

# Quick Start Guide

# VXOA

VIRTUAL APPLIANCES

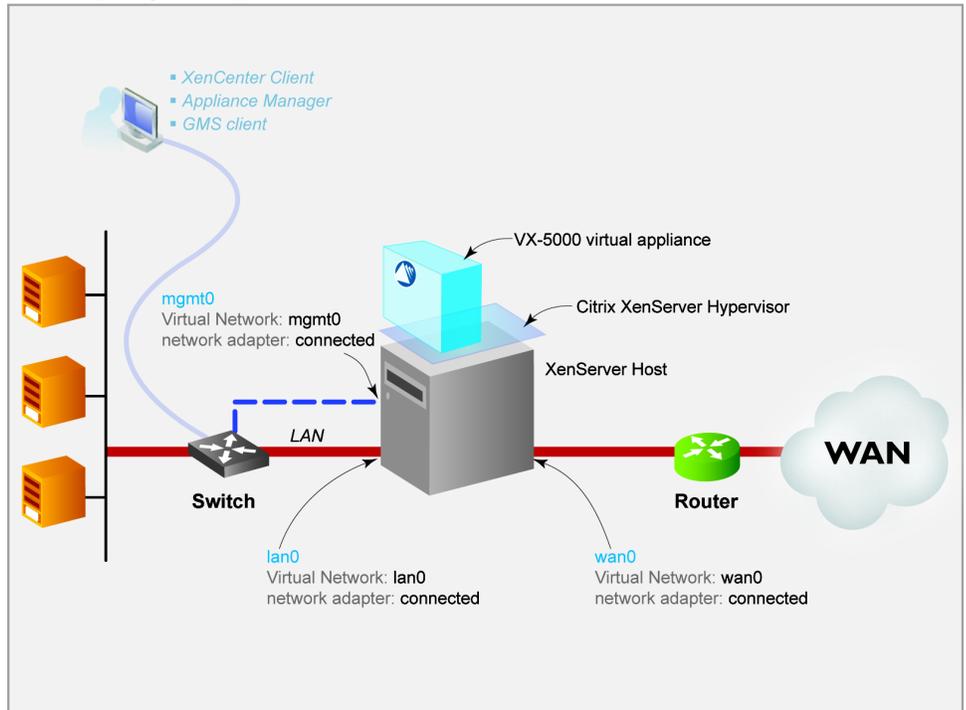
## Citrix XenServer Hypervisor

In-Line Deployment  
(Bridge Mode)

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If you're not using Citrix XenCenter 6.0, your screens may vary.

### Host with Silver Peak VX-5000 IN-LINE [Bridge Mode]



This Quick Start Guide only covers Bridge mode, the in-line deployment.

■ These instructions show the VX-5000 Virtual Appliance as the example. ■

### Support Limitations

- ☑ In Bridge mode, the virtual appliance only uses **mgmt0**, **wan0**, and **lan0**.

### Assumptions

- ☑ Citrix XenCenter Software is installed on the Windows client

### Before You Begin

- ☑ Comply with the VXOA Virtual Appliance Host System Requirements [PN 200566-001]
- ☑ From the Silver Peak Support portal, download the virtual appliance ISO file
- ☑ Obtain a VXOA virtual appliance activation license key

### SUMMARY OF TASKS

- 1 Add new server and verify resources
- 2 Create the virtual networks on the Citrix XenServer host
- 3 Create the virtual machine
- 4 Configure the Virtual Appliance
- 5 Run the Appliance Manager initial configuration wizard



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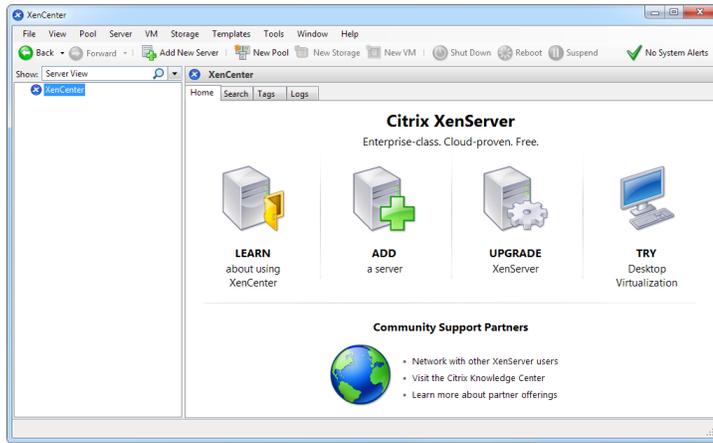
1.877.210.7325 (toll-free in USA)  
+1.408.935.1850  
www.silver-peak.com/support

| Required Virtual Interface | Maps to ...                   |
|----------------------------|-------------------------------|
| mgmt0                      | virtual network = mgmt0       |
| wan0                       | virtual network = wan0        |
| lan0                       | virtual network = lan0        |
| mgmt1                      | network adapter not connected |

**FIRST . . .**

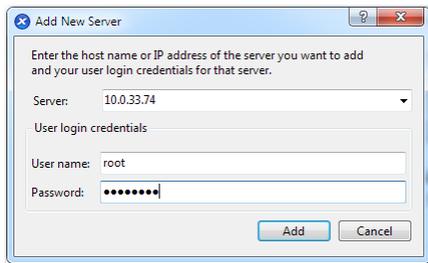
- Download the ISO image from the Silver Peak website to a drive that's accessible to your Citrix server. This could be any CIFS or NFS mountable network drive, which you designate as an ISO library before proceeding further.
- Refer to Citrix documentation for more on creating or mapping an ISO library.

