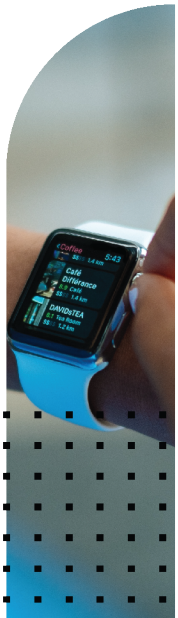
Nuage VPC Administration Guide

FortiOS 7.0



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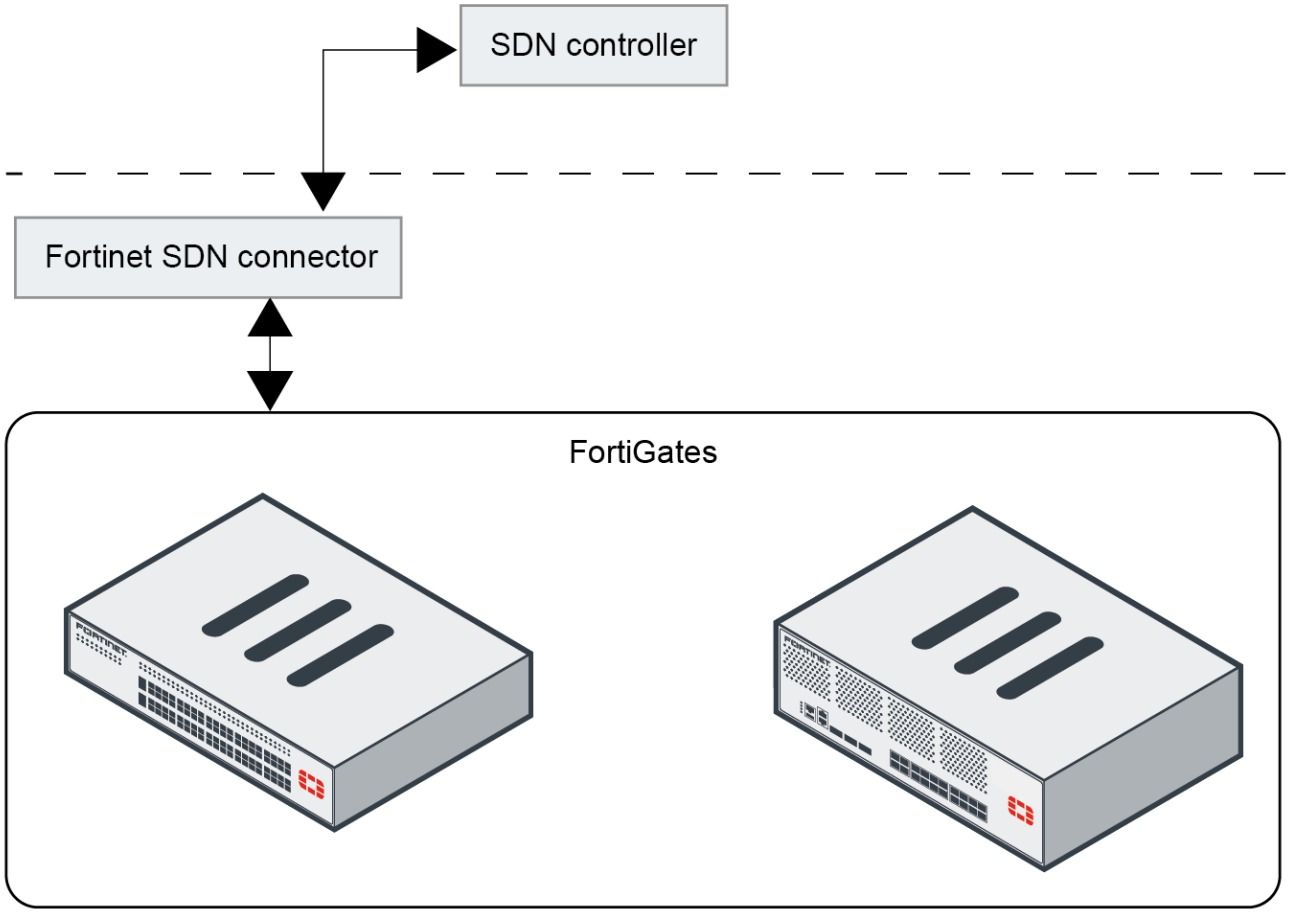
Introduction

The Fortinet SDN Connector is a standalone connector that serves as a gateway bridging SDN controllers and FortiGates. The SDN Connector connects to SDN controllers within Nuage, polls interested objects, and translates them into address objects. You must configure a connection to the Fortinet SDN connector in FortiOS to query the dynamic addresses. The translated address objects and associated endpoints populate to the FortiGate.



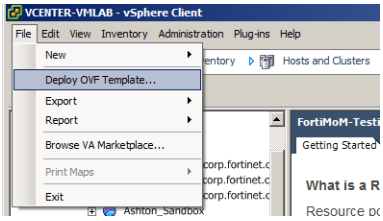
If you plan to instantiate a large number of VMs in your SDN Connector environment, ensure you size the host VM or server appropriately. The following recommendations represent the minimum sizing numbers:

