

VMware Cloud Foundation Frequently Asked Questions (FAQs)



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VMware Cloud Foundation 9.0 Release

Q1. What are the new features in VMware Cloud Foundation 9.0?

A. Refer to the [latest release notes](#) to learn more about the features and capabilities provided by VCF.

Q2. What is being delivered in VMware Cloud Foundation 9.0?

A. VMware Cloud Foundation 9.0 includes the following primary components (for a complete list refer [here](#)):

- vSphere
- vSAN
- VCF Operations
- VCF Automation
- NSX
- HCX

Q3. What are the advanced services available for VMware Cloud Foundation?

A. The following advanced services (add-ons) are available for VMware Cloud Foundation:

- VMware Private AI
- Disaster Recovery & Ransomware Recovery
- Advanced Security
- Load Balancing
- Application Services
- Data Services
- Network Observability



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- Business Operations
- Secure Access
- vSAN Add-On Capacity

Note - Advanced services are available for separate purchases and are not included in the core VCF offerings.

Q4. What is VMware Cloud Foundation?

- A. VMware Cloud Foundation (VCF) is a comprehensive, private-cloud platform with integrated, enterprise-class compute, storage, networking, management, and security, delivering a leading TCO as highlighted in an IDC Report: [The Business value of VMware Cloud Foundation](#).

Q5. Can I install the VMware Cloud Foundation software myself?

- A. Yes, however, it is highly recommended that you work with VMware Professional Services or your Solution Provider to receive assistance with your deployment. VMware provides documentation for customers to deploy the Cloud Foundation software on their own. Visit the [Documentation](#) page for more information on how to deploy Cloud vSphere Foundation.

Q6. What technical support options are available for VMware Cloud Foundation?

- A. Broadcom Software Maintenance Essential Support is included with VCF.

Q7. What other Services and Lifecycle Support are offered?

- A. Broadcom Software Maintenance Essential Support is included with VCF. In addition, the following options are available:
- VMware Pro Cloud Services: help customers adopt and consume VCF faster. These Professional Services are aligned to common customer use cases and were built by

combining VMware Validated Solutions with field-proven best practices.

- Extended Expert Services: provide a flexible way to add experienced VMware consultants to your team to accelerate your project timelines.
- VCF Technical Adoption Manager (TAM): provides subject matter expertise to help you speed adoption by conducting technology assessments, providing solution guidance, and recommending operations optimizations.
- VCF Jumpstart Workshops: help customers with recommended best practices and provide a tailored implementation and adoption plan to achieve their goals and maximize their VCF investment faster.
- Learning: training and certification programs to grow your skills.

Q8. Where can I find VCF 5.2 based Frequently Asked Questions (FAQs)?

- A. Please refer to the [VCF 5.2 FAQs](#) for additional information.

Q9. Where can I find feature comparisons between VMware Cloud Foundation and vSphere Foundation?

- A. Please see the [VMware Feature Comparison document](#) for detailed information on included features.



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Q10. Where can I find more information and resources?

- A. You can find additional VMware Cloud Foundation information here:
- [VMware Product Page](#)
 - [Documentation](#)
 - [Community](#)
 - [Broadcom Software Maintenance Essential Support](#)
 - [Professional Services and Lifecycle Support](#)
 - [VMware Learning](#)

Licensing

Q11. When does the licensing change for customers who have both VCF 9.0 and previous software versions?

- A. VCF 9.0 licensing only applies when deploying or upgrading to VCF 9.0. A customer with VCF 5.x licensing environments will continue to use the previous license keys. Customers can run environments with both a VCF 9 and VCF 5.x licensing.

Q12. When upgrading from VCF 5.x to VCF 9.0, how do I license the new VCF 9.0 environment?

- A. During the upgrade, the components move to “evaluation mode,” after the upgrade, they will need to be re-licensed with VCF Operations.

Q13. What are the licensing changes in VMware Cloud Foundation 9.0?

- A. Starting with version 9.0 of VMware Cloud Foundation (VCF), you license your environment by using a VCF Operations instance and the VCF Business Services console (vcf.broadcom.com). Subscription-based license files replace the use of the 25-character license keys.

