VMware Cloud Activation Standard
For VMware Cloud on AWS

**Service overview**
VMware Cloud Activation™ Standard for VMware Cloud™ on AWS provides rapid instantiation of a VMware software defined data center (SDDC) on AWS, expedites the deployment of VMware HCX® product components, and migrates a single wave of up to 15 virtual machines (VMs). This service includes the L2 extension of a single network segment from your on-premises environment to VMware Cloud.

The VMware Professional Services delivery team will demonstrate how to use VMware vRealize® Network Insight Cloud™ to get insight into virtual machine traffic flows and will also provide an overview of the centralized log collection capabilities with out-of-the-box dashboards with VMware vRealize Log Insight Cloud™.

Finally, to ensure the Customer’s team is enabled to perform additional workload migrations, this service also includes a VMware Migration Hub knowledge transfer session, which provides an overview of the VMware application migration methodology, best practices, and information resources.

The following activities are included in this service:

- Instantiation and/or review of a VMware Cloud SDDC environment
- Deployment of HCX and related on-premises environment to VMware Cloud site pairing
- L2 Extension of a network segment using HCX built-in capabilities
- Enablement session on how to use vRealize Network Insight Cloud for application dependencies mapping
- Overview of default capabilities provided by vRealize Log Insight Cloud
- A pilot migration of up to fifteen (15) low-complexity VMs in a single wave
- A VMware Migration Hub knowledge transfer session
- A VMware Migration Methodology workshop session

This service requires the following VMware on-premises and VMware SaaS 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):

- VMware Cloud on AWS
- VMware HCX (on-premises requires VMware vSphere® 6.0 or higher) (*)
- VMware vRealize Network Insight Cloud (requires vSphere® 6.5 or higher) (*). (**)
- VMware vRealize Log Insight Cloud

(*) Note 1: please check the VMware Requirements and Product Interoperability Matrix links in the Appendix.

(**) Note 2: if Customer already has VMware vRealize Network Insight (4.x or higher) running in the source environment we will be able to leverage it if it matches the requirements.
Service Delivery Description
Service activities will be entirely delivered remotely by the VMware Professional Services. 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.

Service Capabilities
This service contributes to the full development of the following capabilities:

- Create an SDDC on a VMware Cloud platform
- Enable the application migration and workload mobility platform
- Network stretching with no need to change IP or network topology
- Out-of-the-box logs dashboard

Project Scope
The scope of the service is defined in the following tables.

<table>
<thead>
<tr>
<th>VMWARE CLOUD ON AWS - SDDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECIFICATION</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Review VMware Cloud SDDC requirements and validate user accounts</td>
</tr>
<tr>
<td>Create VMware Cloud SDDC</td>
</tr>
<tr>
<td>Configure gateway firewall Rules</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VMWARE VREALIZE LOG INSIGHT CLOUD</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECIFICATION</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Alerts</td>
</tr>
<tr>
<td>Dashboards</td>
</tr>
<tr>
<td>Widgets</td>
</tr>
</tbody>
</table>
### VMWARE HCX

<table>
<thead>
<tr>
<th>SPECIFICATION</th>
<th>PARAMETERS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMware vCenter® Instances</td>
<td>Up to one (1)</td>
<td>VMware vCenter instance where to activate VMware HCX</td>
</tr>
<tr>
<td>On-Premises VMware vCenter Instances</td>
<td>Up to one (1)</td>
<td>On-premises VMware vCenter instance where to deploy VMware HCX for pairing</td>
</tr>
<tr>
<td>On-premises Layer 2 networks extended</td>
<td>Up to one (1)</td>
<td>On-premises Layer 2 networks to extend with VMware HCX</td>
</tr>
<tr>
<td>Additional VMware HCX Activities</td>
<td></td>
<td>Review of the on-premises VMware HCX integration (plug-in) with VMware vCenter and standalone interfaces, the migration of up to five (5) low complexity virtual machine for validation purpose.</td>
</tr>
</tbody>
</table>

### VMWARE VREALIZE NETWORK INSIGHT CLOUD

<table>
<thead>
<tr>
<th>SPECIFICATION</th>
<th>PARAMETERS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMware product required</td>
<td></td>
<td>Network Insight subscription through <a href="http://cloud.vmware.com">http://cloud.vmware.com</a>. Customer must provide access user account if Customer subscription is used.</td>
</tr>
<tr>
<td>VMware vCenter Server® instances</td>
<td>Up to one (1)</td>
<td>VMware vCenter Server instances used during the application discovery process.</td>
</tr>
<tr>
<td>Applications</td>
<td>Up to three (3)</td>
<td>Unique application instances discovered and mapped, across all vCenter instances (total).</td>
</tr>
</tbody>
</table>
## Workload Migration

