

[How to create a service package in MAS and publish to VMware NSX?](#)

Introduction:

One of the key component of NSX, Edge gateway provides gateway services such as DHCP, VPN, NAT, dynamic routing, and Load Balancing. Common deployments of NSX Edge include multi-tenant Cloud environments where the NSX Edge creates virtual boundaries for each tenant.

To support Multi-tenancy in NSX environment i.e. to allocate different NetScaler resources to different edge gateways the service package mechanism of MAS orchestration can be leveraged.

Service Package in NetScaler MAS is a set of SLAs which define the way NetScaler resources have to be allocated. Below are the supported SLA's for NSX use cases.

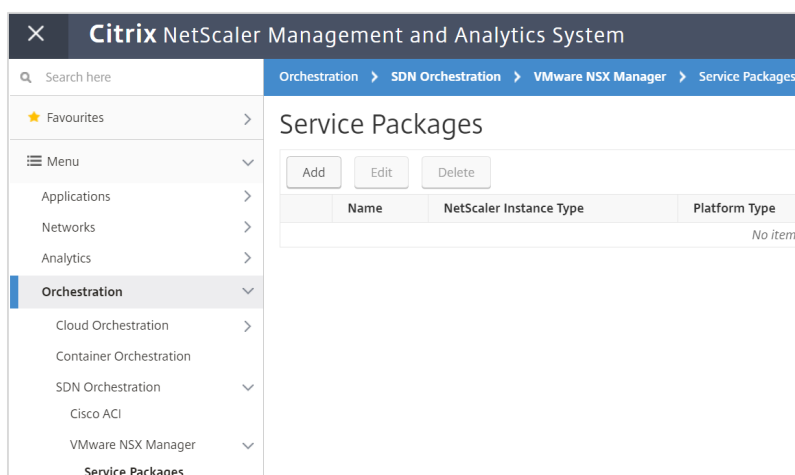
1. Consumption Model
 - a. Dedicated NetScaler
2. Provisioning type
 - a. Auto-provision NetScaler
 - b. Pre-provisioned NetScaler
3. NetScaler Device Type
 - a. VPX on ESX

In the below section we will see the process of creating a service package and publishing the same to NSX.

Assumptions:

1. NetScaler MAS and VMware NSX are registered to establish bi-directional communication.
2. NetScaler VPX image is uploaded to NetScaler MAS
3. NetScaler VPX licenses are uploaded to MAS.

Step1: In NetScaler MAS, Go to Orchestration, SDN orchestration, VMware NSX Manager, Service Packages and click Add to add new Service Package



Step2: Provide name for Service Package, isolation policy is selected as Dedicated by default, enable Auto provision platform, VMware ESX is selected by default and click continue.

The screenshot shows the 'Service Package' configuration window. At the top, there is a back arrow and the title 'Service Package'. Below this is a section titled 'Service Level Agreement'. A descriptive text reads: 'A service package captures the policy that is used for the appliance per edge gateway.' The 'Name*' field contains 'SP for NSX'. Under 'NetScaler Instance Allocation', the 'Dedicated' radio button is selected. The 'Auto Provision' checkbox is checked. Under 'Auto Provision Platform', the 'VMware ESX' radio button is selected. The 'Device Type' is set to 'NetScaler VPX'. At the bottom, there are 'Continue' and 'Cancel' buttons.

Step3: Select the VPX image, select the License, fill the vCPUs and memory and click Continue.

The screenshot shows the 'Service Package' configuration window, now on the 'Auto Provision Settings' section. The 'Name' is 'sp for NSX'. Under 'Resources', the 'Netscaler VPX Package for ESX*' dropdown is set to 'NSVPX-ESX-11.1-49.83_nc.zip'. The 'License*' dropdown is set to 'VPX10_Enterprise, 2number'. The 'vCPUs*' field contains '2'. The 'Memory in MB*' field contains '2048'. Below this is a 'High Availability' section with a checkbox for 'Provision pair of NetScaler appliances for High Availability', which is currently unchecked. At the bottom, there are 'Continue' and 'Cancel' buttons.

Step4: Verify the details and click continue.

The screenshot shows the 'Service Package' configuration page. It is divided into three sections: 'Service Level Agreement', 'Auto Provision Settings', and 'Publish Service Package'.
- **Service Level Agreement:** Name is 'sp for NSX'.
- **Auto Provision Settings:** OVA Image Name is 'NSVPX-ESX-11.1-49.83_nc.zip'. Provision pair of NetScaler appliances for high is 'false'.
- **Publish Service Package:** A checkbox labeled 'Publish this Service Package to VMware NSX' is checked. At the bottom are 'Continue' and 'Cancel' buttons.

Step5: Click Done to publish the service package to NSX

The screenshot shows a confirmation dialog titled 'Publish ServicePackage'. The message reads: 'This Service Package is published to VMware NSX Manager.' At the bottom is a 'Done' button.

Step6: To verify in VMware vSphere web client, go to Networking & Security, service definitions, services, find an entry with the same name as service package.

