



VMware vSphere Foundation

Specific Program Documentation (“SPD”)

The Broadcom software program(s) (“Broadcom Software”) listed below is provided under the following terms and conditions in addition to any terms and conditions referenced on the Broadcom quote, order form, statement of work, or other mutually agreed ordering document (each a “Transaction Document”) under the applicable end user agreement or governing contract (collectively, the “Agreement”) entered into by Customer and the Broadcom entity (“Broadcom”) through which Customer obtained a license for the Broadcom Software. These terms shall be effective from the effective date of such Transaction Document. Capitalized terms have the meanings ascribed to them herein, or, otherwise, in the Agreement.

The version of the SPD published on legaldocs.broadcom.com on the date that Broadcom accepts the Customer’s Transaction Document for Broadcom Software applies to the version of Broadcom Software in that Transaction Document. If Customer installs a release of Broadcom Software that Broadcom provides as part of Support services, then the then-current version of the SPD published on legaldocs.broadcom.com on the date Customer installs that release applies to that release of Broadcom Software.

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.

“**GiB**” means a unit of physical storage capacity that is equal to 2^{30} bytes.

“**Internally Developed Application**” means: i) a computer applications that Customer has created or developed and (ii) a third-party computer application(s) that is ancillary to Customer’s application-based service, and (b) cannot be accessed directly by end users of Customer’s application-based service..

“**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.

“**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 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 deployed 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.

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 manage VVF Cores only. (i.e. Aria entitlement in VVF cannot be used to manage physical cores licensed by another offer (VMware Cloud Foundation, vSphere Standard, vSphere Essentials Plus)).
2	vSAN	100 GiB	The 100 GiB vSAN trial capacity included in VVF is tied solely for use with respect to the VVF Cores that are configured for vSAN and, for clarity, cannot be aggregated. Once customers exceed the trial capacity, they must license the entire raw storage claimed in the vSAN cluster starting from 0.
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. The vSAN Stretched Clusters using iSCSI target service are not supported.

raw device mapping (RDMs) for Microsoft Windows Server Failover Clustering (WSFC) using iSCSI target service is not officially supported on vSAN.

- **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 Internally Developed Applications as a service to a third party via an internal or external network. Except as expressly provided in this paragraph and the License Agreement, 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.

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.