



Cisco Spaces: Connector OVA

- [Deploying the Connector 3 OVA \(Single Interface\)](#), on page 1
- [Deploying the Cisco Spaces: Connector OVA \(Dual Interface\)](#), on page 9
- [Using Snapshots for Backup](#), on page 16

Deploying the Connector 3 OVA (Single Interface)

This chapter provides information about how to download and deploy the Cisco Spaces: Connector 3 and obtain the URL for the connector GUI.

Before you begin

Ensure you have the minimum configuration required for installing connector OVA:

- 2 vCPU
- 4-GB RAM
- 120-GB hard disk

-
- Step 1** Download connector OVA to your local system.
- Step 2** Create a virtual machine (VM) in the ESXi server and deploy the downloaded Cisco Spaces: Connector OVA.
- Step 3** In the **1. Select an OVF template** window, click **UPLOAD FILES**, and select the corresponding connector OVA files or drag and drop the downloaded file, and click **Next**.

Figure 1: 1. Select an OVF template

Step 4

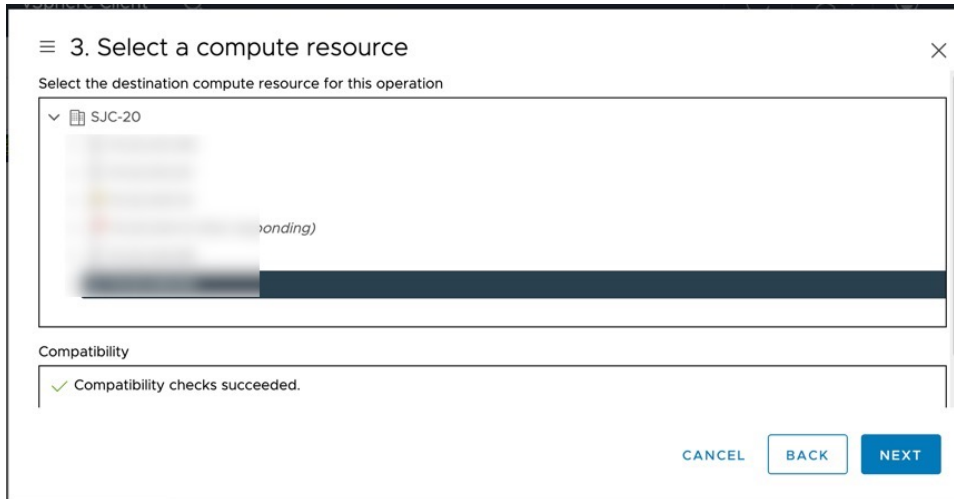
In the **2. Select a name and folder** window, enter a name for the VM, and choose a location for the VM, and click **Next**.

Figure 2: 2. Select a Name and Folder

Step 5

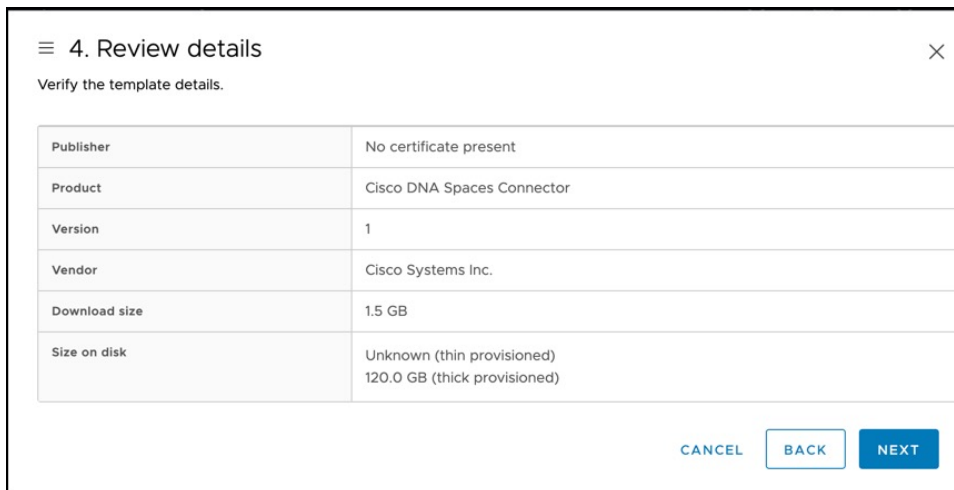
In the **3. Select a compute resource** window, select a destination compute resource, and click **Next**.

