



# VMware Cloud Activation Advanced

## At a glance

VMware Cloud Activation Advanced services accelerate the time to adopt your first cloud SDDC, and give you the choice of discovering and migrating 100 VMs or discovering and protecting 100 VMs.

## Key benefits

- Rapidly instantiate a VMware Cloud™ solution
- Free IT staff to work on business-critical activities
- Minimize disruption to existing resources and operations
- Learn how to manage and operate your solution from VMware experts through knowledge transfer

## SKUs

### VMware Cloud™ on AWS

PS-VMC-ACT-ADV-C

### VMware Cloud™ on Dell EMC

PS-VMC-D-ACT-ADV-C

### Azure VMware® Solution

PS-AVS-ACT-ADV-C

### Google Cloud VMware® Engine

PS-GCVE-ACT-ADV-C

### Oracle Cloud VMware® Solution

PS-OCVS-ACT-ADV-C

## Service overview

VMware Cloud Activation™ Advanced services provide a rapid setup of your first cloud SDDC, and your choice of one of the following:

- Setting up VMware HCX® and discovering and migrating up to 100 VMs
- Configuring your first disaster recovery (DR) site and discovering and protecting up to 100 VMs to the cloud

These services can help ensure your team understands the fundamentals of the VMware solution implemented. Through a knowledge transfer workshop, VMware will provide an overview of the VMware methodology, best practices, and information resources.

## Workstreams

This offering allows you to choose only one (1) of the following two workstreams. Both workstreams require VMware on-premises and VMware on-cloud products, with vendor-supported versions as agreed to by VMware and Customer at project kickoff but limited to those that are in general availability (GA).

### Workstream 1: Cloud SDDC setup, discovery, and migration

- Validation of requirements and creation of your first cloud SDDC in one of the supported cloud infrastructures
- Deployment of HCX components on-premises and pairing with a cloud SDDC
- Validation of the ability to migrate VMs from on-premises to the cloud SDDC
- A VMware Migration Methodology knowledge transfer session
- Discovery and dependency mapping for up to hundred (100) VMs
- Migration of up to hundred (100) VMs

Discovery activities are important for successful migrations, and we assume the use of VMware Aria Operations™ for Networks for proper mapping of dependencies.

This workstream applies to the following cloud infrastructure:

- VMware Cloud on AWS
- VMware Cloud on Dell EMC
- Azure VMware Solution

- Google Cloud VMware Engine
- Oracle Cloud VMware Solution

#### **Workstream 2: DR solution setup, discovery, and protection**

- Validation of requirements and creation of your first cloud SDDC in one of the supported cloud infrastructures
- Activation in one recovery site of either VMware Cloud Disaster Recovery™ or VMware Site Recovery Manager™ for Hyperscalers
- Activation in one protected site of either VMware Cloud Disaster Recovery or VMware Site Recovery Manager
- A knowledge transfer session about VMware Cloud Disaster Recovery or VMware Site Recovery Manager
- Discovery and dependency mapping for up to hundred (100) VMs
- Protection of up to hundred (100) VMs

We assume the use of VMware Aria Operations for Networks for proper mapping of dependencies.

This workstream applies to the following cloud infrastructure:

- VMware Cloud on AWS
- VMware Cloud on Dell EMC
- Azure VMware Solution
- Google Cloud VMware Engine

**Note:** For both workstreams, please check the VMware Requirements and Product Interoperability Matrix links in the Appendix.

#### **Service delivery description**

Service activities will be entirely delivered remotely by VMware Professional Services offshore resources. Due to the nature of some on-premises components and security aspects we require Customer to join virtual sessions and engage their infrastructure, network, and security teams when appropriate to execute required actions (e.g., firewall port configurations or appliance deployments) under VMware Team supervision. The delivery team will also require validating the proper configurations and requirements are in place before proceeding with the remote installation.

#### **Project scope**

The scope of services delivered is dependent on which workstream is chosen:

- Workstream 1: Cloud SDDC setup, VMware HCX Setup, discovery and dependency mapping, and migrations activities
- Workstream 2: Cloud SDDC setup, VMware DR solution setup, discovery and dependency mapping, and protection activities

The scope of activities is defined in the following tables grouped under the specific workstream.

## Workstream 1: Migration

### Cloud SDDC setup

Cloud SDDC		
Specification	Parameters	Description
Review requirements and validate user accounts	Up to one (1) cluster	Review and validation of cloud infrastructure and SDDC requirements.
Create VMware SDDC	Up to one (1)	Deploy the planned cloud SDDC through the cloud provider portal.
Cloud VPN	Up to one (1)	On-premises interconnectivity using cloud VPN is useful for low-volume data connections. For additional cloud connection options, please check the cloud provider links in the appendix.
Configure gateway firewall rules	Up to five (5)	Configure VMware NSX™ Management firewall rules for establishing the network connectivity between on-prem and the VMware SDDC.