Q14. What is the VCF Business Services console?

- A. The VCF Business Services console is a section of the Broadcom support site for managing various aspects of the

VMware Cloud Foundation private cloud experience. The licensing experience is one of the capabilities managed on this site.

Q15. Is VCF Operations required to license VCF 9.0?

- A. Yes. VCF Operations is required to license VCF 9.0. License files created on the VCF Business Services console (vcf.broadcom.com) are uploaded to VCF Operations and assigned to the vCenters.

Q16. What VCF Components are part of the new VCF 9 subscription-based licensing?

- A. The VCF 9 licensing process applies to vSphere (vCenter & ESX), vSAN, NSX, HCX, VCF Logs, VCF Operations, VCF Automation, vSphere Kubernetes Service (VKS), and VMware Private AI Foundation with NVIDIA. The process for Add-on services such as AVI Load Balancer, vDefend Firewall and VMware Live Recovery continue to be licensed separately.

Q17. What is in the License Usage File?

- A. It's important to note that the License Usage File exclusively gathers this specific information and, for clarity, does not collect Personal Data and Customer Data.

The License Usage File only records the following license usage data points:

- The usage generation timestamp
- Utilization details for both post-version 9 and pre-version 9 licenses
- The unique VCF Ops instance ID
- A unique identifier for the usage report
- A list of post-version 9 licenses added to VCF Operations but currently unused
- Any detected usage anomalies



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Q18. Can I submit my license usage with a disconnected form?

- A. In VCF 9.0, licensing automatically collects license usage data into a file. Customers can send this file to Broadcom using either a connected or disconnected method. A disconnected deployment does not require an internet connection for registration.

Q19. How do I report my license usage?

- A. Please refer to the [report licensing usage page](#) for additional information.

Q20. How do I resume if the license reporting is late?

- A. Please refer to the [updating licenses page](#) for additional information.

Q21. Where can I learn more details for the licensing steps in VMware Cloud Foundation 9.0?

- A. Please refer to the [licensing overview](#) for additional information.

License Portability

Q22. What is the new VCF License Portability entitlement for customers?

- A. VCF License Portability allows customers to port their purchased licenses of qualified VCF and any applicable Add-On(s) to any compatible endpoint whether that is in their own data center, a hosting provider, a cloud service provider or hyperscaler cloud environment as their needs evolve. There is feature parity across the deployment options when customers participate in [License Portability](#).

Q23. What are the qualified licenses eligible for the VCF License Portability?

- A. VCF and applicable add-on(s) licenses purchased directly from Broadcom or an authorized reseller or distributor after

December 13th, 2023, and where the end customer is the licensee, are eligible for License Portability.

Here are the qualified licenses for the Program:

Product
VMware Cloud Foundation
Add-Ons
vSAN
VMware vDefend Firewall
VMware vDefend Firewall with Advanced Threat Prevention (or Add-On)
VMware Avi Load Balancer
VMware Live Recovery (VMware Live Site Recovery and VMware Cloud Director Availability – Disaster Recovery components are only eligible)

Table 1: Qualified licenses for the Program.

New licenses may be added to the table once licenses become qualified. Licenses obtained through a Value-Added OEM or through a Broadcom cloud provider program, (e.g., VMware Cloud Service Provider, Metal-as-a-Service), where the provider is the licensee, are not eligible for License Portability.

Q24. Will customers have the option to port their eligible VCF licenses as part of the cloud provider's fully integrated solution?

- A. Yes, Broadcom is working with cloud service providers offering managed solutions with fully integrated VCF to be part of the VCF ecosystem that ensures consistent experience for customers



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porting their eligible VCF licenses. The VMware software deployed by cloud service providers in their integrated offerings will be the same for the License Portability Offering.

Perpetual Offerings

Q25. Can VCF customers with perpetual licenses or legacy subscription licenses upgrade to VCF 9.0?