- **Memory**: 4 GB
- **CPU**: 2 vCPU
- **Disk**: 20-50 GB
- **vNICs**: 1

Installing the SDN Connector

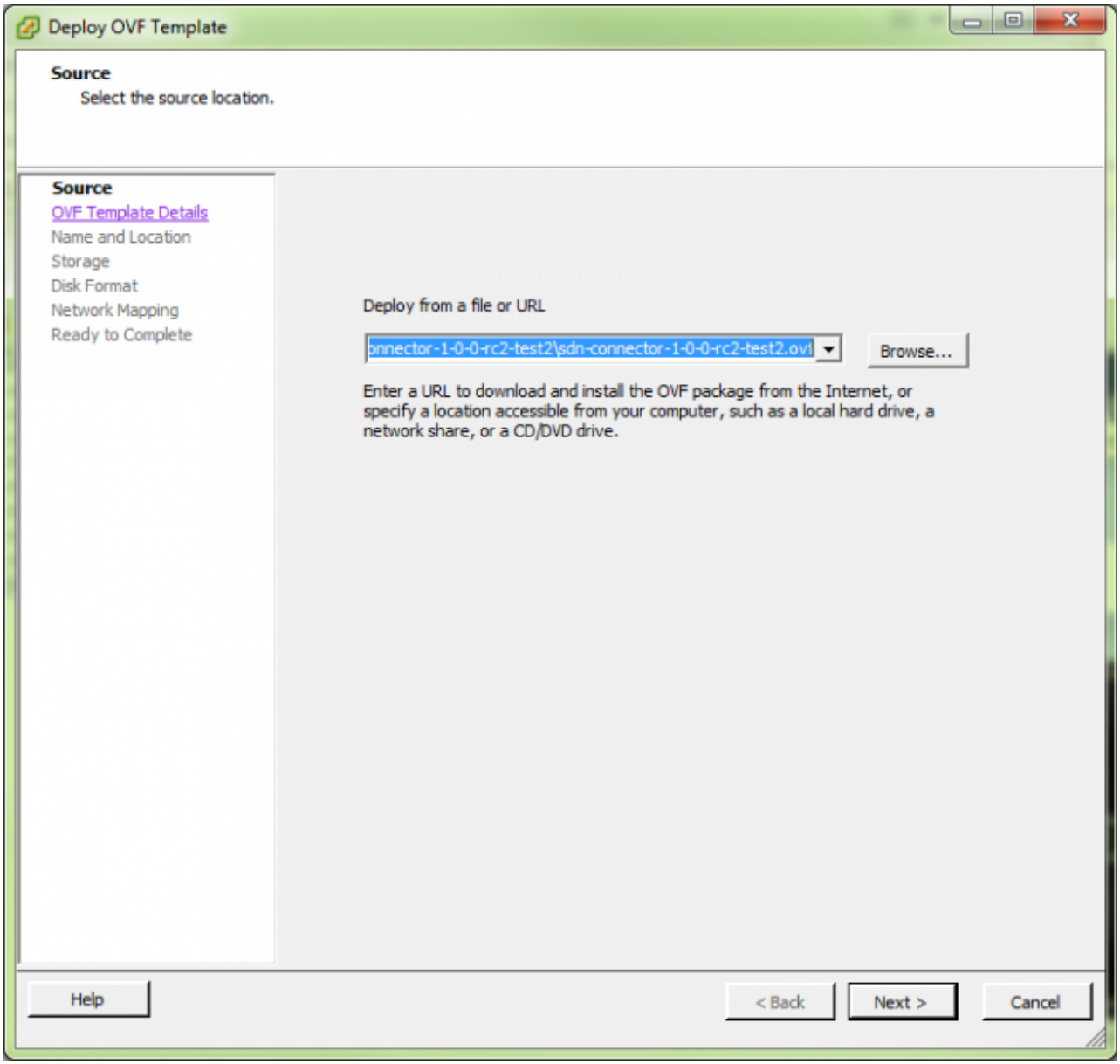
To install the SDN Connector:

1. SDN Connector supports VMware vSphere and KVM as deployment environments. In this example, vSphere client is used. Download sdn-connector.ovf. In vSphere Client, navigate to *File > Deploy OVF Template*.

