VMWARE HORIZON 7 SMALL SCALE DEPLOYMENT SERVICE

AT A GLANCE
Horizon 7 streamlines management, reduces costs, and helps maintain compliance by delivering desktops and applications as a service through a single platform. The VMware Horizon 7 Small Scale Deployment Service helps customers extend and adapt a foundational VMware vSphere® architecture to support a dynamic end user computing environment.

KEY BENEFITS
• Dynamically allocated resources simplify management and reduce costs
• Contextual, role-based policies improve security
• The ability to create a secure, digital workspace on any device increases business agility
• A consistent experience across devices and locations increases user productivity
• Pooling infrastructure dramatically reduces storage and operating costs

Overview
The VMware Horizon 7 Small Scale Deployment Service provides a comprehensive design of the virtual infrastructure, followed by the deployment and validation of the design using the capabilities provided by VMware vSphere® and VMware vSAN. The solution use case covers datacenter consolidation of server environments (physical and virtual) to provide an optimized virtual infrastructure. This project includes the following modules:

• Horizon 7 Small Scale Deployment. Non-scalable production Horizon 7 environment to customers who want to utilize VMware virtual desktop technology to support a single production use case.

The following are the high-level activities included in this project:

• Deploy. Deployment and validation of technology components.
• Knowledge Transfer. Knowledge transfer of the design, deployment and operations procedures.

This project relates to the following VMware product:

• VMware Horizon®

Project Scope
The scope of the service includes the following:

Horizon 7 Small Scale Deployment

<table>
<thead>
<tr>
<th>SPECIFICATION</th>
<th>PARAMETERS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizon 7 Implementation</td>
<td></td>
<td>The number of physical data centers supported by this service.</td>
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<tr>
<td>Physical data center</td>
<td>Up to one (1)</td>
<td>The number of physical data centers supported by this service.</td>
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<tr>
<td>Single View POD/Instance</td>
<td>Up to one (1)</td>
<td>The number of View component if Horizon PODs/Instances supported by this service.</td>
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<tr>
<td>Connection Servers (two for internal access and one for external access with the Security Server)</td>
<td>Up to three (3)</td>
<td>The number of View Connection Servers supported by this service.</td>
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<tr>
<td>View Composer Server component of Horizon 7</td>
<td>Up to one (1)</td>
<td>The number of View Composer servers supported by this service.</td>
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<tr>
<td>Security server or Access Point virtual appliance</td>
<td>Up to one (1)</td>
<td>The number of View security servers or Access Point virtual appliance supported by this service.</td>
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<tr>
<td>End users</td>
<td>Up to two hundred (200)</td>
<td>The number of end users supported by this service.</td>
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</table>
Horizon 7 Implementation includes the following:

<table>
<thead>
<tr>
<th>SPECIFICATION</th>
<th>PARAMETERS</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>Installation and optimization of Windows operating system</td>
<td>Up to one (1)</td>
<td>The number of Windows desktop operating system installation and optimizations supported by this service.</td>
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<tr>
<td>Desktop image</td>
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<td>The number of desktop images supported by this service.</td>
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<tr>
<td>Creation of desktop pools, either linked clones or full virtual machines</td>
<td>Up to two (2)</td>
<td>The number of desktop pools that can be created by this service.</td>
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<tr>
<td>Low complexity use case</td>
<td>Up to one (1)</td>
<td>The number and type of use case supported by this service.</td>
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<tr>
<td>Initial end user rollout assistance</td>
<td>Up to twenty-five (25)</td>
<td>The number of end users to roll out during this service.</td>
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Out of Scope
The following are the 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.

Horizon 7 Small Scale Deployment
• Documenting or performing any pilot rollout activities or user acceptance testing
• Making specific recommendations regarding hardware, storage, networking, or management products or vendors
• Configuration of load balancers to support Horizon 7
Estimated Schedule
VMware estimates that the duration of this project will not exceed 2 weeks. VMware consulting services will operate according to a schedule agreed to by both parties. Typically, consulting services are performed during normal business hours and workdays (weekdays and non-holidays).