Figure 3: 3. Select a Compute Resource



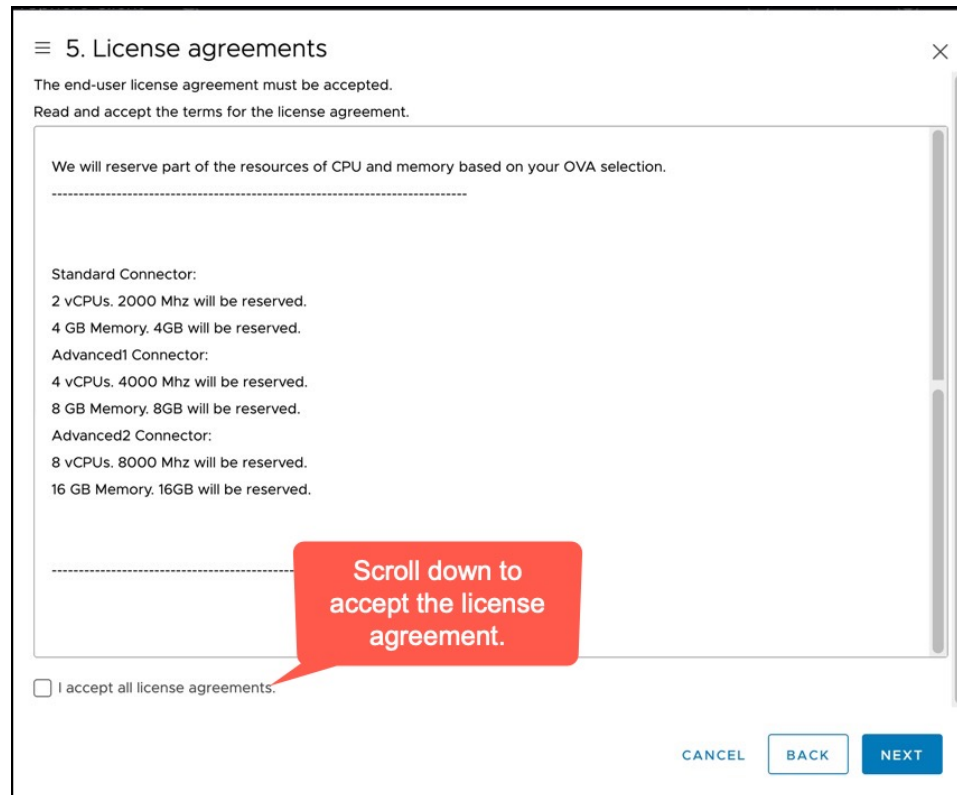
Step 6 In the **4. Review details** window, read and verify the template details, and click **Next**.

Figure 4: 4. Review Details



Step 7 In the **5. License agreements** window, read the license agreement that is displayed and scroll to the end. Check **I accept all license agreements** and then click **Next**.

Figure 5: License Agreements



Step 8 In the **6. Configuration** window, choose one of the following, and click **Next**.

- **Standard**
- **Advanced1**
- **Advanced2**

Step 9 In the **7. Select storage** window, choose the standard storage configuration, and click **Next**.

Figure 6: 7. Select storage

7. Select storage

Select the storage for the configuration and disk files

Encrypt this virtual machine (Requires Key Management Server)

Select virtual disk format: Thick Provision Lazy Zeroed

VM Storage Policy: Datastore Default

Disable Storage DRS for this virtual machine

Name	Storage Compatibility	Capacity	Provisioned	Free	Type	Cluster
datastore1 (1...	--	5.44 TB	4.58 TB	1,014.88 GB	VMFS 6	

Compatibility

CANCEL BACK NEXT

Step 10 In the **8. Select networks** window, choose a destination network, and click **Next**.

Figure 7: 8. Select Networks

8. Select networks

Select a destination network for each source network.

Source Network	Destination Network
NAT	VM Network

IP Allocation Settings

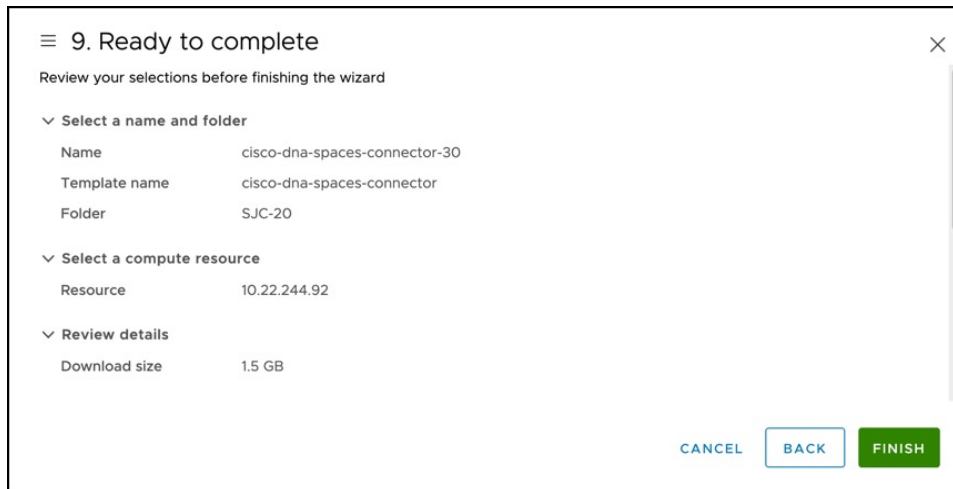
IP allocation: Static - Manual

IP protocol: IPv4

CANCEL BACK NEXT

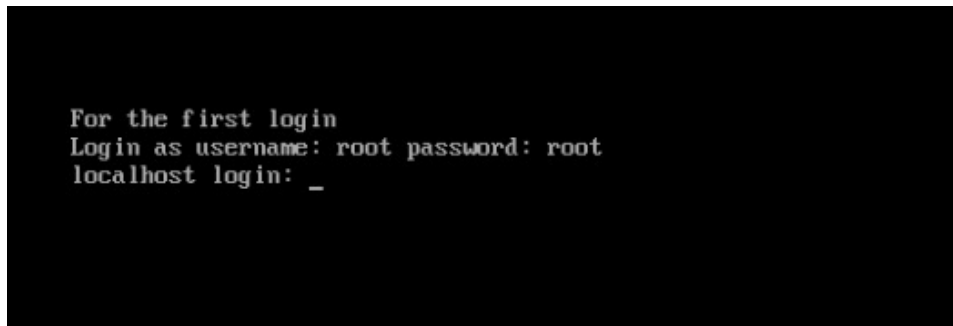
Step 11 In the **9. Ready to complete** window, review the configurations and click **Finish**.