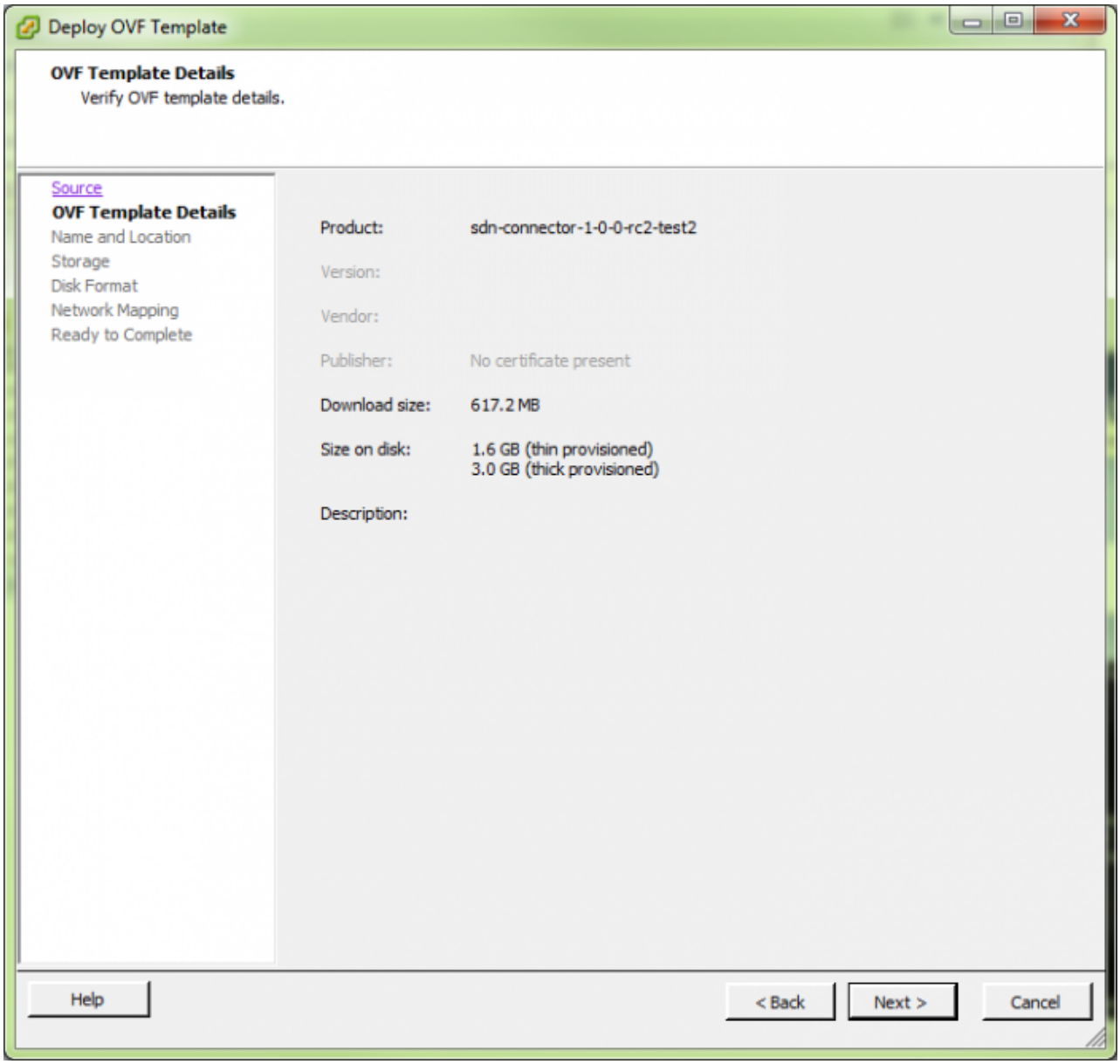


2. In the *Deploy OVF Template* dialog, enter the SDN Connector image file path in the *Deploy from a file or URL*

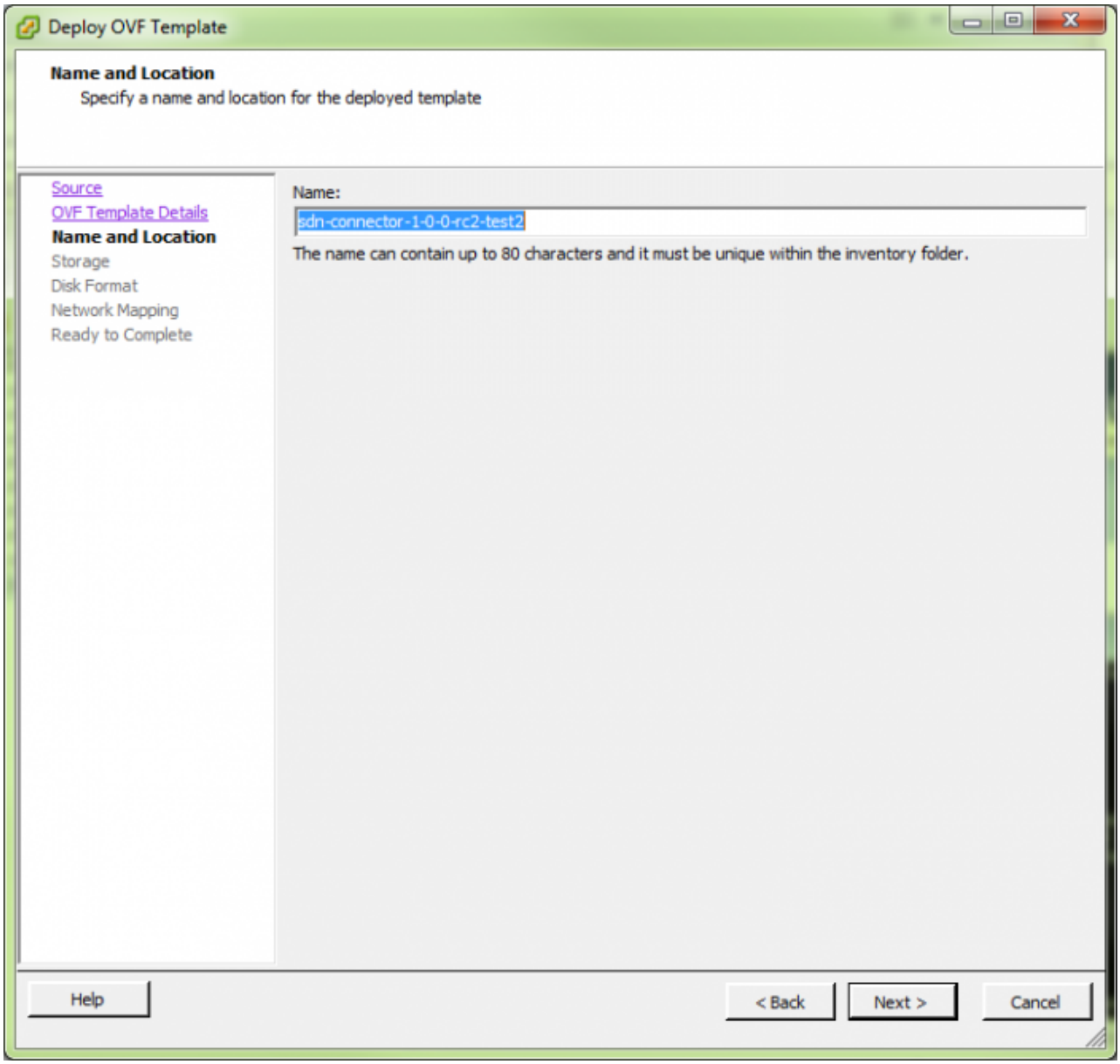
field. Click *Next*.



