



# Managing Resources on VMware vCenter

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## Adding Images on VMware vCenter

When you deploy VNFs on VMware vCenter, you can either use the out-of-band images that are already available on VMware vCenter or create an image in the ESC portal, or using REST or NETCONF APIs. For more information on deployment attributes see, [Cisco Elastic Services Controller Deployment Attributes](#).

### Adding Images Using Northbound APIs



**Note** When you deploy VNFs on VMware vCenter, you can either use the out-of-band images that are already available on VMware vCenter or create an image in the ESC portal or using REST or NETCONF APIs.

NETCONF request to create an image:

```
<?xml version="1.0" encoding="UTF-8"?>
<esc_datamodel xmlns:ns2="urn:ietf:params:xml:ns:netconf:notification:1.0"
xmlns:ns1="urn:ietf:params:xml:ns:netconf:base:1.0"
xmlns:ns3="http://www.cisco.com/esc/esc_notifications"
xmlns:ns0="http://www.cisco.com/esc/esc" xmlns="http://www.cisco.com/esc/esc">
  <images>
    <image>
      <name>cirrosimage-indep</name>

      <src>http://172.16.0.0:/share/images/esc_automated_test_images/cirros-0.3.3-x86_64-disk.img</src>

      <disk_format>qcow2</disk_format>
      <container_format>bare</container_format>
      <serial_console>>true</serial_console>
      <disk_bus>virtio</disk_bus>
    </image>
  </images>
</esc_datamodel>
```

NETCONF notification upon successful creation of an image:

```
<?xml version="1.0" encoding="UTF-8"?>
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
```

```

<eventTime>2015-07-13T13:46:50.339+00:00</eventTime>
<escEvent xmlns="http://www.cisco.com/esc/esc">
  <status>SUCCESS</status>
  <status_message>Image creation completed successfully.</status_message>
  <image>cirrosimage-indep</image>
  <vm_source>
</vm_source>
  <vm_target>
</vm_target>
  <event>
    <type>CREATE_IMAGE</type>
  </event>
</escEvent>
</notification>

```



**Note** For more information about adding images using NETCONF API, see [Cisco Elastic Services Controller API Guide](#). To access the REST API documentation directly from the ESC VM, see [REST Northbound API](#). For more information on adding and deleting images using the ESC portal, see [Managing VMware vCenter Resources Using ESC portal](#).

## Creating Distributed Port on VMware vCenter

On VMware vCenter, you configure a distributed port on a vSphere distributed switch that connects to the VM kernel or to a virtual machine's network adapter. It specifies port configuration options for each member port on a vSphere distributed switch. Distributed port groups define how a connection is made to a network. You can use REST interface to create distributed port groups.

The following example shows how to create a distributed port group (VMware vCenter only) using REST API:

```

<?xml version="1.0" encoding="UTF-8"?>
<network xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <name>network-portgroup-01</name>

  <switch_name>vdsSwitch-01</switch_name>

  <vlan_id>0</vlan_id>

  <number_of_ports>8</number_of_ports>
</network>

```



**Note** On VMware vCenter, ESC only supports basic portGroup or network creation within a vSphere Distributed Switch (VDS). For advance vDS configuration, only out-of-band configuration is supported by ESC.