**THEN . . .** Launch Citrix XenServer from the desktop, and connect to the target XenServer host.

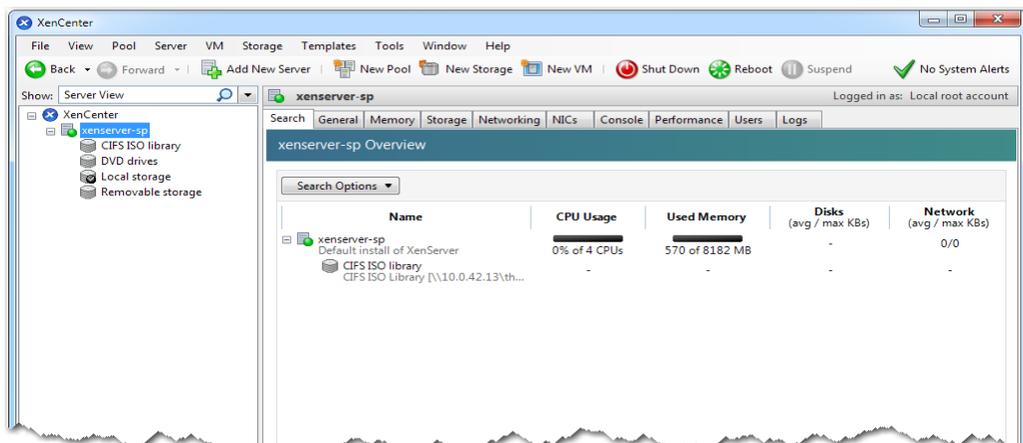


**Add new server and verify resources**

- Click **Add a Server**. In the **Add New Server** dialog box, enter the server IP address and the user login credentials.



The new server displays in the left navigation pane. In this example, the server is named **xenserver-sp**.

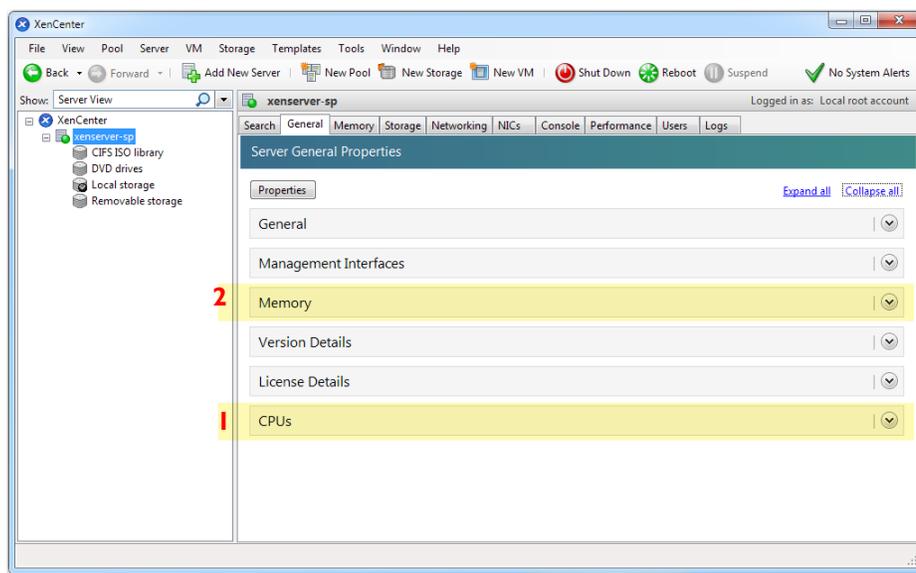


Now, with the following three tabs, you'll verify that the XenServer host's hardware meets the minimum system requirements for the specific VXOA virtual appliance.

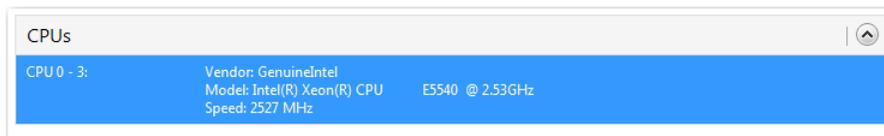
(Refer to the *VXOA Virtual Appliance Host System Requirements*, PN 200566-001)

|   | Item                 | Where to verify the information |
|---|----------------------|---------------------------------|
| 1 | CPU {Processor Core} | General tab                     |
| 2 | Memory               | General tab                     |
| 3 | Storage              | Storage tab                     |
| 4 | Network Interfaces   | NICs tab                        |

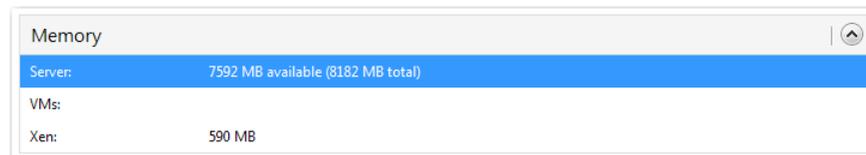
b. To verify the first two items, click the **General** tab. You can expand or collapse the headings, as needed, for easier viewing.