- A. No. Customers with perpetual licenses will need to switch to subscription licenses prior to upgrading. Customers should either remain on VCF 5.2 or switch from the legacy licensing to Broadcom subscription pricing prior to attempting an upgrade to VCF 9.0.

Compute

Q26. Is the memory tiering with NVMe supported on both traditional VMs and VM service based VMs?

- A. Memory tiering happens transparently at host level. This is done at the ESX level, completely transparent to how the VM was created, so it works for both traditional VMs and k8s VMs.

Q27. Will the VCF Installer be replacing Cloud Builder?

- A. Yes. The new VCF Installer will completely replace Cloud Builder. The process will shift from using the Cloud Builder spreadsheet to a curated, guided set of steps through the VCF Operations UI, enhancing user experience and clarity. The VCF Installer also supports importing configuration templates using JSON files.

Storage

Q28. Will vVols be supported in VCF 9.X?

- A. VMware vSphere Virtual Volumes (vVols) capabilities will be deprecated beginning with the release of VMware Cloud Foundation (VCF) version 9.0 and will be fully removed in a future release. Support for vVols (critical bug fixes only) will continue for VCF 5.x, and other older supported versions until end-of-support of those releases.

Limited-time support may be considered on a case-by-case basis for customers desiring vVols support in VCF 9.0. Such customers should contact their Broadcom representative or Broadcom support for further guidance.

We will offer best practices and recommendations to help customers migrate their vVol-based virtual machines to supported datastore types.

Q29. Is vSAN required for the VCF Management Domain in VCF 9.0?

- A. No, vSAN is not required for the VCF Management domain, however it is recommended. VCF 9.0 supports either vSAN, NFS, or FC.

Q30. What types of external storage are supported in VCF 9.0?

- A. VCF 9.0 supports several storage options for both the Workload and Management domains. Aggregated vSAN HCI clusters, or disaggregated vSAN storage clusters can be used for a fully integrated experience. Storage can also be provided using traditional storage arrays using block-based storage (Fibre Channel, iSCSI) or file-based storage (NFS) for both Workload and Management domains.



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Q31. How can I get access to vSAN's global deduplication in VCF 9.0?

- A. vSAN global deduplication will be available to a limited number of customers. Customers interested in the global deduplication feature should request access via their sales representative.

Q32. What licenses are required for vSAN-to-vSAN Replication?

- A. vSAN Data Protection, which is included in a VCF license entitlement, provides local data protection capabilities. vSAN-to-vSAN replication extends the capabilities of vSAN Data Protection to protect data from a source vSAN cluster to a target vSAN cluster. This extended capability is a part of the VMware Live Recovery add-on license.

Q33. Multi Tenancy Storage - can we slice it for each tenant and how does this map to VCF Automation?

- A. Yes. Logical delegation and management of volume services for VMs and Kubernetes is achieved through Supervisor namespaces. This allows for administrators to provide a logical set of storage resources for the purpose of VMs, VKS, databases, or partner integrations.

Networking

Q34. Is NSX required with VCF 9.0 and does it get installed automatically?

Yes, NSX is a required component with VCF 9.0 and must be installed. NSX is automatically installed with VCF to make sure Workload Domains are VPC ready. However, customers are not required to use the virtual networking or logical routing features provided by NSX. If desired, customers can continue to use VLAN backed port groups. Thus, allowing flexibility for customers to deploy VCF without requiring any changes to existing networking topologies.

Q35. Is NSX Federation Supported in VCF 9.0?

- A. Yes, NSX Federation is supported with VCF 9.0. Note, however, that pre-existing environments with an existing federated NSX environment cannot be imported at this time.

Aria Operations & Aria Automation

Q36. Do customers still have access to Aria Suite with VCF?

- A. Yes, customers still have access to the products formally known as the Aria Suite. However, the solutions are now accessed under VCF Operations and VCF Automation. VMware Aria Suite Lifecycle Manager, VMware Aria Operations for networks and VMware Aria Operations for logs will now be capabilities within VCF Operations known as VCF Operations fleet management, VCF Operations for networks and VCF Operations for logs.

VCF Operations

Q37. Why is VCF Operations required for licensing?