<table>
<thead>
<tr>
<th>Specification</th>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virtual Machines Included in Migration</td>
<td>Up to fifteen (15)</td>
<td>This is the total number of Virtual Machines in scope for this migration effort. These will be included into one (1) migration wave.</td>
</tr>
<tr>
<td>Configure Migration Waves</td>
<td>Up to one (1)</td>
<td>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 event.</td>
</tr>
<tr>
<td>Run Migration Waves</td>
<td>Up to one (1)</td>
<td>During the scheduled migration window, the VMware Consultant will operate the HCX console to ensure a secure and seamless migration process. This includes facilitating failback if necessary.</td>
</tr>
<tr>
<td>Additional Activities</td>
<td></td>
<td>Review of the exists list of workloads planned for migration to the new SDDC.</td>
</tr>
</tbody>
</table>

### Out of Scope

The following are out of scope items for this project.

**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
VMware Cloud on AWS
- Creation of user roles and groups
- Creation of local accounts
- Configuration of LDAP/Active Directory sources
- Creation of networking segments, VPNs, and additional firewall rules not required by the specific service scope
- Design or configuration of interconnectivity between different SDDCs or other native cloud services

VMware HCX
- Deployment of additional target or source endpoints
- Deployment and configuration of Enterprise features like OSAM, MON, RAV or Mobility Groups
- Bandwidth available and size of VMs will affect the time to replicate; the group of VMs that doesn’t fit in an up to two (2) days of replication time will not be included.

vRealize Log Insight Cloud
- Additional collectors that are not part of the VMware Cloud
- Log forwarding/Archival/Processing rules
- Webhook Configuration
- API configuration
- Custom dashboards and alerts

vRealize Network Insight Cloud
- Valid product license must be provided by the customer
- Configuration of customer’s physical devices
- Applications that consume only physical resources may not be recognized by the discovery process.
- Troubleshooting of Customer’s networking and devices

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
- No Specific application dependency will be analyzed
- Virtual machines with Raw Device Mappings (RDM) in Physical Compatibility mode cannot be bulk migrated.
- Virtual machines with SCSI bus sharing cannot be migrated.
- VMware NSX® security tags and configurations related to the virtual machine will not be migrated. vSphere tags will be migrated
- Virtual machine (with) snapshots cannot be migrated. HCX bulk migration will remove the snapshot.

Estimated Schedule
VMware estimates that the duration of this project will not exceed 3 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).
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, scope, 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
• vRealize network insights Cloud requirements validation
• Network segment to be extended
• List of VMs to be migrated

Phase 3: Execute
The key activities for this phase are organized into Deploy and Knowledge Transfer subphases.

In the Deploy subphase VMware deploys, documents, and validates the technology components according to the specifics. VMware does the following:
• Installs and configures the VMware technologies according to the specifics
• Finalizes the Configuration Workbook
• Executes 1 migration wave (up to 15 VMs) and service component functional test validation
• Configures vRealize Log Insight Cloud dashboard
• Configures vRealize Network insight Cloud

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

• Conducts technical knowledge transfer sessions for administrators and operators
• Conducts up to eight (8) hours of knowledge transfer sessions, including introduction to fundamental operational discussions

Phase 4: 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.
Appendix – Service Checklist
The following Customer stakeholders are required to deliver this service:

- VMware operations team leads
- Application operations leads
- Security policy team leads
- Enterprise Architect
- Infrastructure Architect
- Network Operations team leads
- Network Architecture team leads

The following are the technical prerequisites to deliver this service:

- VMware vCenter Server version 6.0 or higher for on-premises HCX Components
- VMware vCenter Server version 6.5 or higher for vRealize Network Insight Cloud
- Virtual machines must be running hardware version 9 or higher
- 3+ on-prem IP addresses from management network for HCX service installation
- 1 on-prem IP address for vRealize Network Insight collector
- Virtual machines must have VMware tools installed and updated
- Virtual machines must reside in a service cluster (defined in the compute profile)
- Each virtual machine overall allocated disk size should not exceed more than 250 GB
- Distributed vSwitch are required for networks to be extended
- The availability of the NTP service is critical to system operations.
- IPFIX for networking flow information
- Migration potential throughput can vary depending on bandwidth available for migrations, latency, available CPU/MEM/IOPS, and disk read speed. For successful switchover phase, the bandwidth and network conditions must be sufficient to satisfy the operation considering the dataset and virtual machine data change rate. For more information about how to determine bandwidth requirements, see Bandwidth Requirements for vSphere Replication

Please verify product requirements with the following:

- VMware Products Interoperability Matrix for HCX
- VMware Products Interoperability Matrix for vRealize Network Insight Cloud
- System Requirements for HCX
- Software Version Requirements for HCX
- System Requirements for vRealize Network Insight Cloud
- Before you onboard with vRealize Network Insight Cloud
- Get Started with vRealize Log Insight Cloud