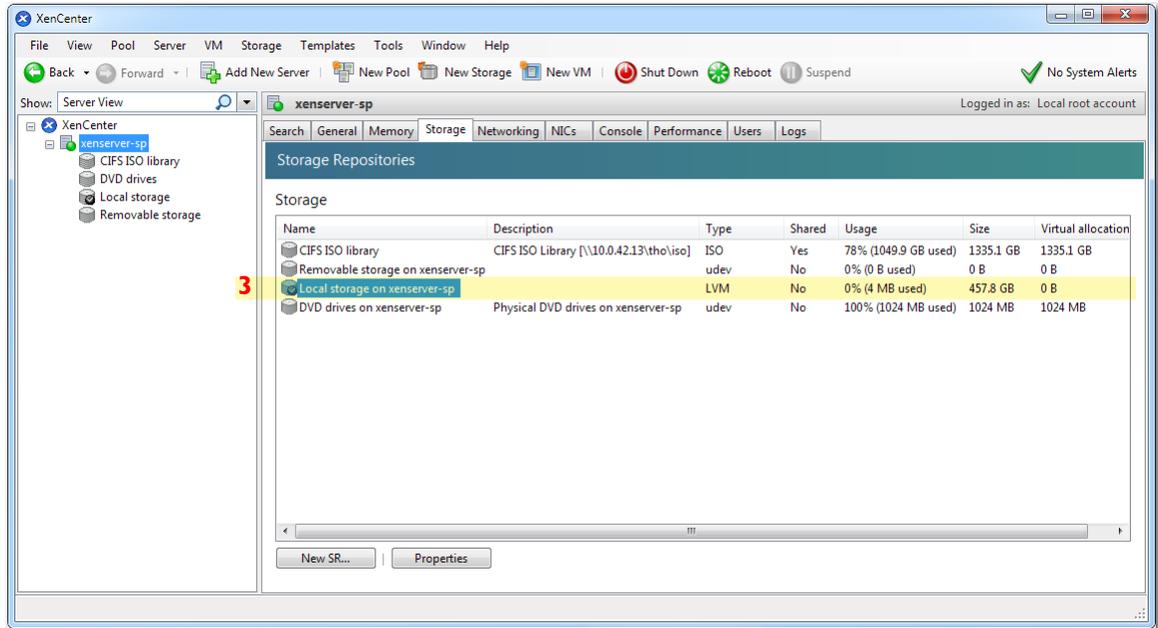
c. Sequentially, expand and view the contents of **CPUs** ...



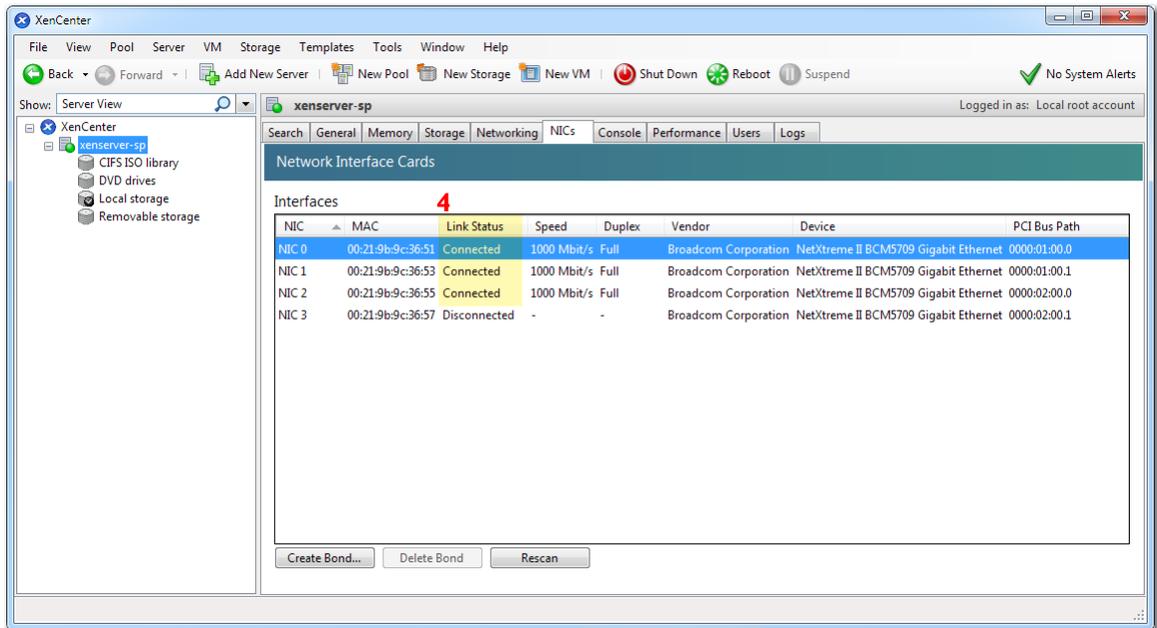
--- and **Memory**.



d. To verify the local storage, click the **Storage** tab.



e. Finally, to review the network interfaces, click the **NICs** tab and verify that you have at least **three** NICs.