Figure 8: 9. Ready to Complete



Step 12 Power on your VM and log in to the terminal and enter the default username **root** and default password **root**.

Figure 9: First Login Credentials root/root



Step 13 Choose an network interface to configure as PRIMARY.

Figure 10: Configuring the Primary Interface: IPv4

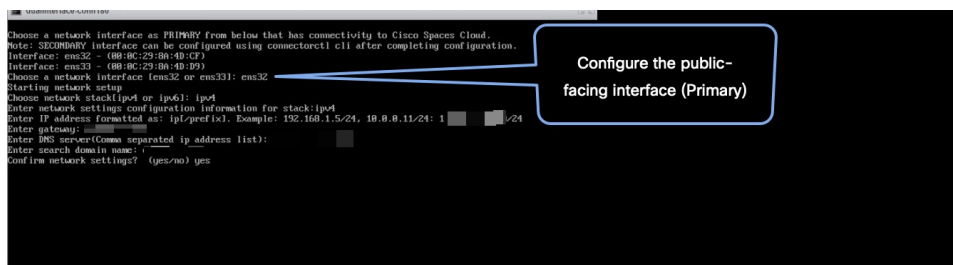


Figure 11: Configuring the Primary Interface: IPv6

```

conn3-ipv6
Configuring network...
Connection 'PRIMARY' (ef021e87-0bd9-430e-b927-97e996d8c799) successfully added.
Testing network configuration...
Checking connection to ::1
Checking connection to 2001:420:28e:2009:14:23:244:202
Checking connection to 2001:420:28e:2009:14:23:244:1
Checking DNS Servers 2001:420:60d:4001:a
Validating DNS Server: 2001:420:60d:4001:a entry with Cisco DNS Spaces end point (dnaspaces.io/dnaspaces.eu/ciscospaces.sg)
Status check successful for server: 2001:420:60d:4001:a

The network setup will timeout in 120 seconds..
Type yes to finalize network setup:
yes
Do you want to configure network for stack:ipv4? (yes/no) no
  
```

Step 14 Do one of the following, and then configure the network settings for the PRIMARY interface. Specify parameters such as IP address, hostname, and so on.

- Configure the IPv6 stack.
- Configure the IPv4 stack.

You can add multiple DNS servers as a comma separated list in this step. After the task is complete and the Cisco Spaces: Connector is deployed, you can login to the connector CLI, and run the **connectorctl network config** command to add more DNS servers or edit the existing list.

Step 15 Confirm the setup.

Note Because this configuration window times out in 120 seconds, ensure that you provide the input on time to avoid reconfiguration.

Step 16 Reset the password for the **spacesadmin** user.

Step 17 Enter the time zone.

Figure 12: Time Zone

```

conn-3-244-89
Timezone setup
Would you like to setup timezone? (blank for default value (UTC))
yes
1. Africa - Press 1
2. America - Press 2
3. Asia - Press 3
4. Australia - Press 4
5. Europe - Press 5
Select an option from the list above: (blank for default (Default value is 2))
2
1. America/Anchorage - Press 1
2. America/Buenos_Aires - Press 2
3. America/Chicago - Press 3
4. America/Denver - Press 4
5. America/Los_Angeles - Press 5
6. America/Mexico_City - Press 6
7. America/New_York - Press 7
8. America/Phoenix - Press 8
9. America/Regina - Press 9
10. America/Santiago - Press 10
11. America/Sao_Paulo - Press 11
12. America/Toronto - Press 12
13. America/Vancouver - Press 13
Select an option from the list above: (blank for default (Default value is 1))
5
Setting timezone and restarting services...
  
```

Deploying the Connector 3 OVA (Single Interface)

Step 18 Enter the Network Time Protocol (NTP) server name to synchronize the system time with that of NTP server, or leave it blank if you do not want to configure an NTP server.

Figure 13: Configure NTP

```

dualinterface-conn180
Configure NTP
Enter comma separated NTP servers list (blank for no NTP server): ntp.es1.cisco.com
Checking status for server: ntp.es1.cisco.com
Status check successful for server: ntp.es1.cisco.com
Warning: The unit file, source configuration file or drop-ins of chronyd.service changed on
to reload units.
NTP configuration: success
  
```

Figure 14: Configure NTP

```

Configure NTP
Enter comma separated NTP servers list (blank for no NTP server): rtp5-b5-rbb-ntp1-06.cisco.com
Checking status for server: rtp5-b5-rbb-ntp1-06.cisco.com
Status check successful for server: rtp5-b5-rbb-ntp1-06.cisco.com
NTP configuration: success
  
```

Step 19 Note the URL (<https://connector-ip>) before the automatic reboot. You can use this URL later to open the connector GUI.