- A. VCF Operations provides centralized license management for VCF. VCF Operations is a required component with each VCF fleet. VCF Operations is where licenses are assigned and managed.

Q38. Can I still monitor my Horizon environment using VCF Operations?

- A. As part of Broadcom's divestiture of its End User Computing division, VMware Horizon is now owned by Omnisia. Consequently, Broadcom will no longer provide, effective March 28, 2025, General Support including Bug Fixes, Security Patches, or any updates for Aria Operations



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Management Pack for Horizon (MP4H). For customers who continue to use the Management Pack for Horizon, please work with [OmniSSA](#) for any support or future development.

Q39. Does VCF Operations help sending support bundles to Broadcom support?

- A. With the Log Assist feature, customers can now send support bundles to Broadcom support within the VCF Operations console.

Q40. What are the new and upgraded compliance packs as part of VCF 9.0?

A. New Compliance Packs:

- NIST SP 800-171, Protecting Controlled Unclassified Information in Nonfederal Systems and Organizations
- NIST SP 800-53 R5
- CIS Compliance Pack for VCF

Upgraded Compliance Packs:

- PCI DSS Defined Approach Requirements, Version 4.0
- The International Organization for Standardization ISO/IEC 27001:2022
- HIPAA

VCF Automation

Q41. Do I need to migrate from VMware Aria Automation 8.x to VCF Automation in VCF 9.0?

- A. Customers can upgrade from VMware Aria Automation 8.x to VCF Automation in VCF 9.0. This does not require migration.

Q42. Can I upgrade or migrate from VCD to VCF Automation in VCF 9.0?

- A. No, VCD cannot be upgraded to VCF 9.0. Migration from VCD to VCF 9.0 is not supported in VCF 9.0. VCD customers are encouraged to use VCF Automation in VCF 9.0 for greenfield deployments or a greenfield tenant.

Q43. If a customer has multiple Aria Automation 8.x and how that will be upgraded?

- A. Multiple Aria Automation can be upgraded but customers need to choose only one Aria Automation which can be fully integrated to VCF Operation (which is called Integrated VCF Automation) and other Aria Automations will be in non-integrated mode. This means that the customer needs to manage them individually for upgrade and patch management. However, the integrated Aria Automation (first one) can be fully managed by VCF Operation.

Application Platform

Q44. What is VMware vSphere Kubernetes Service?

- A. VMware vSphere Kubernetes Service (VKS) is a built-in Kubernetes runtime service in VCF. It orchestrates Kubernetes management, enabling enterprises to run modern applications alongside traditional workloads. Running modern applications on VKS within VMware Cloud Foundation (VCF) offers enterprises a powerful, unified platform that integrates with the broader

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VMware ecosystem, delivering a scalable, secure, and efficient foundation for modern workloads.

environment for modern applications without disrupting existing vSphere operations.

Q45. What are the key capabilities of VMware vSphere Kubernetes Service (VKS) in VCF?

- A. The key capabilities of VKS are:
- Upstream conformant Certified Kubernetes Release independent from vSphere: a fully upstream conformant Kubernetes distribution that is certified by Cloud Native Computing Foundation (CNCF)
 - Support for N-2 Kubernetes versions for flexible deployment: vSphere Kubernetes Service supports the current Kubernetes release and the two previous major versions.
 - Upgradable independently from vSphere: Kubernetes clusters and the vSphere Kubernetes Service can be upgraded independently of the underlying vSphere infrastructure (ESX, vCenter)
 - Built-in high-availability and reliability: VKS ensures high availability for Kubernetes workloads through intelligent automation and built-in infrastructure resilience.

Q46. What is vSphere Supervisor?

- A. vSphere Supervisor is a Kubernetes control plane built directly into VMware vSphere, enabling enterprises to run and manage both virtual machines and containerized workloads on a single, unified platform. vSphere Supervisor allows consumers to use one API to provision and manage both VMs and containers. The Supervisor supports vSphere Pods, offers policy-driven governance, and integrates with VMware's networking and storage solutions, providing a scalable, secure, and efficient

Q47. What are the key features of vSphere Supervisor?