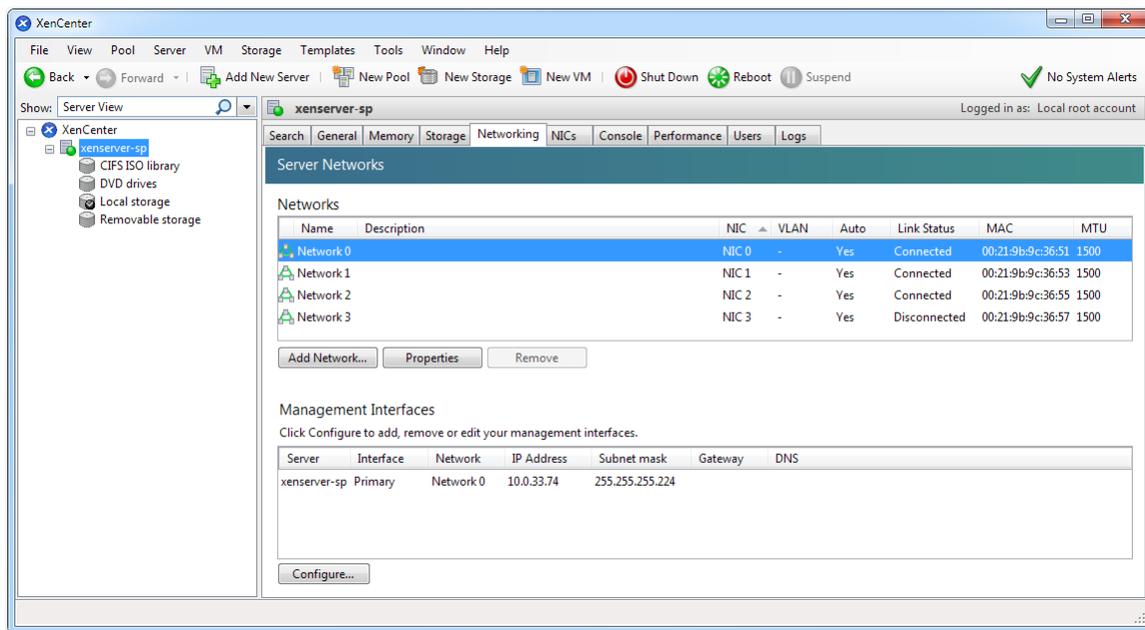


## 2 Create the virtual networks on the Citrix XenServer host

In total, we'll configure four networks.

First, you'll configure the three networks that actually carry traffic: You'll pair one with **mgmt0** (for management traffic) and the other two with **wan0** and **lan0**, for data traffic.

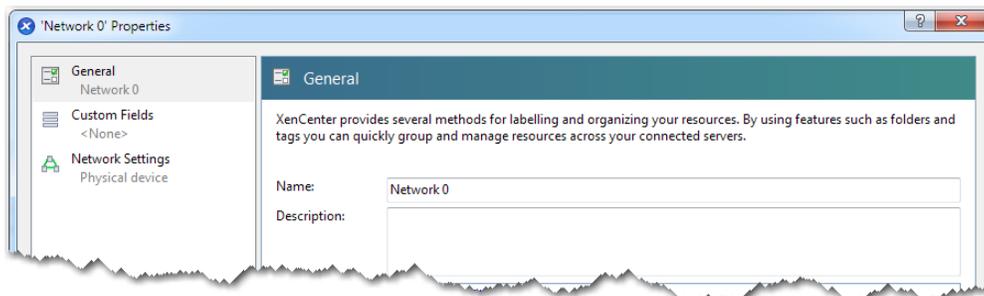
- a. Select the **Networking** tab.



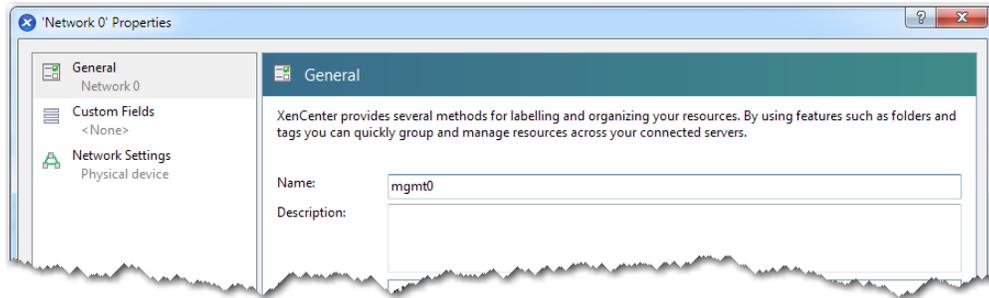
For **mgmt0**, you can use the NIC that the **Management Interface** is currently using, or you can pick a different one. In this example, we'll pair **NIC 0** with **mgmt0**, **NIC 1** with **wan0**, and **NIC 2** with **wan0**.

To do this, we'll rename **Network0** to **mgmt0**, **Network1** to **wan0**, and **Network2** to **lan0**.

- b. To configure for **mgmt0**, select **Network0** and click **Properties**. The **'Network0' Properties** screen appears.

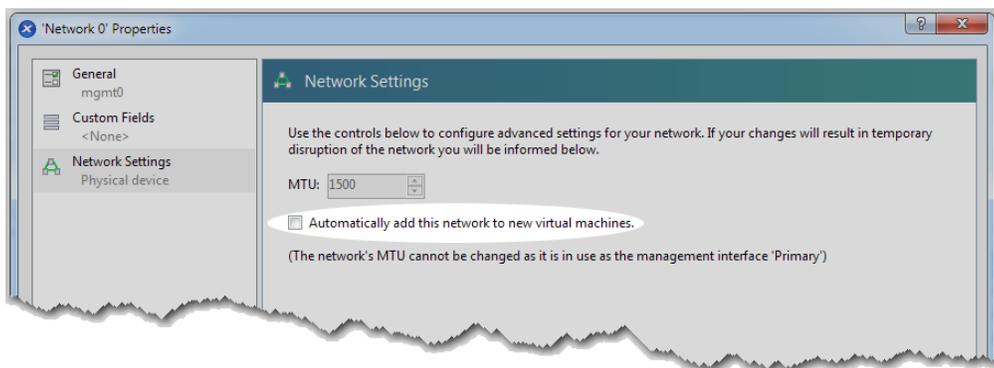


- c. In the **Name** field, enter `mgmt0`.

