

# Deploy and Consume VMware NSX Advanced Load Balancer on Horizon Single Site

## At a glance

The primary objective of this service is design and implement an Application Delivery Controller (ADC) solution based on NSX ALB limited to the minimum design and configuration required to load balance VMware Horizon at a single site.

The service is conducted jointly with your team members to enhance the learning experience during the deployment.

## Key Benefits

- Deploy a best practice-based, foundational VMware NSX ALB implementation
- Develop key skills to be able to support a load balancer for desktop virtualization environments
- Improve operational efficiency and network provisioning time, and increase network security

## SKU

PS-ALB-SST-DPY

Deploy and Consume NSX ALB on Horizon single site (Remote Only)

## Service Overview

The VMware Deploy and Consume NSX Advanced Load Balancer (ALB) for Horizon services entail a rapid installation, configuration, and high-level deployment validation of a reference design for VMware NSX ALB for single site desktop virtualization deployment.

This service is ideal for organizations who need to quickly deploy a VMware NSX ALB load balancing solution for VMware Horizon Deployments and can work with remote team members.

## Project Scope

The scope of the service includes the following:

Deploy and Consume NSX Advanced Load Balancer on Horizon single site (REMOTE ONLY) Design and implementation of an Application Delivery Controller (ADC) solution based on NSX ALB. This solution will be designed and implemented in accordance with VMware NSX ALB best practices and customer environmental requirements and be delivered through a series of working sessions.

This solution is strictly limited to the minimum design and configuration required to load balance VMware Horizon at a single site. VMware Horizon is required to be installed prior to or during the VMware NSX ALB deployment to ensure the functionality of Horizon through the NSX ALB solution.

Specification	Parameters	Description
Design Workshop		Lead customer design workshops and document the design/deployment details of NSX ALB integration with VMware Horizon components.
Number of Horizon Sites	Up to one (1)	Up to One (1) Horizon sites. One (1) NSX ALB Controller Cluster deployment, up to four (4) NSX ALB Server Load Balancing (SLB) Service Engines and required virtual services will be implemented per site based on Solution Guide.

Local Server Load Balancing	Up to three (3)	Up to three (3) local VIPs created per site to support local load balancing for Horizon Connection Servers, Unified Access Gateways and App Volumes Managers.
Knowledge transfer workshop		Conduct knowledge transfer session on NSX ALB infrastructure, NSX ALB troubleshooting, and load balancing Horizon applications.

## Outcomes

Customer will be able to accomplish the following outcomes after the project:

- Plan and extend load balancing deployments to support a single site desktop virtualization environment
- Improve operational efficiency
- Improve utilization of assets
- Improved insight into application component communication
- Map role and skill set definitions to support the IT transformation

## Estimated Schedule

VMware estimates that the duration of this project will not exceed two (2) weeks. VMware consulting services will be performed according to a schedule agreed to by both parties. Typically, consulting services are performed during normal business hours and workdays.

## Project Activities

The activities for this engagement are organized in the following phases:

- Phase 1: Initiate
- Phase 2: Plan
- Phase 3.1: Execute: Design
- Phase 3.2: Execute: Implement
- Phase 3.3: Execute: Knowledge Transfer
- Phase 4: Close

### Phase 1: Initiate

The VMware Project Manager hosts one (1) project initiation call with key Customer and VMware stakeholders. Topics to be discussed include the following:

- Project business drivers, scope, and objectives.
- Project deadlines, estimated timelines, scheduling, and logistics.
- Identification of key Customer team members with whom VMware will work to perform the tasks defined in this SOW.
- Participating team members are confirmed, and contact details are exchanged to schedule the project kickoff meeting.

#### Deliverables

- One (1) project initiation call

### Phase 2 Plan

VMware leads one (1) project kickoff meeting with Customer project sponsors and stakeholders to review expectations about the purpose of the engagement, the delivery approach, and estimated timelines. The following are the objectives of the meeting:

- Introducing the VMware team, roles, and responsibilities.
- Describing the project goals, phases, and key dates.
- Agreeing on communication and reporting process and creating a communications plan.
- Validating the project expectations and clarifying roles and responsibilities
- Confirming prerequisites are met as detailed in the solution checklist for specified solutions.
- Presenting the solution overview for specified solutions including expected project results and deliverables.
- The VMware Project Manager and the Customer Project Manager collaborate to develop the project plan.