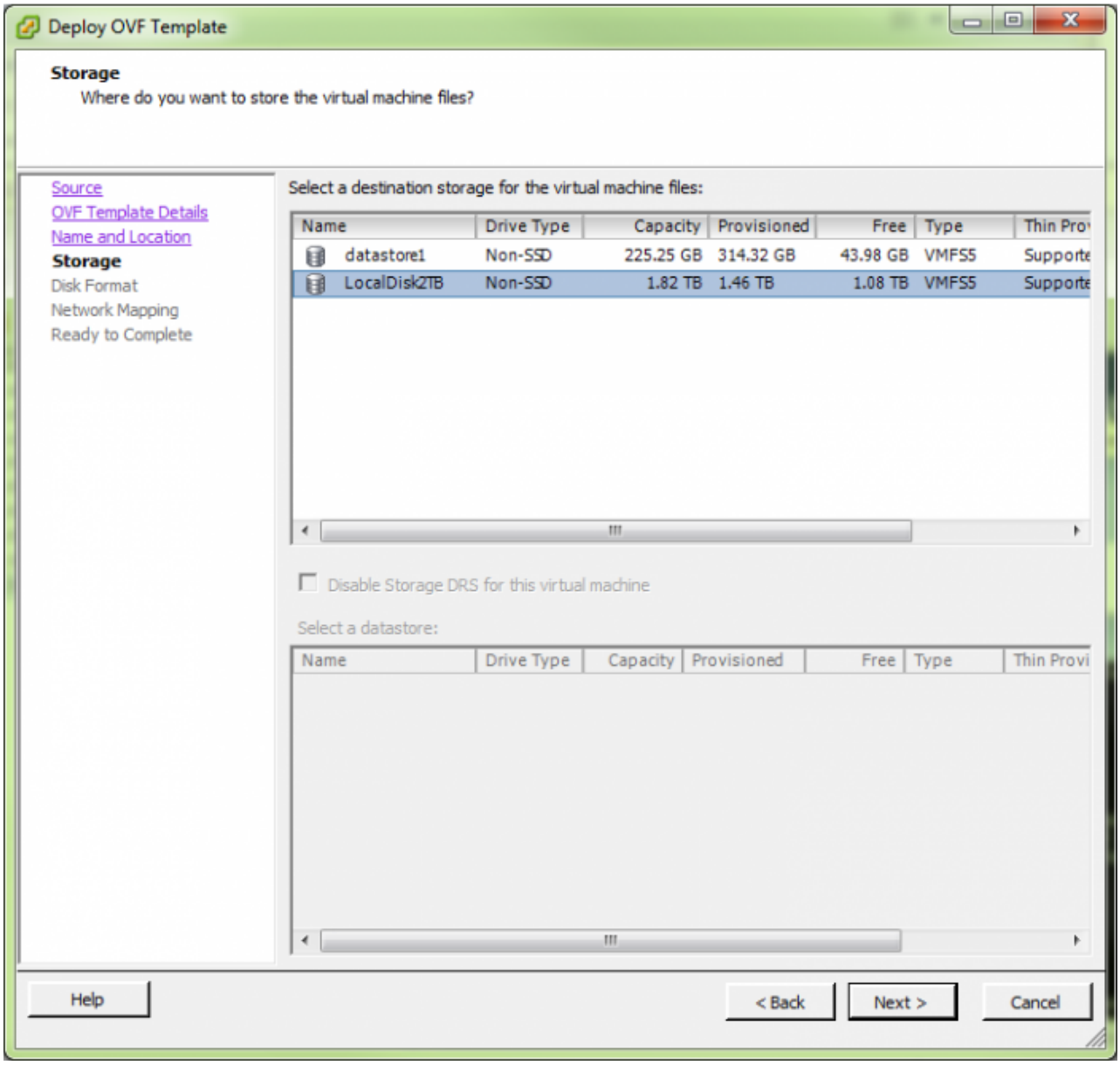
3. The dialog displays the SDN Connector version, download size, and size on disk. Click *Next*.



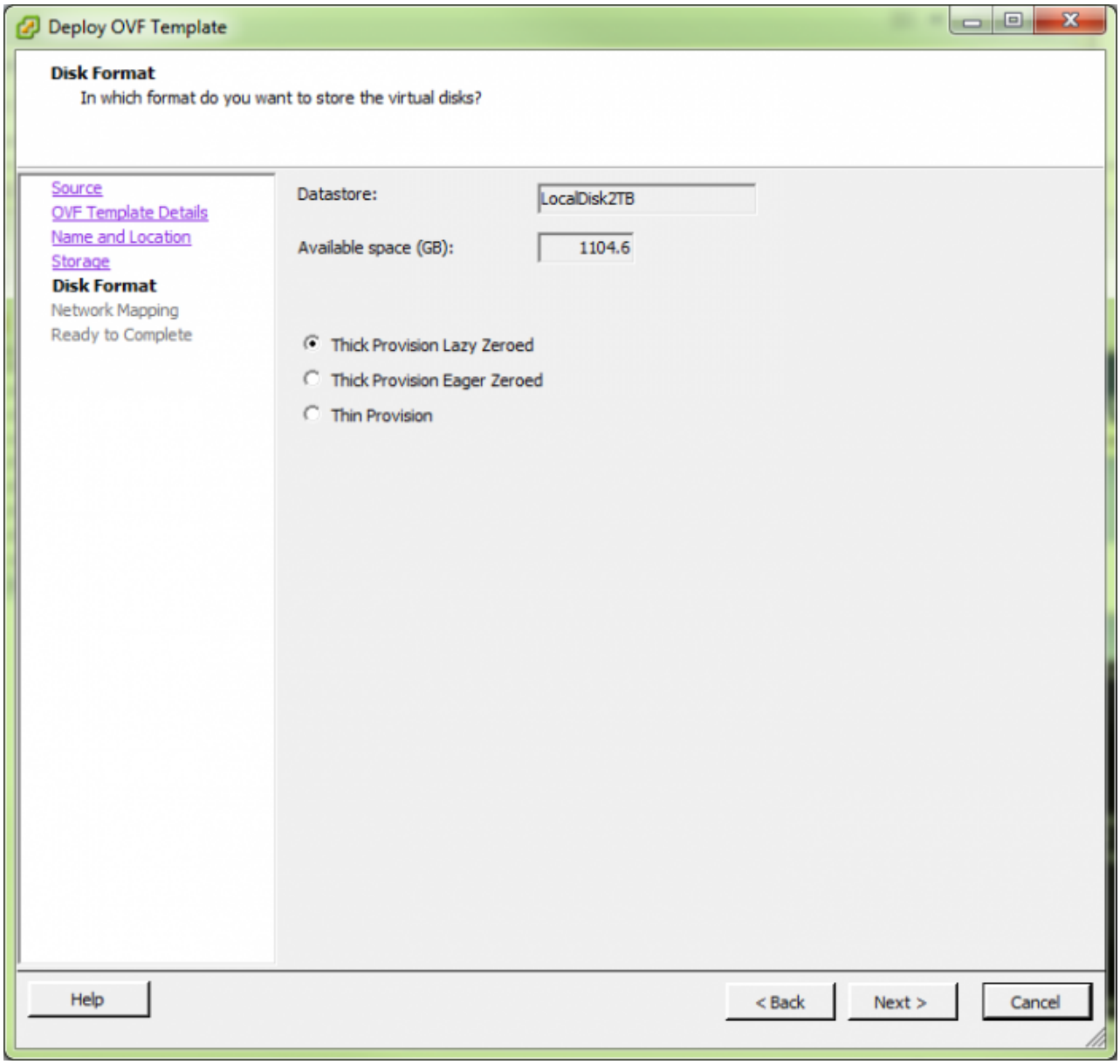
4. Enter the VM name, select the location, then click *Next*.