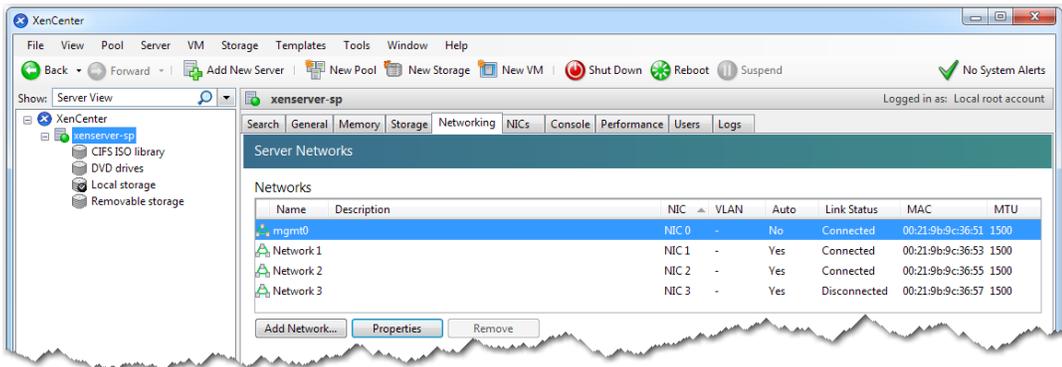


- d. On the left, click **Network Settings**. The **Network Settings** screen appears.

- e. **Clear** the checkbox, **Automatically add this network to new virtual machines**.



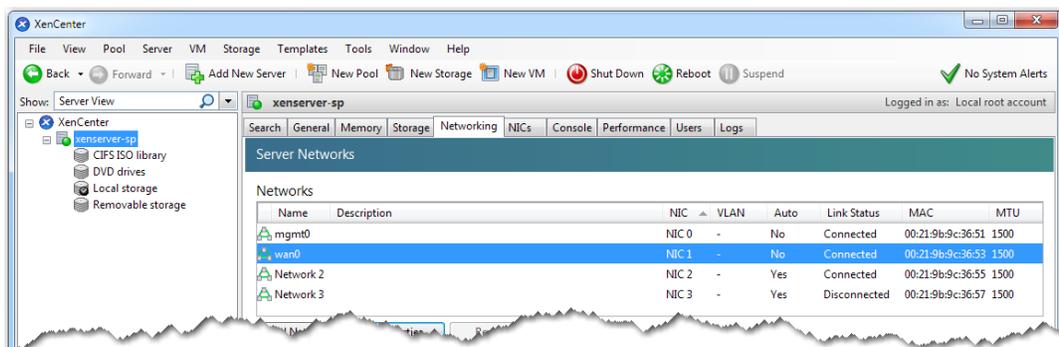
- f. Click **OK**. The **Networking** tab displays the new name, `mgmt0` with **No** in the **Auto** column.



Repeat **Steps b – f** for `wan0` and `lan0`. For your convenience, they're summarized as follows:

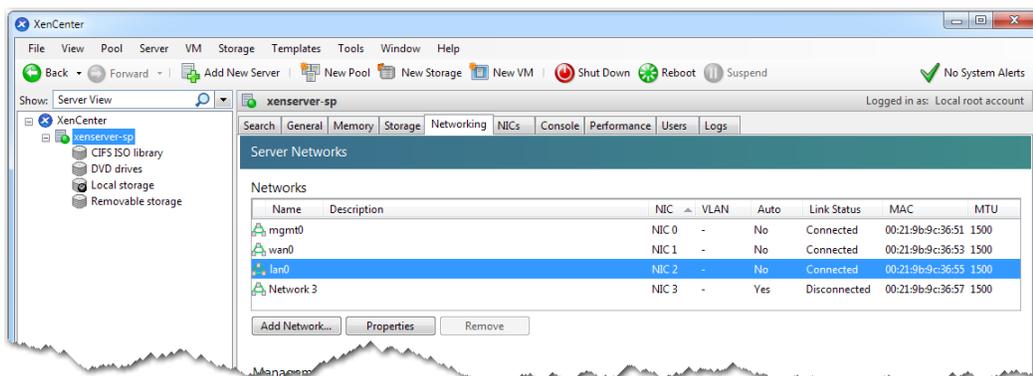
g. To configure for **wan0**, do the following:

- Select **Network1** and click Properties.  
The **'Network1' Properties** screen appears.
- In the **Name** field, enter **wan0**.
- On the left, click **Network Settings**. The **Network Settings** screen appears.
- Clear** the checkbox, **Automatically add this network to new virtual machines** and click **OK**.  
The **Networking** tab displays the new name, **wan0**, with **No** in the **Auto** column.



h. To configure for **lan0**, do the following:

- Select **Network2** and click Properties.  
The **'Network2' Properties** screen appears.
- In the **Name** field, enter **lan0**.
- On the left, click **Network Settings**. The **Network Settings** screen appears.
- Clear** the checkbox, **Automatically add this network to new virtual machines** and click **OK**.  
The **Networking** tab displays the new name, **lan0**, with **No** in the **Auto** column.