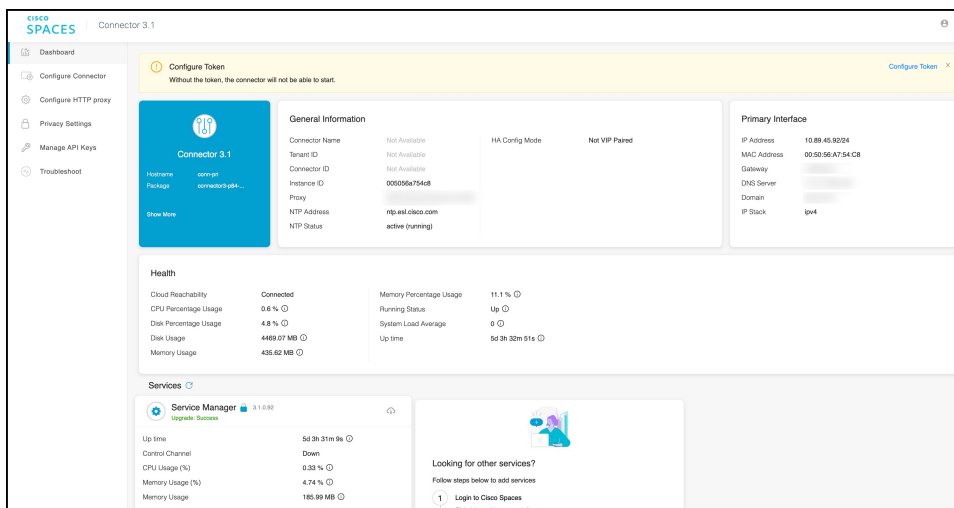
Figure 15: Connector GUI

```

Cisco Spaces Connector UI:
https://10.22.244.180
Username log in: spacesadmin
The install is complete, a reboot will occur in 5 seconds...
  
```

Step 20 In a browser window, enter the noted URL and press Enter to open the connector GUI. Log in as a **spacesadmin** user.

Figure 16: Connector GUI



Note The root user is disabled and is used only for advanced troubleshooting by the Cisco Support team.

What to do next

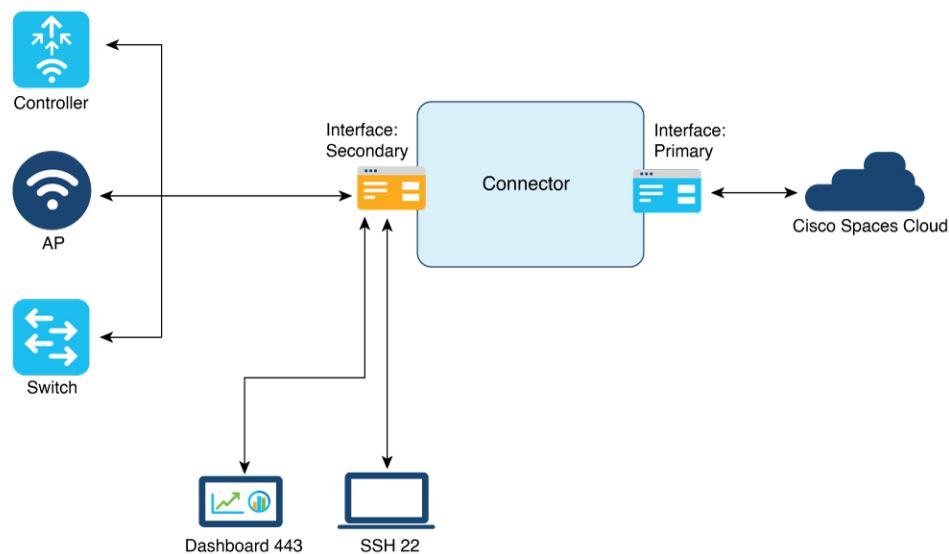
You can now [Configure this Connector on Cisco Spaces](#).

Deploying the Cisco Spaces: Connector OVA (Dual Interface)

If you need to connect the connector to two separate customer networks in network deployments, you can use a dual-interface deployment. We recommend this deployment in scenarios where you manage devices on private or internal networks. To set up this deployment, you must use two interfaces:

- PRIMARY interface: Used to transmit traffic to Cisco Spaces.
- SECONDARY interface: Used by connector to interact with devices such as wireless controller, access points, or switches, over a private or internal network. You can also allow SSH and GUI (443) access to connector on this interface with additional configurations (disabled by default). Ensure that the connector is part of subnet routes to access it.

Figure 17: Dual Interface Deployment



Note We recommend that you connect the wireless controller to a private network as it enables the connector to establish SSH connections with the wireless controller.

