with VVF.** If the total number of vSAN TiB license entitlements from VVF and/or vSAN subscriptions purchased for the hosts added to, or renewed in, the vSAN Cluster using license entitlements from legacy offers licensed on a per CPU or per Core license metric are greater than, or equal to, the total number of Processors in the vSAN Cluster, Customer has permission to use any excess entitlements from the included vSAN capacity (0.25 TiB per 1 Core) in VVF subscription and/or vSAN subscription purchase to apply to the entire vSAN Cluster, consisting of existing and new or renewed hosts, for the sole reason to enable vSAN Cluster expansion or renewal. At the time that the legacy offers' Support and Subscription agreement expire, Customer must purchase VVF and/or vSAN subscriptions and apply the vSAN license entitlements for the hosts in the vSAN Cluster that were previously using the license entitlements from the legacy offers.
- **Restrictions on Use with Public Cloud Services.** Customer must not (and must not allow Customer's Third-Party Agents to) use or deploy the Software on any Cloud Services.
- **Hosting Rights and Restrictions.** Customer may use the Software to deliver its Internally Developed Application(s) to a third party via an internal or external network. Except as expressly provided in this paragraph, the use of the Software for any other types of hosting or for the benefit of any third party in any manner is strictly prohibited.
- **vSphere IaaS Control Plane Lifecycle Policy**
 - vSphere IaaS Control Plane components have a shorter support [life cycle period](#) as compared to the lifecycle period generally applicable to the VVF Software.
 - Tanzu Kubernetes releases work with specific versions of the vSphere IaaS Control Plane components (e.g. the TKG Service, Supervisor) and vCenter. Additional interoperability conditions and upgrade path may be specified in Tkr release notes.
 - Broadcom will support clusters that use images created using the vSphere Tanzu Kubernetes Grid Image Builder when the same issue can be reproduced using a supported Tanzu Kubernetes release provided by Broadcom .
 - Each version of TKG Service and each version of each Standard Package is supported as long as a compatible Tanzu Kubernetes release is supported.
 - Support for Standard Packages is limited to the installation and upgrade of the packages. Broadcom does not provide support for any components of the Standard Packages, including but not limited to the debugging of configuration, bug fixes, feature enhancements, performance related issues, or security fixes not available from the upstream project. Broadcom reserves the right to discontinue the release of any of these packages at our discretion.
 - The TKG Service allows users to define their own ClusterClass. Broadcom will support clusters created using a customer-provided ClusterClass when the same issue can be reproduced using a ClusterClass provided by Broadcom.
- **Support Services.** Software includes Support Services that may only be used for the Software, and its components, licensed hereunder and may not be used for any other software, including former offers of components of Software that Customer may have licensed separately.

3. THIRD PARTY INFORMATION AND TERMS.

Any required third-party software license terms are incorporated by this reference and are set forth in online documentation at techdocs.broadcom.com or legaldocs.broadcom.com.

- **VMware Tools.** VMware Tools is a suite of utilities and drivers that can be installed in a Guest Operating System to enhance the performance and functionality of a Guest Operating System when running in a Virtual Machine in conjunction with a vSphere hypervisor. Customer may not use VMware Tools with any other hypervisor. Customer may distribute the VMware Tools to third parties solely when installed in a Guest Operating System within a Virtual Machine. Customer is liable for compliance by those third parties with the terms and conditions of the Framework Agreement.