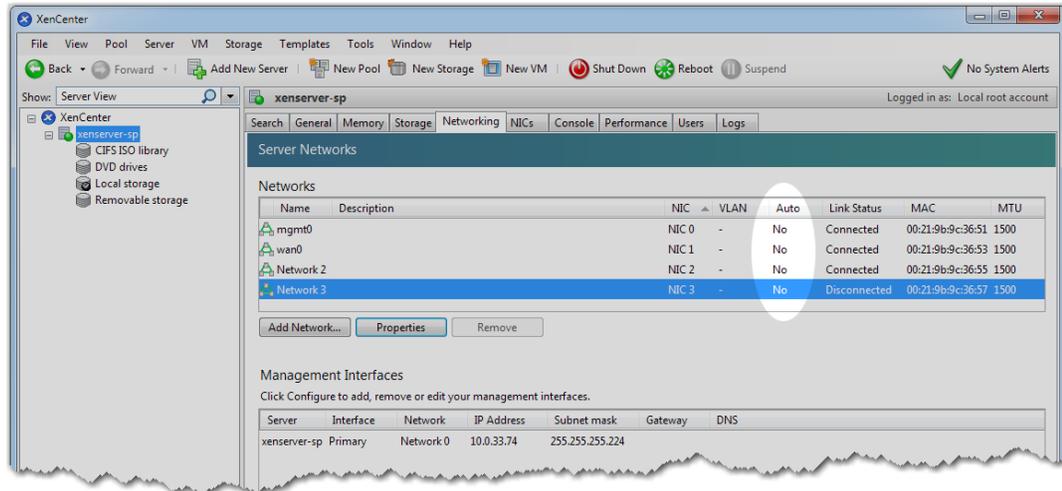


- i. After naming **mgmt0**, **wan0**, and **lan0**, any remaining NICs (Networks) won't be used, and we don't want them to automatically add themselves to the new virtual machine.

Therefore, for any and all remaining NICs, do the following:

- Select the NIC (usually named **Network n**, where **n** is a number), and click **Properties**.
- In the **Network n Properties** window, leave the name unchanged and click **Network Settings**.
- Clear** the checkbox, **Automatically add this network to new virtual machines** and click **OK**.

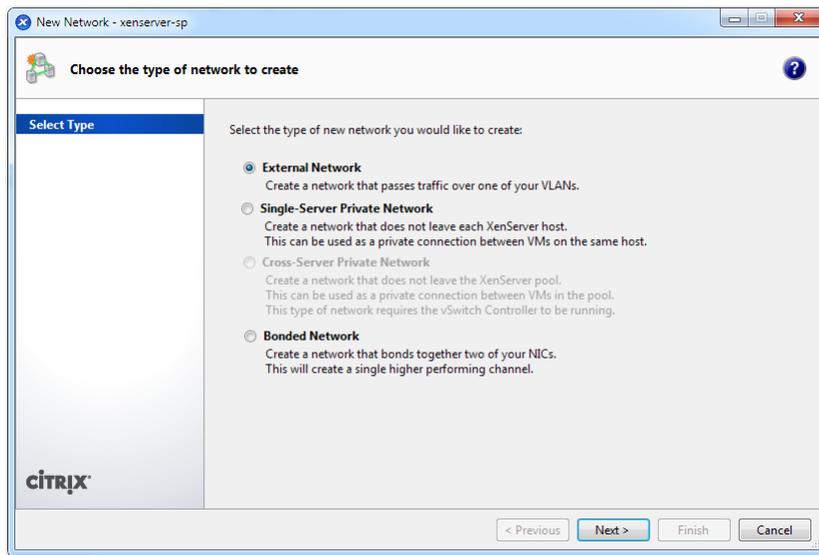
You are finished when each NIC has **No** in the **Auto** column.



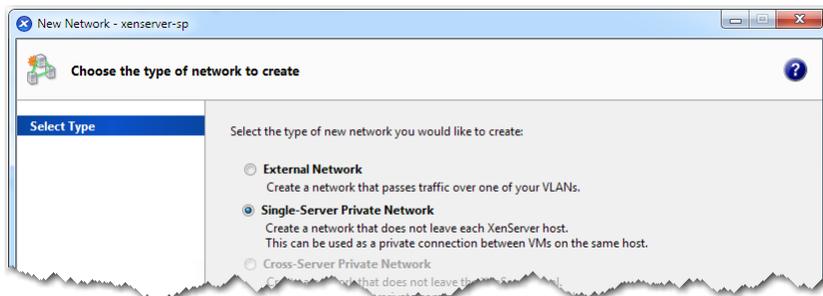
In Bridge mode configuration, **mgmt1** is **not used**. Therefore, you must map it to a virtual network that is not connected to any physical interface, as follows.

First, we'll map **mgmt1**.