### VMware HCX setup

VMware HCX		
Specification	Parameters	Description
VMware vCenter® cloud-side Instances	Up to one (1)	VMware vCenter cloud-side identified as initial target to activate VMware HCX.
On-premises VMware vCenter instance	Up to one (1)	On-premises VMware vCenter instance identified as initial source to deploy VMware HCX.
On-premises Layer 2 networks extended	Up to one (1)	On-premises Layer 2 networks to extend with VMware HCX.

Additional VMware HCX activities		Configure migration of up to five (5) low complexity virtual machines for validation purposes.
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### Discovery and dependency mapping activities

VMware Aria Operations for Networks		
Specification	Parameters	Description
VMware product required		A VMware Aria Operations for Networks subscription through <a href="http://cloud.vmware.com">http://cloud.vmware.com</a> . Customer must provide access user account if Customer subscription is used.
VMware vCenter server instances	Up to one (1)	vCenter server instances on-premises used during the application discovery process.
Applications	Up to twenty (20)	Unique application instances discovered and mapped, with an average of five (5) VMs each App. complexity will affect the number.
Number of VMs	Up to one hundred (100)	Maximum number of VMs that will be analyzed. Complexity will affect the number.

### Migration activities

Virtual machines migration with HCX		
Specification	Parameters	Description
Preliminary activities		Review of the discovered list of virtual machines planned for migration to the new SDDC.
On-premises Layer 2 networks extended	Up to one (1)	On-premises Layer 2 networks to extend with VMware HCX.
Virtual machines included in migration	Up to one hundred (100)	This is the total number of virtual machines in scope for this migration effort; only those that will fit into two (2) migration waves will be included.

Configure migration waves	Up to two (2)	Configure workload migrations in HCX with proper resource selections for the target site. This includes monitoring and management of workload replication to ensure synchronization prior to the migration wave.
Run migration wave	Up to two (2)	During the scheduled migration window, the VMware Consultant will operate the HCX console and facilitate the customer validation activities.

## Workstream 2: DR protection use case

### Cloud SDDC setup

Cloud SDDC		
Specification	Parameters	Description
Review requirements and validate user accounts	Up to one (1) cluster	Review and validation of cloud infrastructure and SDDC requirements.
Create VMware SDDC	Up to one (1)	Deploy the planned Cloud SDDC through the cloud provider portal.
Cloud VPN	Up to one (1)	On-premises interconnectivity using cloud VPN is useful for low-volume data connections. For additional cloud connection options, please check the cloud provider links in the appendix.
Configure gateway firewall rules	Up to five (5)	Configure VMware NSX™ Management firewall rules for establishing the network connectivity between on-prem and the VMware SDDC.

### DR solution setup

Based on the specific cloud infrastructure you can use only one (1) of following products:

- VMware Cloud Disaster Recovery
- VMware Site Recovery Manager for Hyperscalers (or VMware Site Recovery™)

VMware Cloud Disaster Recovery		
Specification	Parameters	Description
VMware Cloud Disaster Recovery in the recovery site	Up to one (1)	VMware Cloud Disaster Recovery region where the service will be activated.
VMware Cloud Disaster Recovery in the protected site	Up to one (1)	Activation of VMware Cloud Disaster Recovery at the protected SDDC on cloud-side or on-premises where an appliance will be deployed in Customer environment.
Protection groups	Up to one (1)	VMware Cloud Disaster Recovery protection group configured.
DR plans	Up to one (1)	VMware Cloud Disaster Recovery DR plan configured.
Virtual machines	Up to five (5)	Virtual machines protected.
DR plan testing and cleanup	Up to two (2)	Test and cleanup for a DR plan consisting of no more than five (5) non-business critical VMs and no larger than 2000GB for each VM.

The following table for Site Recovery Manager is also valid for VMware Site Recovery.

VMware Site Recovery Manager		
Specification	Parameters	Description
Site Recovery Manager recovery site	Up to one (1) recovery site	Site Recovery Manager to be activated and configured at the recovery site, must already have a cloud SDDC available.
Site Recovery Manager protected site	Up to one (1) protected site	Components deployed at the protected site: one (1) VMware vSphere® replication appliance and one (1) Site Recovery Manager appliance.
Protection groups	Up to one (1)	Site Recovery Manager server protection group configured.
Recovery plans	Up to one (1)	Site Recovery Manager server recovery plan configured.
Virtual machines (VMs) protected	Up to five (5)	VMs to be protected.