- A. The key features of vSphere Supervisor are:
- One API to manage both VMs and containers: A single, consistent API allows users to create, deploy, and manage both VMs and Kubernetes clusters.
 - Self-service access to cloud services with governance: Through a role-based access model, platform engineers can leverage self-service capabilities to provision infrastructure resources on demand.
 - Embedded, declarative API, CLI and UI access with vSphere Supervisor: With vSphere in VCF 9.0, VCF offers a range of flexible interfaces that align with cloud admins' and platform teams' preferred workflows.

Q48. Will Tanzu Mission Control - Self-Managed (TMC-SM) be available in our current VCF offering?

- A. Yes, VCF customers with Broadcom post-acquisition SKUs and onward will be entitled to use TMC-SM.

Fleet Management

Q49. What is a "Fleet" and what does "Fleet Management" cover?

- A. VCF 9.0 introduces the concept of fleet management. A fleet refers to the collection of all VCF instances that are deployed by a customer across their environment. A fleet can run within a single region or span across multiple regions. A VCF Fleet consists of one or more VCF instances

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together with an instance of VCF Operations, VCF Automation and VCF Identity Broker (VIDB).

Q50. What is the new Identity & Access management feature (vSphere Identity Broker (VIDB)), how does this differ from the VIDM that was used in previous VCF releases?

A. VIDB, introduced with VCF 9.0, provides a common identity broker that can be used by all VCF components. VIDB replaces the legacy VIDM appliance that was used by VCF Automation in prior versions of VCF. VIDB is deployed from VCF Operations as a day-2 operation.

Q51. What are the new certificate management capabilities?

A. In VCF 9.0, certificate management is now centralized under VCF Operations providing a single place to view and manage certificates.

VCF Import

Q52. What is VCF Import?

A. VCF Import refers to the capability of adding existing vSphere infrastructure to a Cloud Foundation private cloud. VCF Import was first released in VCF 5.2 as a CLI tool. In VCF 9.0 the VCF Import feature is fully integrated into VCF Installer (converting a management domain) and VCF Operations (importing a VI domain).

Q53. What are the available options for turning existing vSphere clusters into VCF instances?

A. Using the VCF Installer, customers can convert an existing vSphere 9.0 environment to a Cloud Foundation management domain. Using VCF Operations, customers can import vSphere 8.0 (and above) environments to a Cloud Foundation VI domain. Both approaches allow customers to leverage existing infrastructure and do not require downtime or a migration of applications or data.

Q54. Can I import vSphere Clusters with non-vSAN storage?

A. Yes. VCF 9.0 supports vSphere infrastructure running a choice of vSAN, NFS, VMFS on FC. These storage topologies are supported for both the management and VI domains.

Q55. What are the supported vSphere versions that can be converted to a VCF management domain?

A. VCF 9.0 supports converting vSphere infrastructure running vSphere & NSX 9.0 to a management domain.

Q56. Can I convert an existing vSphere 8.x environment running NSX 4.x as a VCF management domain?

A. No. VCF 9.0 does not yet support converting a vSphere environment running NSX 4.x to a VCF management domain. A supported upgrade path from NSX 4.0 to NSX 9.0 will make this possible in an upcoming maintenance release.

Q57. What are the supported vSphere versions that can be imported to VCF as a VI domain?

A. VCF 9.0 supports importing vSphere infrastructure running vSphere 8.0 Update 1 and NSX 4.1.0.2 and above.

Q58. Can I import vSphere Clusters where NSX has been installed/enabled?

A. Yes. VCF 9.0 supports importing vSphere clusters where NSX has been installed and configured as VI domains. Clusters to be imported must be running vSphere 8.x and NSX 4.1.0.2 (or above). Note, VCF 9.0 does not yet support converting vSphere



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clusters where NSX has been installed to a management domain.

Q59. Can I import vSphere Clusters where NSX has not been installed/enabled?