Before you begin

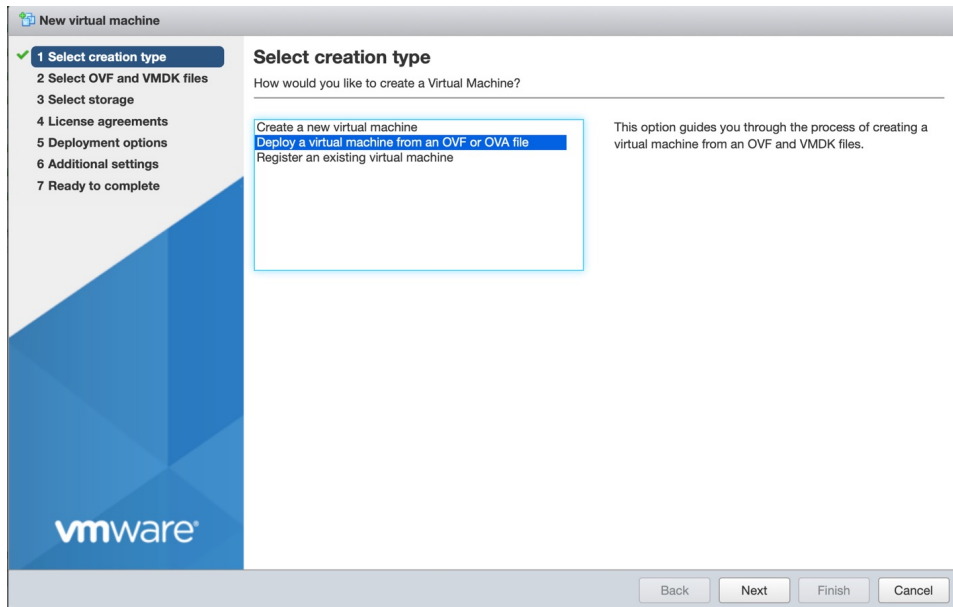
Ensure that the Cisco Unified Computing System (Cisco UCS) device where you install the Open Virtualization Appliance (OVA) is connected to two separate networks. In this network configuration, the Cisco UCS device is configured with two physical network interface cards (NICs). Each NIC is connected to a switch. In this way, the Cisco UCS device is connected to two networks.

Step 1 Download connector 3 from [Cisco.com](https://www.cisco.com).

Step 2 Create a virtual machine in the ESXi server and deploy the downloaded Cisco Spaces: Connector OVA.

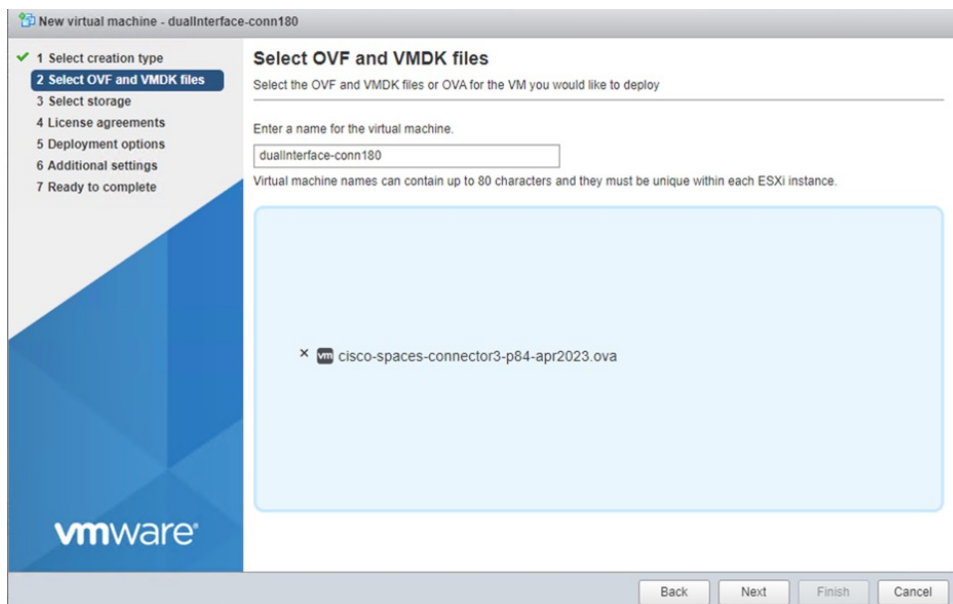
Step 3 In the **Select creation type** window, choose **Deploy a virtual machine from an OVF or OVA file**, and click **Next**.

Figure 18: Select Creation Type



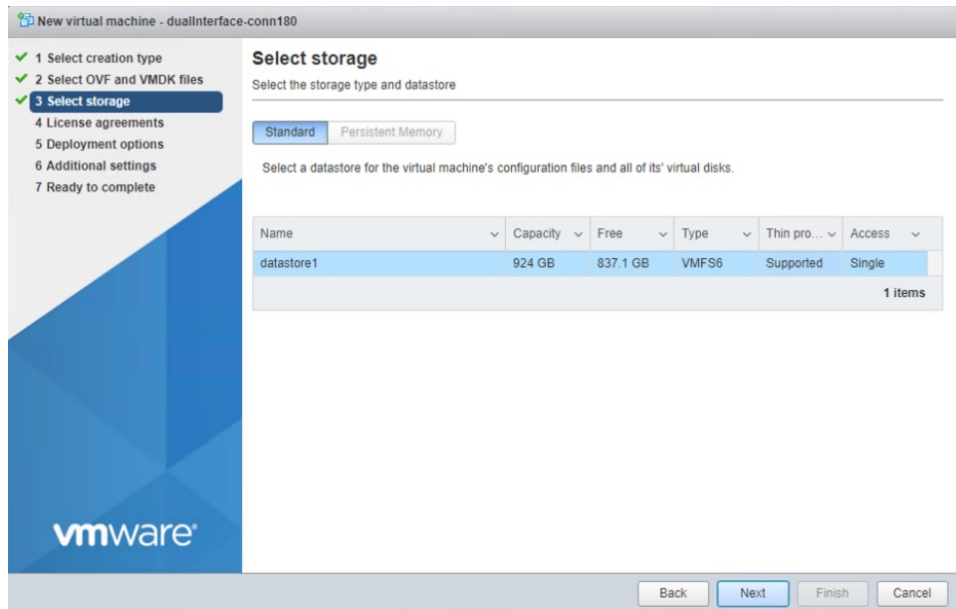
Step 4 In the **Select OVF and VMDK files** window, enter a name for the virtual machine. Click the blue area to either select files from the computer or drag and drop files. Click **Next**.