Recovery Plan testing and cleanup	Up to two (2)	Test and cleanup of a recovery plan consisting of no more than five (5) non-business critical VMs and no larger than 200GB for each VM.
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### Discovery and dependency mapping activities

VMware Aria Operations for Networks		
Specification	Parameters	Description
VMware product required		A VMware Aria Operations for Networks subscription through <a href="http://cloud.vmware.com">http://cloud.vmware.com</a> . Customer must provide access user account if Customer subscription is used.
VMware vCenter server instances	Up to one (1)	vCenter server instances on-premises used during the application discovery process.
Applications	Up to twenty (20)	Unique application instances discovered and mapped, with an average of five (5) VMs each for application. Complexity will affect the number.
Number of VMs	Up to one hundred (100)	Maximum number of VMs that will be analyzed. Complexity will affect the number.

### VM protection activities

VMware Site Recovery Manager		
Specification	Parameters	Description
Preliminary activities		Review of the customer's provided list of workloads planned to be protected for DR in the new SDDC.
Virtual machines included	Up to one hundred (100)	This is the total number of virtual machines in scope for DR Protection.
Protection groups	Up to seven (7)	Number of protection group(s) configured.
Recovery plans	Up to two (2)	Number of recovery plan(s) configured.

Recovery plan testing and cleanup	Up to two (2)	The test and cleanup for a recovery plan consisting of no more than five (5) VMs with each VM no larger than 200GB.
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## Estimated schedule

VMware estimates that the duration of each of the workstreams described individually will not exceed 8 weeks. VMware Professional Services will operate according to a schedule agreed to by both parties. Typically, professional services are performed during normal business hours and workdays (weekdays and non-holidays).

## Out of scope

The following are out of scope items for the defined project workstreams:

### General

- Installation and configuration of custom or third-party applications and operating systems on deployed virtual machines
- Operating system administration including the operating system itself or any operating system features or components
- Management of change to virtual machines, operating systems, custom or third-party applications, databases, and administration of general network changes within Customer control
- Remediation work associated with any problems resulting from the content, completeness, accuracy, and consistency of any data, materials, or information supplied by Customer
- Installation or configuration of VMware products not included in the scope of this document
- Installation and configuration of third-party software or other technical services that are not applicable to VMware components
- Installation and configuration of Customer-signed certificates
- Configuration of VMware products used for the service other than those implemented for the mutually agreed-to use cases
- Customer solution training other than the defined knowledge transfer session
- Creation of user roles and groups
- Creation of local accounts
- Configuration of additional LDAP/Active Directory sources
- vCenter content library creation, OS images creation/copy/sync
- Creation of networking segments, VPNs, and additional firewall rules not included in the specific service scope



- Specific cloud vendor networking solutions (i.e., AWS Direct Connect, Microsoft ExpressRoute, Google Cloud Interconnect) configuration and troubleshooting
- Design or configuration of interconnectivity between different SDDCs or other native cloud services

### **VMware HCX**

- Creation of additional network extensions or stretched networks not included in the specific service scope
- Deployment of additional target or source endpoints
- Deployment and configuration of enterprise features like OSAM, MON, RAV or mobility groups
- Mixed cloud infrastructure for Initial target and initial source

### **VMware DR solutions**

- Configuration or troubleshooting of on-premises networking and firewall components
- Protection of VMs created by vSphere vApp(s)
- Protection of fault tolerant VMs
- Protection of VMs with shared disks
- Replication using array-based, VVOLs, and storage policy protection groups
- Mixed cloud infrastructure for protected and recovery sites

### **Workload migration**

- Pre- and post-application validation
- Backup/restore of virtual machines
- Multi-instances databases and/or part of database clusters will not be migrated
- Virtual machines with raw device mappings (RDM)
- Virtual machines with SCSI bus sharing cannot be migrated.
- NSX security tags and configurations related to the virtual machine will not be migrated.
- Virtual machine (with) snapshots
- Migration of physical to virtual environments
- Migration of clustered virtual machines
- Migration of virtual machines other than vSphere as source and target
- Migration of firewall rules, network, and security appliances not specified in the current document

## Project activities

### Phase 1: Initiate

VMware hosts a project initiation call with key Customer and VMware stakeholders.

Topics to be discussed include:

- Project business drivers, workstream scope identification, and objectives
- Project deadlines, timelines, scheduling, and logistics
- Identification of key Customer team members who VMware will work with to accomplish the tasks defined in this project
- Technology prerequisites necessary for a successful project, including review of the Service Checklist for the VMware solution
- Confirmation of team members and contact details will be exchanged to schedule the project kickoff meeting

Deliverables include:

- Initial pre-engagement call

### Phase 2: Plan

VMware leads a project kickoff meeting with Customer to assess prerequisite completion readiness, review the VMware standard architecture, and confirm project milestone dates.

The objectives of the meeting are as follows:

- Introducing the VMware team, roles, and responsibilities
- Describing the project goals, phases, and key dates
- Explaining the expected project results and deliverables
- Agreeing on communication and reporting process
- Validating the project expectations and clarifying roles and responsibilities

After Customer and VMware agree on project expectations, the VMware Project Manager and the Customer Project Manager work together on the detailed project plan.