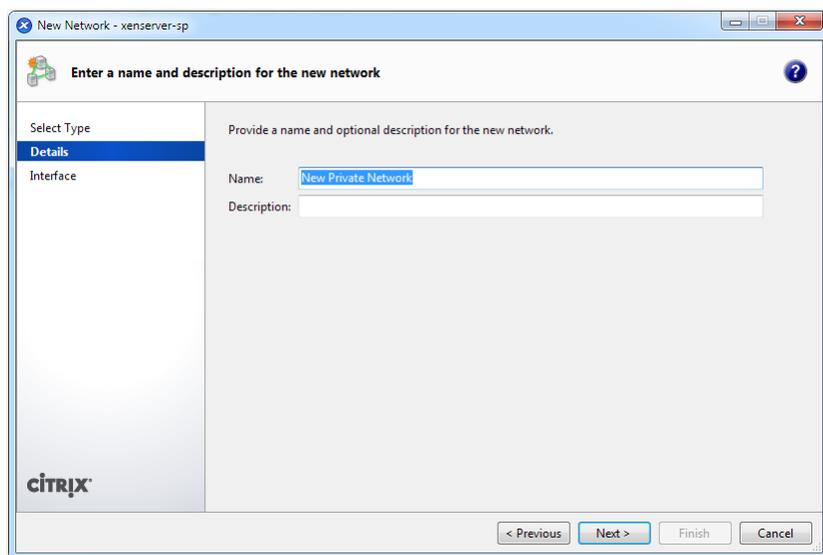
- j. Return to the **Networking** tab, and click **Add Network**. The **New Network - <your server name>** screen appears.



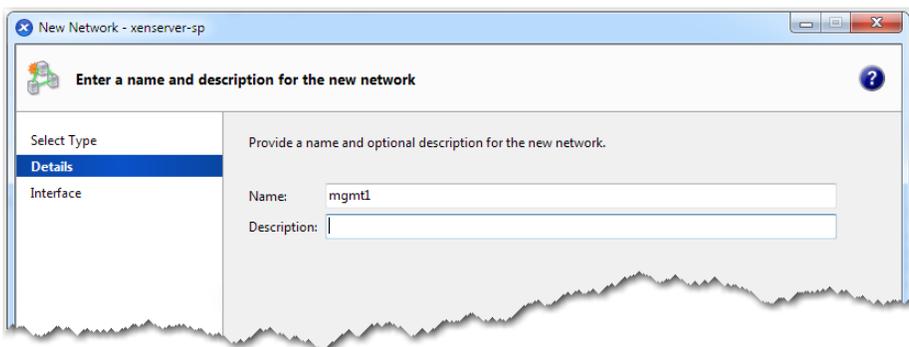
- k. Select **Single-Server Private Network** and click **Next**.



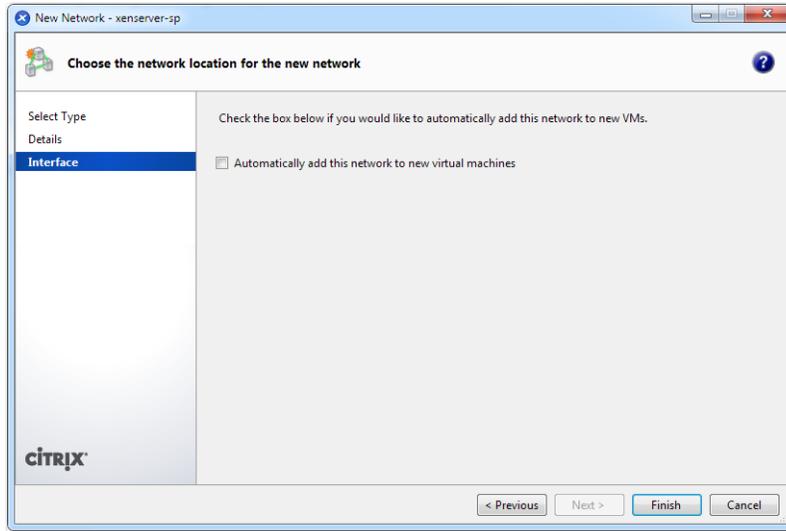
The **New Network Details** screen appears.



- l. In the **Name** field, enter **mgmt1** and click **Next**.

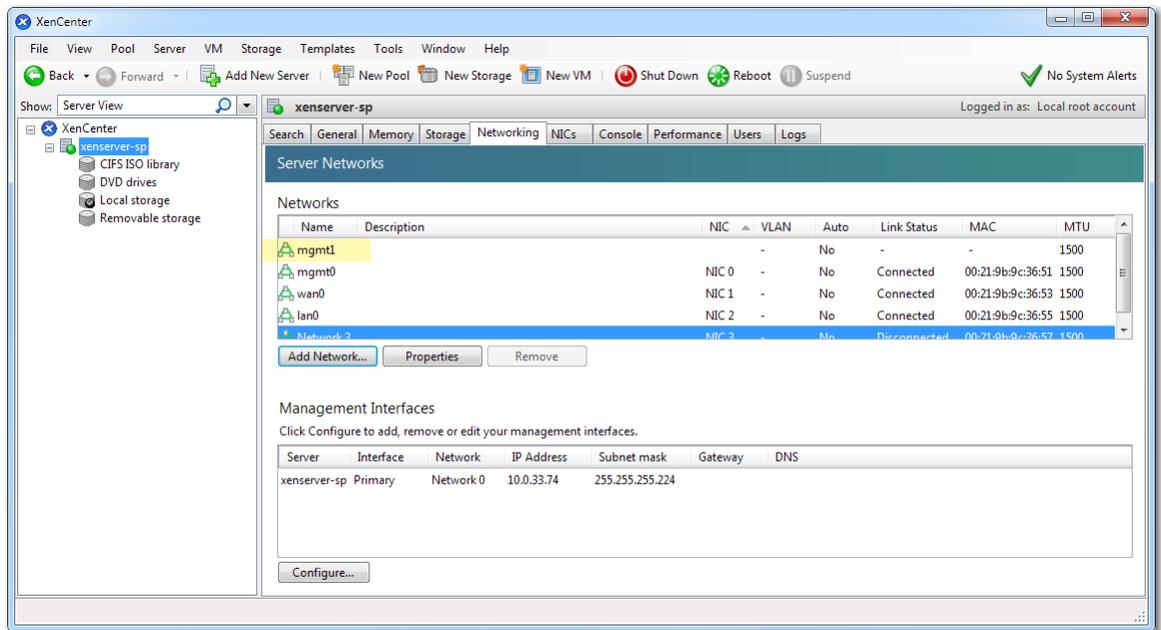


The **New Network Interface** screen appears.