Figure 19: Select OVF and VMDK files



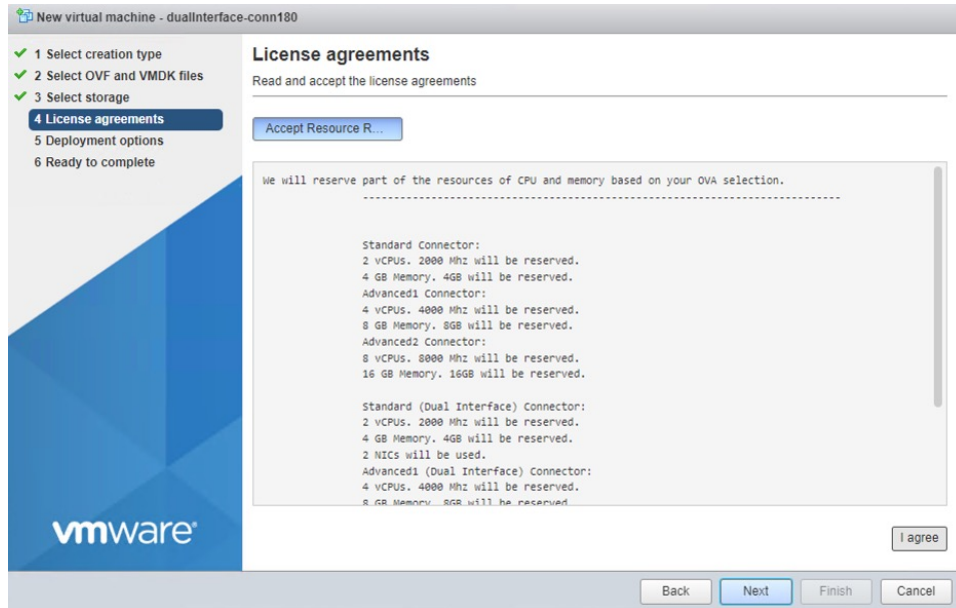
Step 5 In the **Select storage** window, the **Standard** storage configuration is displayed. Click **Next**.

Figure 20: Select Storage

**Step 6**

In the **License agreements** window, read the license agreement that is displayed and scroll to the end. Click **I Agree** and then click **Next**.

Figure 21: License agreements

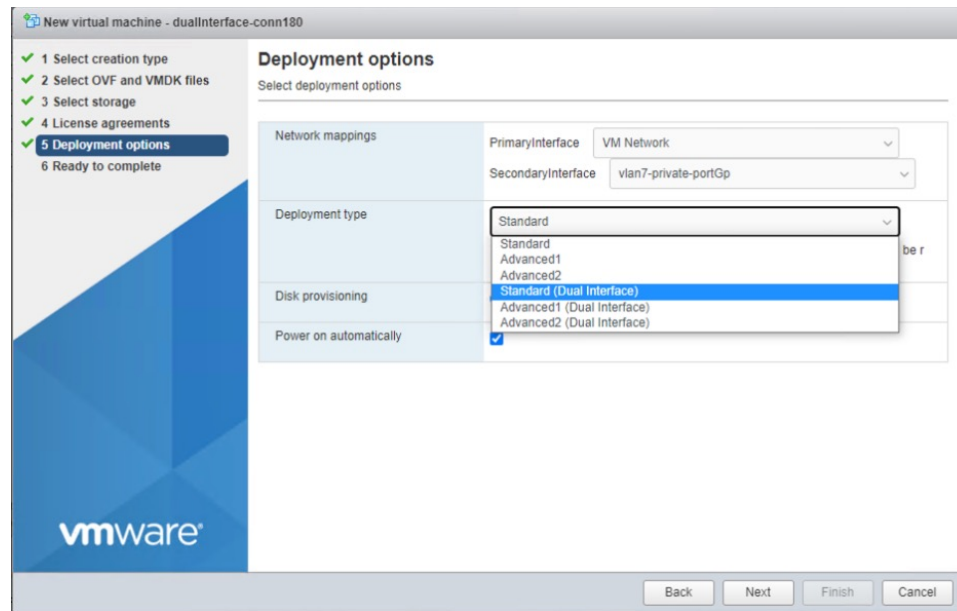
**Step 7**

In the **Deployment options** window, do the following:

- In the **PrimaryInterface** field, enter the name of the external-facing interface.
- In the **SecondaryInterface** field, enter the name of the private-facing interface.
- From the **Deployment type** drop-down list, choose one of the following deployment types.