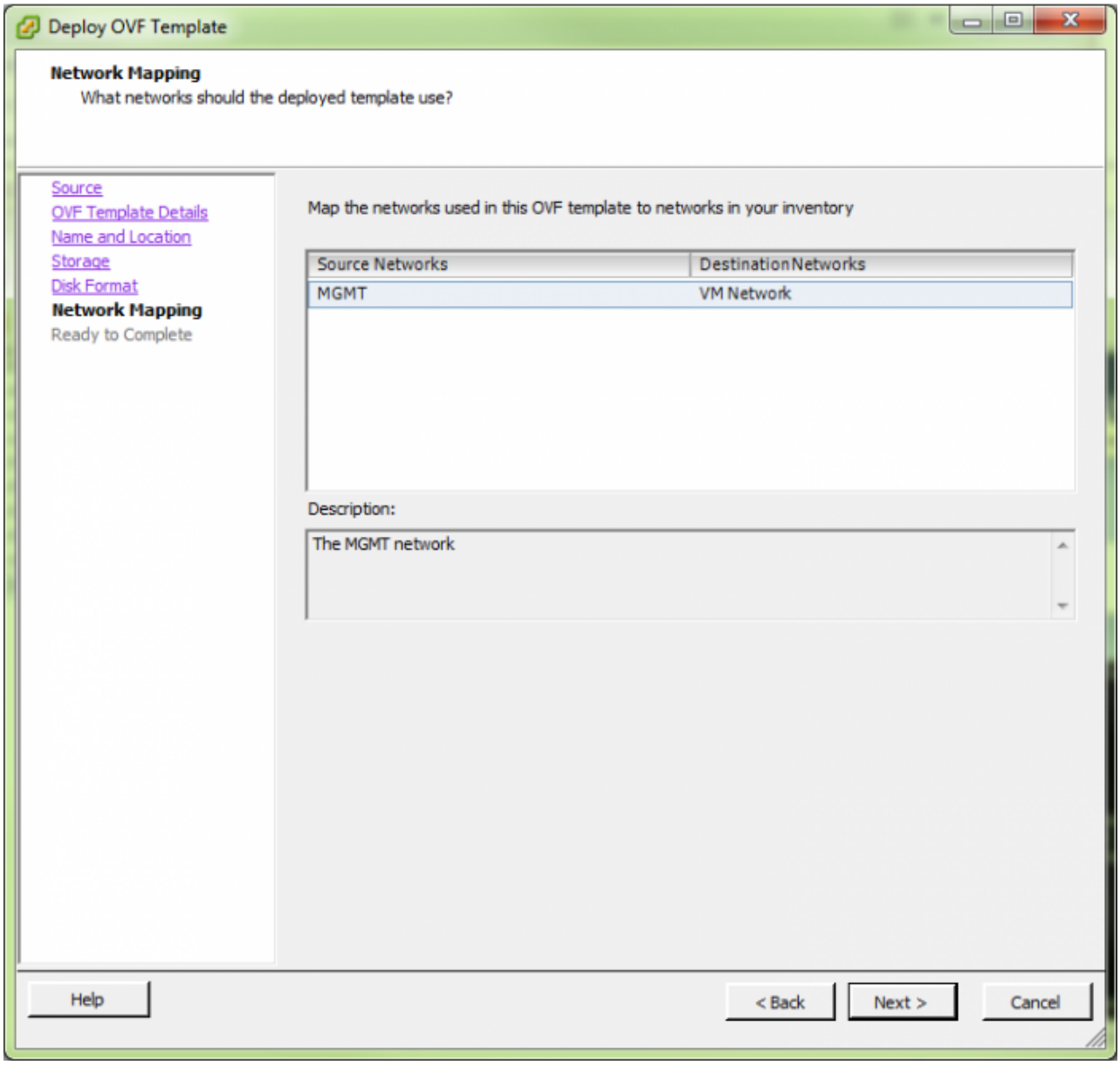
5. Choose the destination storage for the VM files, then click *Next*.