#### Deliverables

- Communications plan
- One (1) project kickoff meeting
- Project Plan
- Solution checklist

- Solution overview presentation

### **Phase 3: Execute**

The key activities for this phase are organized in the following sub-phases:

- Design
- Implement
- Knowledge Transfer

#### **Phase 3.1: Execute: Design**

VMware leads the Customer project team in a series of workshops to develop a design. VMware does the following:

- Conducts up to twelve (12) hours of design workshops.
- Documents the design for the specified VMware solutions in the solution design document(s).

#### **Deliverables**

- Solution design document
- Up to twelve (12) hours of design workshops

#### **Phase 3.2: Execute: Implement**

VMware implements the solution according to the VMware solution specification. VMware does the following:

- Implements the specified solutions as detailed in the specification workbooks
- Verifies the implementation and documents results in the verification workbooks for the specified solutions

#### **Phase 3.3: Execute: Knowledge Transfer**

VMware conducts knowledge transfer sessions covering the design, implementation, and operational considerations relating to the scope of this project. VMware does the following:

- Conducts up to three (3) hours of knowledge transfer sessions for appropriate Customer representatives
- Provides an adoption guide document(s) containing operational guidance for the specified solutions

Note: For the avoidance of doubt, the Knowledge transfers herein do not comprise VMware product training or certification courses as offered by the VMware Education unit - (<http://mylearn.vmware.com/mgrreg/index.cfm>).

### Deliverables

- Adoption guide document
- Knowledge transfer workshop presentation
- Up to three (3) hours of knowledge transfer sessions

### Phase 4: Close

The VMware Project Manager conducts one (1) closure meeting with Customer covering project status, next steps, and how to engage further with VMware.

### Deliverables

- Engagement summary presentation
- One (1) closure meeting

## 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
- 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

- Design, deployment, configuration, or migration-related work for NSX ALB (AVI) WAF components

## Prerequisites Checklist

Customer is responsible for executing all items discussed in the Service Checklist prior to arrival of VMware consultants on site.

The participation of the following Customer stakeholders is required for the Service to be performed:

- Desktop operations leads
- VMware operations team leads
- Network Operations team leads
- Network Architecture team leads

The following technical prerequisites are required to enable VMware to perform this Service:

- Horizon servers (Connections servers, security server, Composer server, TrueSSO server) are installed and basic configuration set. Defined minimum: Horizon 7.x
- Service account with permissions in vCenter
- NTP must be setup and time verified to be correct
- DNS must be configured and tested for forward, reverse, short and long name resolution
- Virtualized CPU required minimum: Enough vCPU capacity must be available to deploy three (3) NSX ALB Controllers, up to one (1) Service Engine for GSLB and up to four (4) Service Engines for SLB depending on the deployment model and sizing guidelines
- Virtualized storage required capacity: Enough storage capacity must be available to deploy three (3) NSX ALB Controllers and up to four (4) Service Engines for SLB depending on the deployment model and sizing guidelines
- Virtualized RAM required minimum: Enough memory capacity must be available to deploy three (3) NSX ALB Controllers, up to one (1) Service Engine for GSLB, and up to four (4) NSX ALB Service Engines for SLB depending on the deployment model and sizing guidelines

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- Required number of public/private IP addresses must be allocated for NSX ALB components (Controllers/SEs) as well as Virtual Services (UAG/Connection Server/App Volume) depending on the deployment model
- Required SSL certificates (SAN/Wildcard etc.) must be provided for the NSX ALB virtual services depending on the deployment model
- Horizon UAG and Connection Servers must be configured to load balance Horizon VDI traffic through NSX ALB
- DNS servers must be configured for Horizon UAG and Connection Servers

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.