Deliverables include:

- Project kickoff meeting minutes
- VMware Cloud activation kickoff presentation

### Phase 3: Build

The key activities for this phase are organized into two subphases: Deploy and Knowledge Transfer.

In the Deploy subphase VMware does the following:

- Activate, deploy, and configure VMware technologies according to the workstream
- Finalize the Configuration Workbook
- Perform components functional testing

In the Knowledge Transfer subphase, VMware conducts knowledge transfer sessions covering the overall architecture, deployment procedures, and operations procedures relating to the technologies in the scope. VMware does the following:

- Conduct technical knowledge transfer for administrators and operators during the activities
- Conduct up to 4 hours of knowledge transfer sessions, including fundamental operational discussions

#### **Phase 4: Discovery and dependency analysis**

This phase is organized in two subphases: Discovery and Dependency Analysis.

##### **Sub-phase 1: Discovery**

This sub-phase includes the following activities:

- Collect available asset data including asset dependencies
- Provide high-level strategy recommendations, including advantages and disadvantages of selected migration or DR tools, bandwidth needed, and methods
- Conduct data collection interviews and workshops, per infrastructure owner and application owner based on the discovery findings
- Conduct validation and reconciliation workshops/meetings based on the discovery findings with Customer
- Provide inventory list of in scope servers
- Complete discovery validation and sub-phase milestones

Deliverables include:

- Infrastructure Discovery Workbook

##### **Sub-phase 2: Dependency analysis**

This sub-phase includes the following activities:

- Conduct workshops to review bundling strategy criteria
- Analyze dependencies among assets: applications, servers, and key Infrastructure components
- Finalize asset bundles and event schedule including event dates based on bundle and Customer calendar constraints
- Develop master migration or disaster recovery event workbook and review draft runbook

- Identify risks and prepare a mitigation plan
- Complete dependency analysis and sub-phase milestones

Deliverables include:

- Migration or DR Runbook (based on workstream selected)
- Workload Bundling Report

### **Optional Phase 5: Migration**

This phase applies to Customer's that have selected Workstream 1 (migration use case). The phase includes the following activities:

- Conduct dry-run migration event and task validation
- Validate standard operating procedure and migration runbook
- Perform any required migration runbook adjustments and complete pre-migration event preparation
- Migrate in-scope virtual machines
- Follow up standard operating procedure and migration runbook validation
- Complete migration phase milestone

Deliverables include:

- Migration Runbook
- Workload Bundling Report

### **Optional Phase 6: Protection**

This phase applies to Customer's that have selected Workstream 2 (DR protection use case). The sub-phase includes the following activities:

- Review and validate the VMs to be protected
- Create protection group(s)
- Create recovery plan(s)
- Test recovery plan(s)

Deliverables include:

- Configuration workbook

### **Phase 7: Close**

VMware conducts a closure meeting of up to 2 hours with the Customer covering project status, reviewing completions, next steps and how to engage with VMware support.

## Learn more

Visit [vmware.com/services](https://vmware.com/services).

## Appendix

The following Customer stakeholders are required to participate during the delivery of project activities:

- VMware operations team leads
- Application operations leads
- Security policy team leads
- Enterprise architect
- Infrastructure architect
- Network operations team leads
- Network architecture team leads

## Requirements

To deliver the service accordingly to the expected timeline we require:

- Virtual machines must be running hardware version 9 or higher
- Virtual machines must have VMware tools installed
- Each virtual machine overall allocated disk size should not exceed more than 250 GB
- Distributed vSwitch must be in use for VMware Aria Operations for Networks and networks that need to be extended with HCX
- The availability of the NTP service is critical to system operations
- Migration potential throughput can vary depending on bandwidth available for migrations, latency, available CPU/MEM/IOPS, and disk read speed. For more information about how to determine bandwidth requirements, see [Bandwidth Requirements for vSphere Replication](#)

Please verify product requirements and interoperability with the following:

- [VMware Products interoperability matrix](#)
- [System Requirements for HCX](#)
- [Software Version Requirements for HCX](#)
- [VMware Cloud on AWS documentation](#)
- [VMware Cloud on Dell EMC documentation](#)
- [Azure VMware solution documentation](#)
- [Google Cloud VMware Engine documentation](#)
- [Oracle Cloud VMware Solution documentation](#)
- [VMware Cloud Disaster Recovery documentation](#)
- [VMware Site Recovery manager documentation](#)
- [VMware Site Recovery for VMware Cloud on AWS documentation](#)

This service must be delivered and accepted within the first 12 months of purchase, or the service will be forfeited. Pricing for this service excludes travel and other expenses. For detailed pricing, contact your local VMware representative.