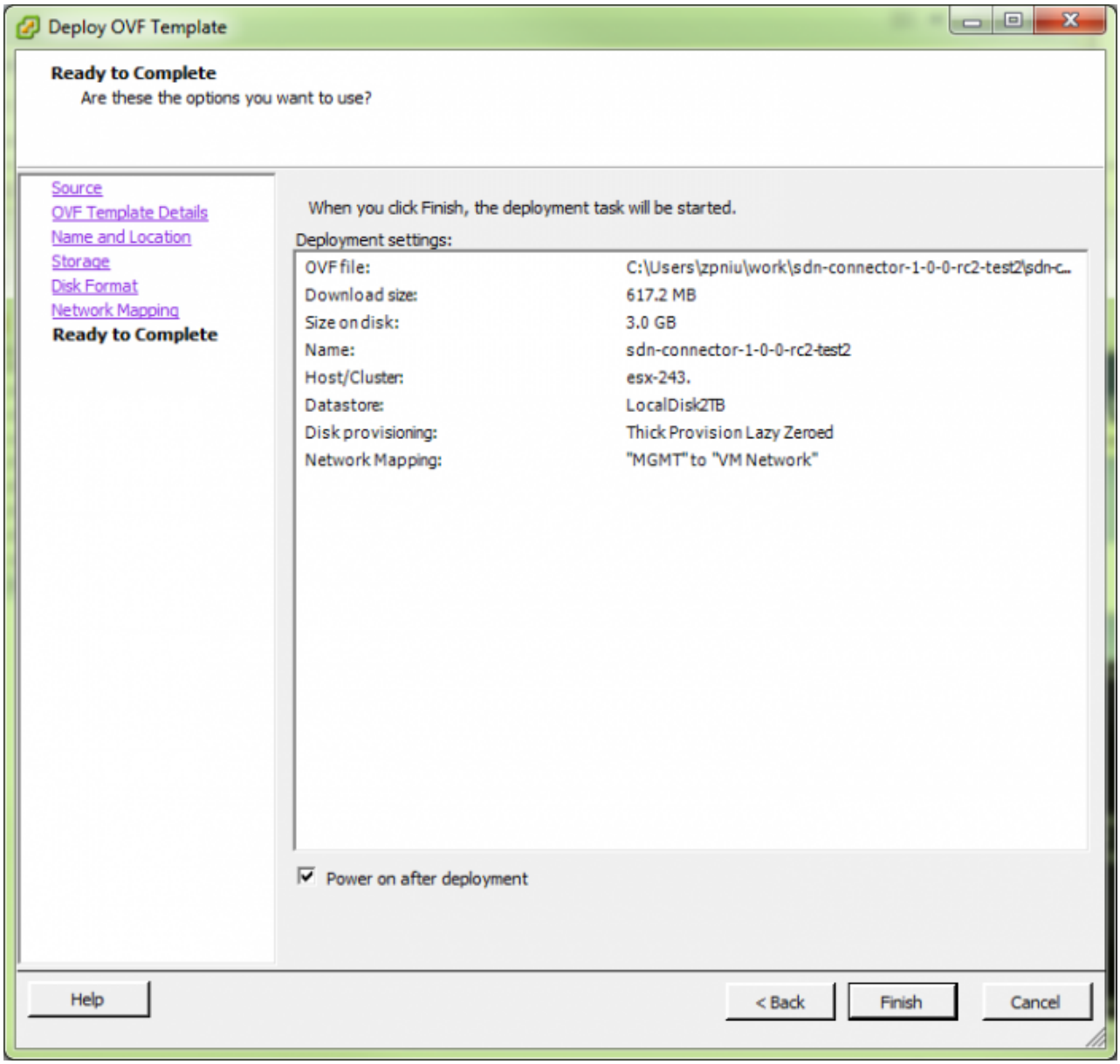
6. The dialog displays the datastore name and amount of available space. Select *Thin Provision*, then click *Next*.



7. Networks used in this OVF template should map to networks in your inventory. Choose the destination network for network mapping, then click *Next*.