- A. Yes. VCF 9.0 supports adding vSphere clusters where NSX has not been installed. NSX will automatically be deployed as part of the convert/import operation. Note that NSX installation is non-disruptive and transparent to running workloads.

Q60. Can I import vSphere Clusters where VKS has been installed/enabled?

- A. Yes. VCF 9.0 supports importing vSphere clusters where VKS has been installed and configured.

Q61. How do I determine when to use the VCF Installer or when to use VCF Operations to add existing infrastructure to VCF?

- A. In VCF 9.0 the import feature has been bifurcated between the VCF Installer and VCF Operations. To create a new VCF fleet/instance, use the VCF Installer to converge an existing vSphere environment into a VCF management domain. To add additional vSphere environments to an

existing VCF fleet/instance, use VCF Operations to import the vCenter instance(s) as a VI domain(s).

Q62. Can I specify which clusters from my vCenter inventory to be added to VCF?

- A. No. Infrastructure is added at the vCenter level. The entire vCenter inventory will be added at the time the environment is converted or imported.

Q63. What is the minimum cluster size that can be added to VCF as a management or VI workload domain?

- A. Refer to the [VCF 9.0 documentation](#) for supported configurations when converting or importing existing vSphere infrastructure to VCF.

Q64. Can I deploy NSX edge clusters and configure virtual networking on converted or imported domains?

- A. Yes. All NSX features are supported on converted and imported domains to include VPCs, virtual networking (i.e., overlay networking), deploying edge clusters, and enabling edge related services.

Q65. Will VCF Import still be a standalone tool in VCF 9.0?

- A. The VCF Import functionality will no longer be a standalone tool. Instead, it will be directly integrated into the VCF Operations workflow, improving usability and reducing complexity.

VCF Edge

Q66. What is VMware Cloud Foundation Edge?

- A. VMware Cloud Foundation Edge is an optimized configuration of VMware Cloud Foundation specifically designed for edge use cases. VMware Cloud Foundation Edge replaces the remote cluster capability and delivers a private cloud infrastructure-as-a-service solution optimized for

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edge sites with integrated enterprise-class compute, storage, networking, management, and security capabilities. Please note that VMware Cloud Foundation Edge should be deployed at the Edge sites ONLY.

Q67. How is VMware Cloud Foundation Edge different from VMware Cloud Foundation?

- A. VMware Cloud Foundation Edge contains all the core components of VMware Cloud Foundation. Additionally, it provides vSphere with vSAN Witness Appliance that can be deployed locally which is specifically useful in scenarios where customers do not want to use VCF Operations fleet management.

Q68. Do I need to deploy all the components of VCF Edge to operate my edge sites?

- A. No. It's not mandatory to deploy all the components of VCF Edge. VMware Cloud Foundation Edge provides customers with flexibility to choose and deploy either a full stack VCF or only vCenter along with VCF operations as per their business needs. However, note that VCF Operations, vCenter, and ESX are required to enable licensing for all edge sites.

Q69. What are the minimum requirements for VMware Cloud Foundation Edge instances for each edge site?

- A. Customers have full flexibility to deploy Centrally managed, locally managed, or isolated edge sites with 1, 2 or 3 or more host configuration. Please refer to the [VCF Edge Design guide](#) for more details.

Q70. Do I have the option to use vSAN witness for Edge deployments?

- A. Yes, customers have a choice to use vSAN witness in a specialized hardware with a dedicated hardware slot or remotely in another Edge location.

Q71. How many sites are required to license at a minimum for VCF Edge deployment?

- A. VCF Edge requires a minimum of 10 sites to be licensed, within a year of initial VCFE deployment, with a minimum of 8 cores per CPU and 256 Cores per Site maximum.

Advanced Services

Q72. Is Data Services Manager (DSM) included in VCF 9.0?

- A. As of May 5th, 2025, Data Services Manager (DSM) is now offered as an advanced service (separate purchase).

Q73. Are Data Services Manager (DSM) and the DSM consumption operator available as an option in the VCF installer as an option to be deployed and configured on VCF?

- A. No. It is deployed independently but it is natively integrated with VCF Automation and VCF Operations.