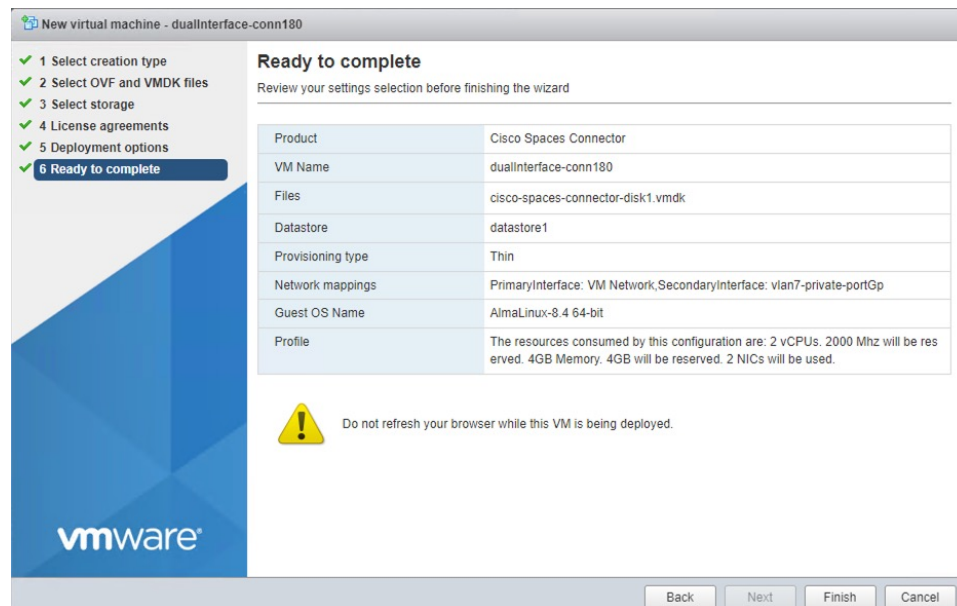
- **Standard (Dual Interface)**
- **Advanced1 (Dual Interface)**
- **Advanced2 (Dual Interface)**

Figure 22: Deployment options



Step 8 Review the configurations and click **Finish**.

Figure 23: Ready to complete



Step 9 Log in to the terminal and enter the default username **root** and default password **root**.

Step 10 Configure the host name for the connector.

Step 11 Choose an network interface to configure as PRIMARY.

Figure 24: Configuring the Primary Interface: IPv4

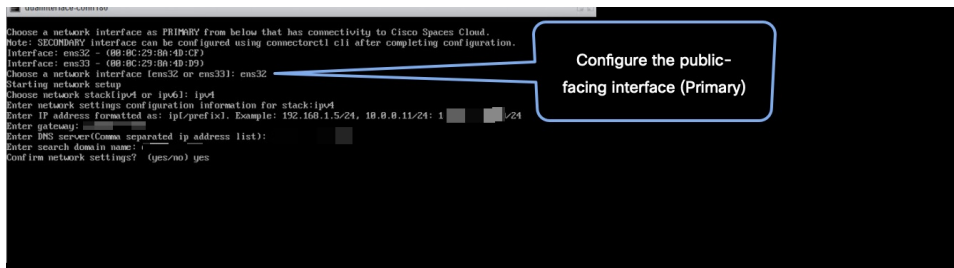
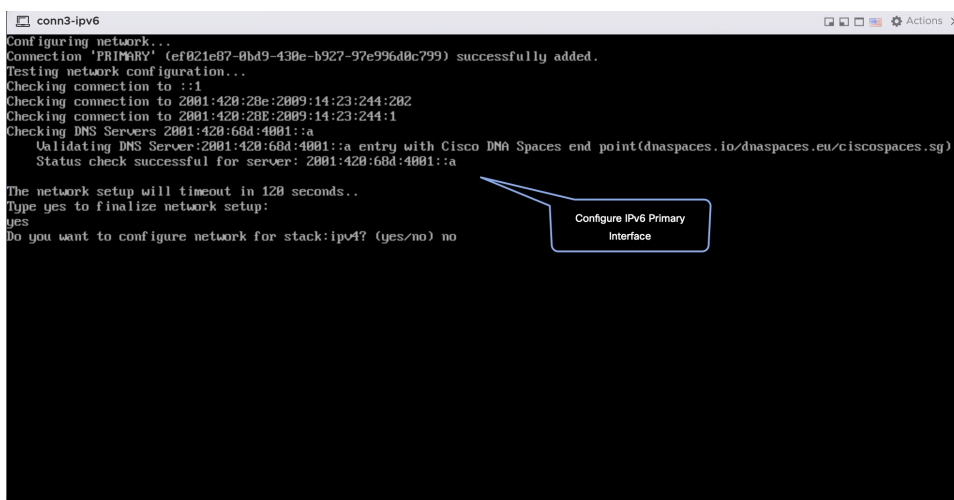


Figure 25: Configuring the Primary Interface: IPv6



Step 12 Do one of the following, and then configure the network settings for the PRIMARY interface. Specify parameters such as IP address, hostname, and so on.

- Configure the IPv6 stack.
- Configure the IPv4 stack.

You can add multiple DNS servers as a comma separated list in this step. After the task is complete and the Cisco Spaces: Connector is deployed, you can login to the connector CLI, and run the **connectorctl network config** command to add more DNS servers or edit the existing list.

Step 13 Reset the password for the **spacesadmin** user.

Step 14 Confirm the setup.

Note Because this configuration window times out in 120 seconds, ensure that you provide the input on time to avoid reconfiguration.

Step 15 Enter the time zone.