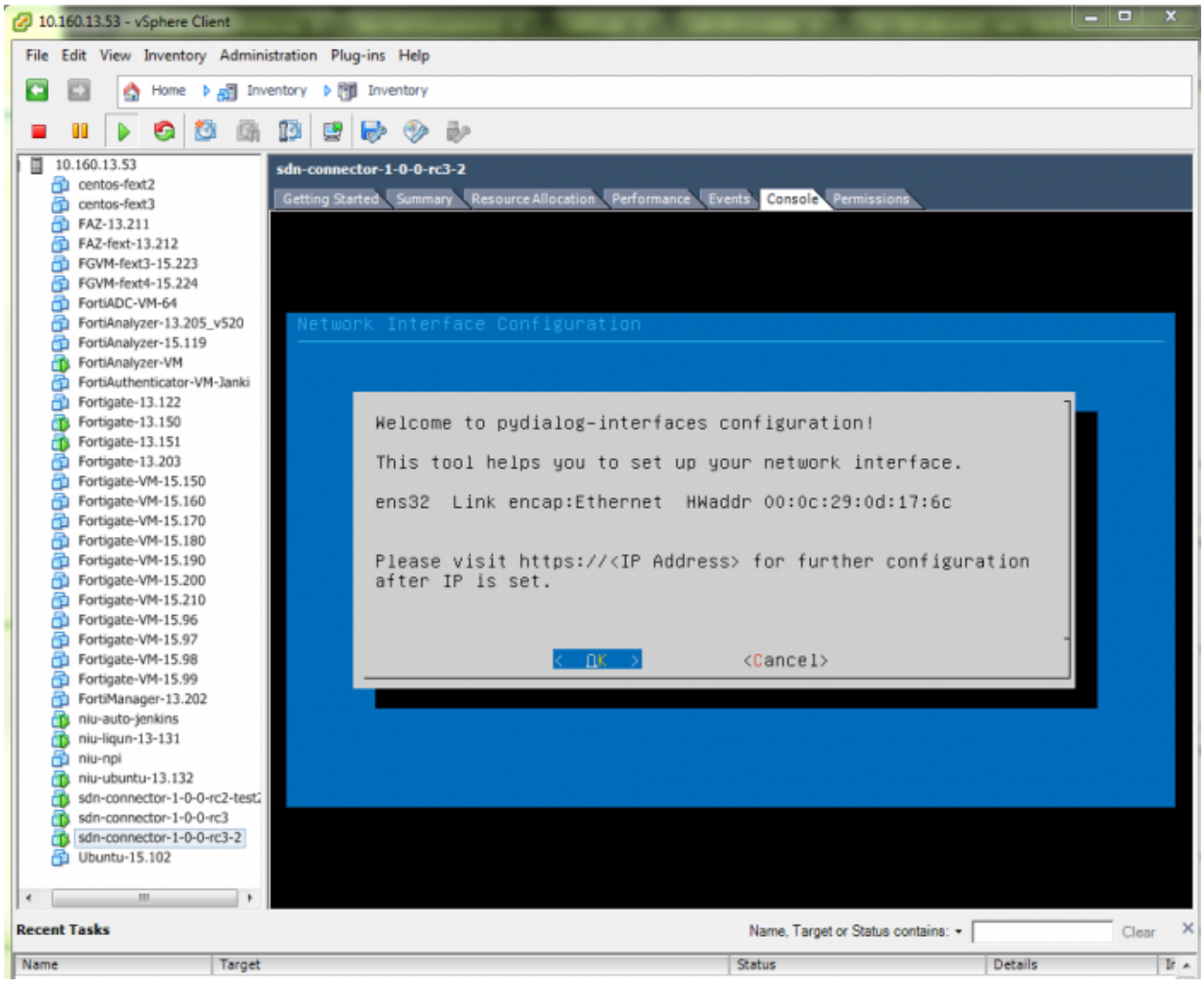

Deploy OVF Template
Network Mapping
What networks should the deployed template use?
Source
OVF Template Details
Name and Location
Storage
Disk Format
Network Mapping
Ready to Complete
Map the networks used in this OVF template to networks in your inventory
Source Networks
Destination Networks
MGMT
VM Network
Description:
The MGMT network
Help
< Back
Next >
Cancel

8. The dialog displays all previously configured options. To edit an option, click *Back*. If ready to deploy, click *Finish*.

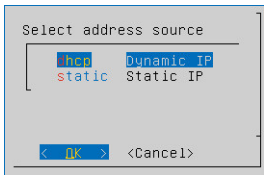


Initializing the SDN Connector

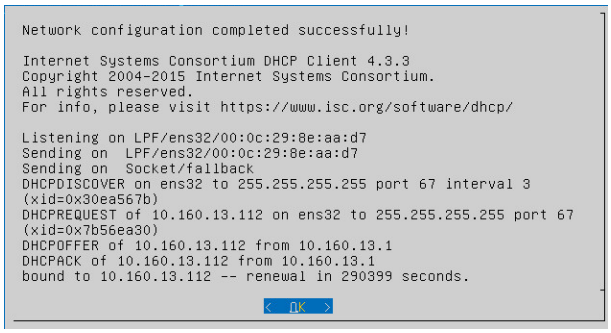
1. Once the OVF template is deployed, turn on the VM and navigate to the *Console* tab. Once the SDN Connector boots up, the system displays the following GUI dialog for configuration. Press *Enter* to proceed to the Network Interface Configuration wizard.



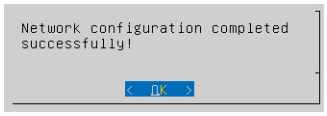
The Network Interface Configuration wizard provides DHCP and static IP configuration options.



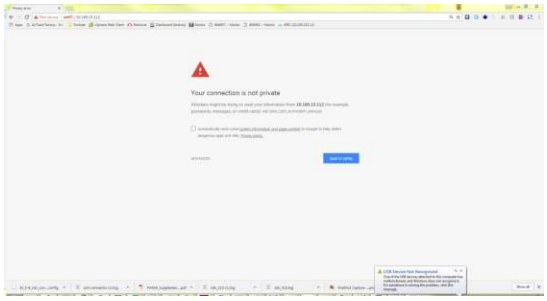
When the VM receives the IP address from the DHCP server, the system shows this success dialog. The dialog shows the SDN Connector IP address and gateway information.



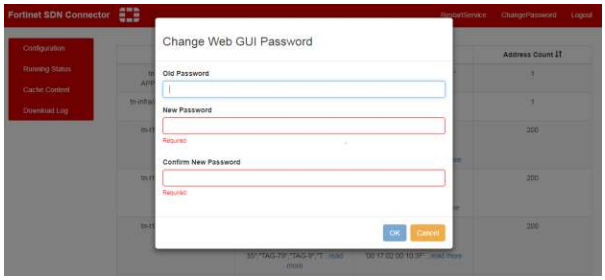
When the VM is configured with a static IP address, the system shows this success dialog.



2. To change the network configuration, click *OK* and return to the wizard to restart the setup flow.
3. Using a web browser, navigate to *https://<SDN connector IP address>*.



4. Log into the system with the default username and password, which are *admin@sdn-connector.local* and *fortinet123*, respectively. When you first log in, the GUI prompts you to change the password.

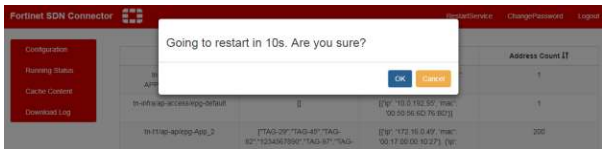


5. Click *Configuration*, then enter the SDN controller IP address, username, and password, then click *OK*.
6. Click *Running Status* to verify the status. When the signal icons are green, this indicates the connection between the SDN controller and SDN connector has been established.

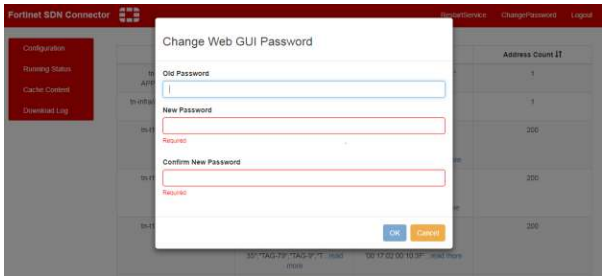
Configuring the SDN Connector

The SDN Connector GUI has several web controls. It is a single-page web application.

To restart the service, click *Restart Service*. The system displays a dialog asking you to restart the connector service.