<table>
<thead>
<tr>
<th>Phase</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tr>
<td>Initiate</td>
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<tr>
<td>Plan</td>
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<tr>
<td>Execute - Deploy</td>
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<tr>
<td>Execute - Knowledge Transfer</td>
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<tr>
<td>Close</td>
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Project Activities

Phase 1: Initiate
After the statement of work (SOW) is signed and the purchase order is received, the VMware Project Manager 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 data sheet.
• 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
• Initial pre-engagement call

Phase 2: Plan
VMware leads a project kickoff meeting with Customer project sponsors and stakeholders to review expectations about the purpose of the engagement, the delivery approach, and timelines.

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 processes
• 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**
- Project kickoff meeting minutes
- Initial project plan

**Phase 3: Execute**
The key activities for this phase are organized in the following sub-phases:
- Deploy
- Knowledge Transfer

**Deploy**
VMware deploys, documents, and validates the technology components according to the design.

VMware does the following:
- Installs and configures the VMware technologies according to the design.
- Finalizes the Configuration Workbook with physical design elements.
- Executes service and service component functional test validation.

**Deliverables**
- Base Service Horizon 7 Small Scale Installation and Configuration Procedures document
- Base Service Horizon 7 Small Scale Validation Workbook
- Base Service Horizon 7 Small Scale Reference Architecture document

**Knowledge Transfer**
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.

**Deliverables**
- Base Service Horizon 7 Small Scale Operational Procedures document

**Phase 4: Close**
The VMware Project Manager conducts a closure meeting of up to two (2) hours with the Customer covering project status, reviewing completions, next steps and how to engage further with VMware.

**Deliverables**
- Project closure meeting presentation
4. Appendix – Service Checklist

The following are the prerequisites for this service engagement.

• The procurement of VMware licenses covering the products listed in the Overview section and defined in the Service Checklist document.
• Physical hardware, including servers, storage, and networking, must have been procured, installed, and confirmed to be operational.
• The required compute capacity available to support the implementation of each module and its components as defined in the Service Checklist document.
• Physical hardware for installation of VMware ESXi hosts. Minimum of three (3) hosts per cluster if using VMware vSAN as the shared storage. The recommended configuration is to use three (3) hosts for the management cluster, and three (3) hosts for a desktop vSphere cluster.
• VMware ESXi Installed and configured with NTP Servers, VMware vSphere vMotion™ networks and storage or vSAN networks if required.
• Management and desktop clusters configured with VMware vSphere Distributed Resource Scheduler™ and high availability enabled.
• The number of desktop hosts will depend on the number of desktops required to support and their configuration.
• Two (2) vCenter Servers instances deployed and configured. One (1) vCenter Server instance to manage the management cluster. One (1) vCenter Server instance to manage the desktop resource cluster.
• The following are required for component installation (Horizon, App Volumes, User Environment Manager) before the VMware consultant arrives on site.
  - Static IP address assignment.
  - Configured DNS entries.
  - Host names tested for forward, reverse, short name, and long name resolution.
  - Access to an NTP server that can be used for configuration.
  - SQL 2012 SP1 database server deployed as an external cluster or hosted on the management cluster.
  - A shared storage solution with a minimum of one (1) datastore. If using VMware vSAN, the hardware must be supported as listed on the VMware vSAN compatibility list.
  - CIFS volumes to store User Environment Manager configuration and profiles if used.
• The procurement of Windows and other licenses required for the desktop operating systems and applications.
• Active Directory, DHCP, DNS, NTP.

The following stakeholders are required to deliver this service:

• Desktop operations leads
• Desktop design leads
• Active Directory architects
• Active Directory operations
• Server provisioning team leads
• VMware operations team leads
• Security policy team leads
• Firewall/DMZ team leads
The following are the technical prerequisites required to deliver this service:

- Number of Hosts 3
- vCenter Version 6.0
- ESXi Version 6.0
- Number of vCenter Servers 1
- Number of Clusters Required 2
- Windows Desktop OS Version 10

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