Figure 26: Time Zone

```

conn-3-244-99

Timezone setup
Would you like to setup timezone? (blank for default value (UTC))
yes
1. Africa - Press 1
2. America - Press 2
3. Asia - Press 3
4. Australia - Press 4
5. Europe - Press 5
Select an option from the list above: (blank for default (Default value is 2))
2
1. America/Anchorage - Press 1
2. America/Buenos_Aires - Press 2
3. America/Chicago - Press 3
4. America/Denver - Press 4
5. America/Los_Angeles - Press 5
6. America/Mexico_City - Press 6
7. America/New_York - Press 7
8. America/Phoenix - Press 8
9. America/Regina - Press 9
10. America/Santiago - Press 10
11. America/Sao_Paulo - Press 11
12. America/Toronto - Press 12
13. America/Vancouver - Press 13
Select an option from the list above: (blank for default (Default value is 1))
5
Setting timezone and restarting services...
-

```

- Step 16** Enter the Network Time Protocol (NTP) server name to synchronize the system time with that of NTP server, or leave it blank if you do not want to configure an NTP server.

Figure 27: Configure NTP

```

dualInterface-conn180
Configure NTP
Enter comma separated NTP servers list (blank for no NTP server): ntp.esl.cisco.com
Checking status for server: ntp.esl.cisco.com
Status check successful for server: ntp.esl.cisco.com
Warning: The unit file, source configuration file or drop-ins of chronyd.service changed on Wed Nov 14 2018 11:41:40 AM. Reload to reload units.
NTP configuration: success

```

Figure 28: Configure NTP

```

Configure NTP
Enter comma separated NTP servers list (blank for no NTP server): rtp5-b5-rbb-ntp1-v6.cisco.com
Checking status for server: rtp5-b5-rbb-ntp1-v6.cisco.com
Status check successful for server: rtp5-b5-rbb-ntp1-v6.cisco.com
NTP configuration: success

```

- Step 17** Note the URL (<https://connector-ip>) before the automatic reboot. You can use this URL later to open the connector GUI.

Figure 29: ConnectorGUI

```

Cisco Spaces Connector UI:
https://10.22.244.180
Username log in: spacesadmin
The install is complete, a reboot will occur in 5 seconds...
-

```

- Step 18** Wait for the completion of the reboot, and login as a **spacesadmin** user.
- Step 19** Configure the secondary interface using the **connectorctl network config** command

```

[spacesadmin@connector ~]$ connectorctl network config -p ipv4 -i 10.7.0.11/24 -g 10.7.0.1 -o
cisco.com -d 172.70.168.183 -n SECONDARY
Executing command:network
Command execution status:Success
-----

```

```

Connection SECONDARY (5e970417-13b4-4ad8-af12-d125ce407c49) successfully added.
Network setup completed with given configuration.
Secondary interface - Added routes.
Secondary interface - Configured firewall zone.
System reboot will happen in 10 seconds. Do not execute any other command...

```

Step 20 Verify the network Settings of external-facing network using the **connectorctl network show** command.

```

[spacesadmin@connector ~]$ connectorctl network show
  Executing command:network
Command execution status:Success
-----
=====Network Config=====
Hostname    - connector-p84-aprill

Interface   - PRIMARY
-----

Network configuration for stack:ipv4
Ip Address  - 10.22.244.180/24
Mac Address - 00:0C:29:EE:24:8A
Gateway     - 10.22.244.1
Dns         - 172.70.168.183
Domain     - cisco.com

Interface   - SECONDARY
-----

Network configuration for stack:ipv4
Ip Address  - 7.7.0.11/24
Mac Address - 00:0C:29:EE:24:94
Gateway     - 7.7.0.1
Dns         - 172.70.168.183
Domain     - cisco.com

=====end=====

```

You can use the **connectorctl network show -n PRIMARY** and **connectorctl network -n SECONDARY** to see information specific to these interfaces.

Step 21 In a browser window, navigate to the noted URL to open the connector GUI. Log in as a **spacesadmin** user.

Figure 30: ConnectorGUI

General Information			
Connector Name	fastlocate-ha-cip	HA Config Mode	VIP Paired
Tenant ID	12212	HA VIP	7.7.0.25
Connector ID	48636929145890280000	HA State	BACKUP
Instance ID	000c29d6e4cd	HA Instance Channel Status	UP
Proxy	Not Available	HA Peer Instance ID	000c292a43c6
NTP Address	ntp.esl.cisco.com	HA Peer IP	7.7.0.20
NTP Status	active (running)		

Primary Interface		Secondary Interface	
IP Address	10.22.244.114/24	IP Address	7.7.0.21/24
MAC Address	00:0C:29:D6:E4:CD	MAC Address	00:0C:29:D6:E4:D7
Gateway	10.22.244.1	Gateway	7.7.0.1
DNS Server	171.70.168.183	DNS Server	171.70.168.183
Domain	cisco.com	Domain	cisco.com
IP Stack	ipv4	IP Stack	ipv4

Health			
Cloud Reachability	Connected	Memory Percentage Usage	33 %
CPU Percentage Usage	6.1 %	Running Status	Up

Note The root user is disabled and is used only for advanced troubleshooting by the Cisco Support team.

Using Snapshots for Backup

You can use the snapshot of a deployed connector OVA for backing up your connector. Ensure that the following prerequisites are in place:

- connector is deployed.
- All the services are started.
- connector is added to Cisco Spaces.

Figure 31: Backing Up Using a Snapshot

Manage snapshots	
Take snapshot	Restore snapshot
Delete snapshot	Delete all
Edit snapshot	Refresh

Connector-v7-Baseline-latest	
Name	Connecto...
Description	...
Created	Tuesday, January 26, 2021, 17:21:50 -0800



Note Proxies are not carried over during a snapshot restore. You have to reconfigure proxies.