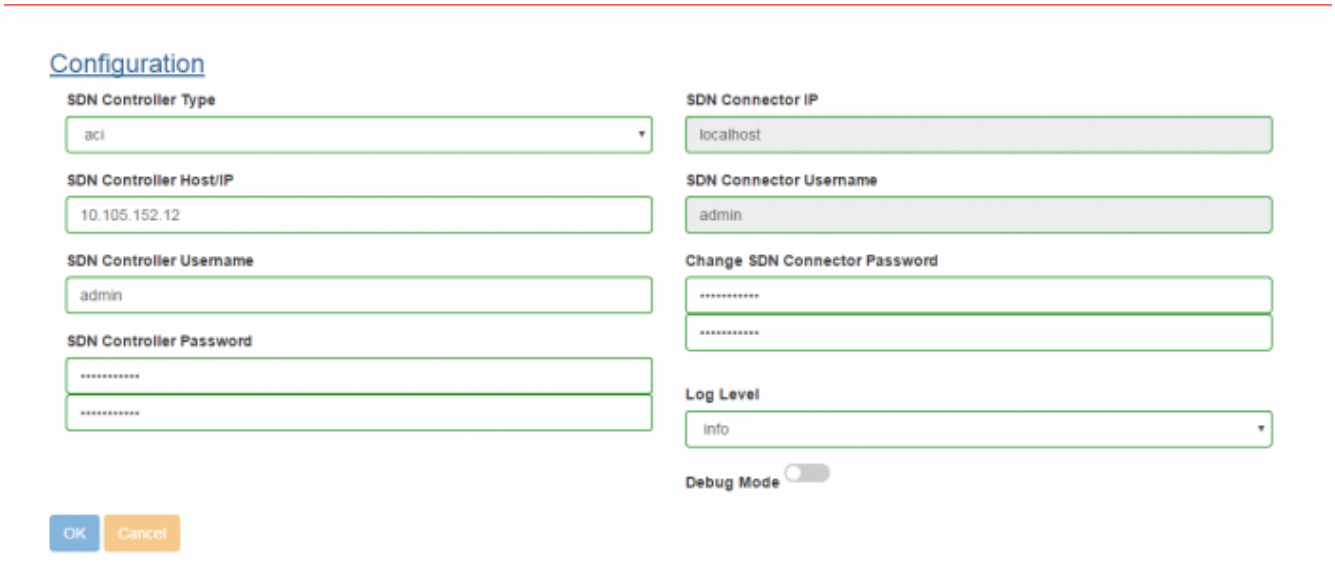


To change the password, click *Change Password*.



To change the configuration click *Configuration*. You can enter and update the SDN Controller login information and SDN Connector login information. In the *SDN Controller Type* dropdown list, select *nuage*. Enter the Nuage credentials. The user certificate and key must be provided.

The SDN connector username and password apply to the Fortinet SDN Connector configuration. This is different than the SDN Connector GUI login credentials. The default username and password are *admin* and *fortinet123*, respectively.



Running Status indicates the SDN Connector status. Red icons mean that the connection is not established.

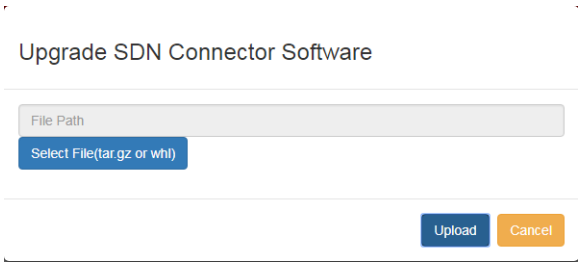
Cache Content displays the cache downloaded from the SDN Controller.

DN ▲	TAGS	Dynamic Address List	Address Count ⇵
tn-Demo/ap-APN-APPLICATION/epg-B1	[]	[{'ip': '192.168.45.100', 'mac': '00:50:56:B4:3B:8E'}]	1
tn-infra/ap-access/epg-default	[]	[{'ip': '10.0.192.95', 'mac': '00:50:56:6D:76:BD'}]	1
tn-t1/ap-ap/epg-App_2	["TAG-29","TAG-45","TAG-82","1234567890","TAG-97","TAG-51","TAG-13","TAG-28","TAG-20","TAG-47","TAG-...read more	[{'ip': '172.16.0.49', 'mac': '00:17:00:00:10:27'}, {'ip': '172.16.0.107', 'mac': '00:17:00:00:10:61...read more	200
tn-t1/ap-ap/epg-App_3	["TAG-63","TAG-6","TAG-23","TAG-34","TAG-13","TAG-46","TAG-21","TAG-73","TAG-42","TAG-95","TAG-36","...read more	[{'ip': '172.17.0.156', 'mac': '00:17:01:00:10:92'}, {'ip': '172.17.0.172', 'mac': '00:17:01:00:10:A...read more	200
tn-t1/ap-ap/epg-App_4	["TAG-21","TAG-10","TAG-62","TAG-4","TAG-91","TAG-42","TAG-95","TAG-36","TAG-35","TAG-79","TAG-9","T...read more	[{'ip': '172.18.0.39', 'mac': '00:17:02:00:10:1D'}, {'ip': '172.18.0.73', 'mac': '00:17:02:00:10:3F'...read more	200
tn-t1/ap-ap/epg-Web_2	["TAG-82","TAG-76","TAG-44","TAG-1","TAG-84","TAG-9","TAG-35","TAG-97","TAG-29","TAG-45","TAG-36","T...read more	[{'ip': '172.26.0.38', 'mac': '00:00:18:00:11:1C'}, {'ip': '172.26.0.61', 'mac': '00:00:18:00:11:33'...read more	200

To download system logs, click *Download Log*, then */*.

To log out, navigate to the SDN Connector homepage, then click *Logout* on the banner. The system logs the user out.

To upgrade the service, navigate to the SDN Connector homepage, then click *UpgradeService* on the banner. A dialog shows the upgrade progress. Once the upgrade is finished, the dialog prompts *"Upgraded Successfully! Going to refresh in 10s"* and the GUI refreshes automatically.



Logging into RabbitMQ

After successful configuration, the SDN Connector service is started. You can log in to check the connection status. The default username and password are *admin* and *fortinet123*, respectively.

SDN connector integration with Nuage VPC

See the *FortiOS Administration Guide*.

Change log

Date	Change Description
2021-03-30	Initial testing.

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