- m. Make no changes. Click **Finish**.

This returns you to the **Networking** tab, showing the addition of **mgmt1**.

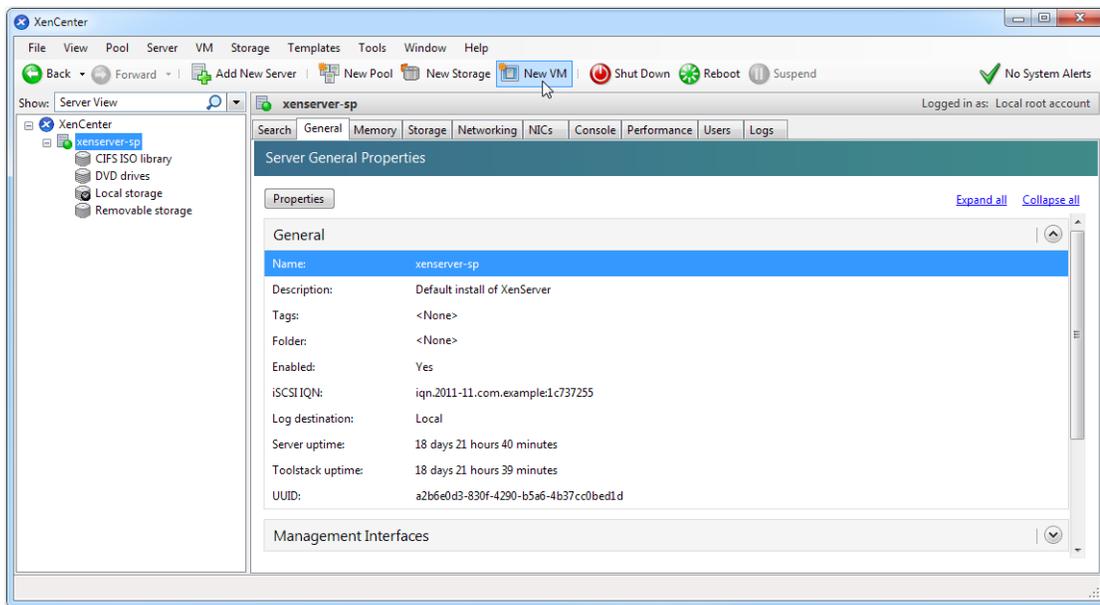


You should see all four of the newly named networks. The **Auto** setting for each is **No**. The network configuration is now done.

### 3 Create the virtual machine

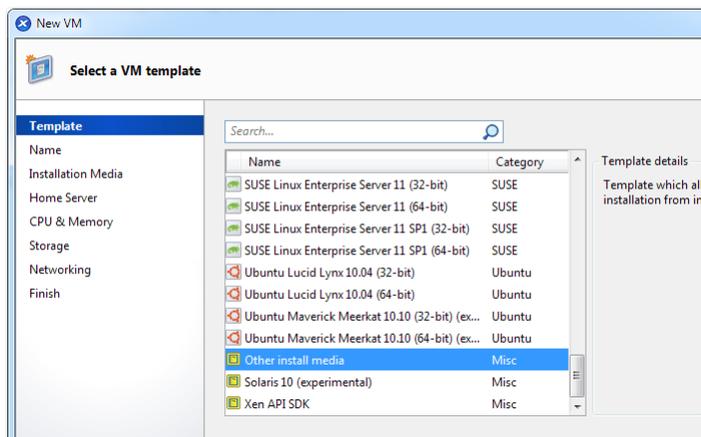
Before continuing, make sure that you've saved the downloaded ISO file from Silver Peak's Support portal to the XenServer's ISO library.

- a. In the XenCenter menu bar; click **New VM**.

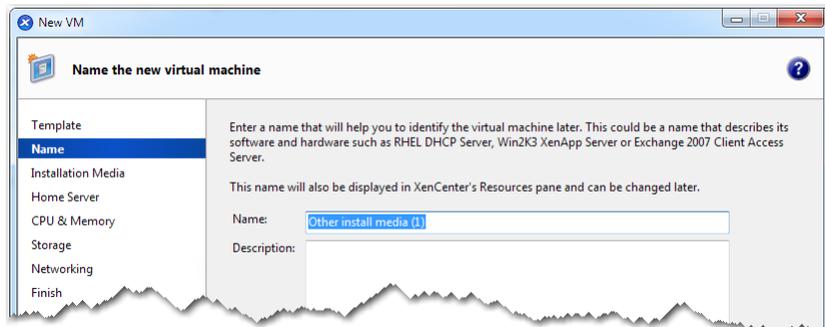


The **New VM Template** page appears.

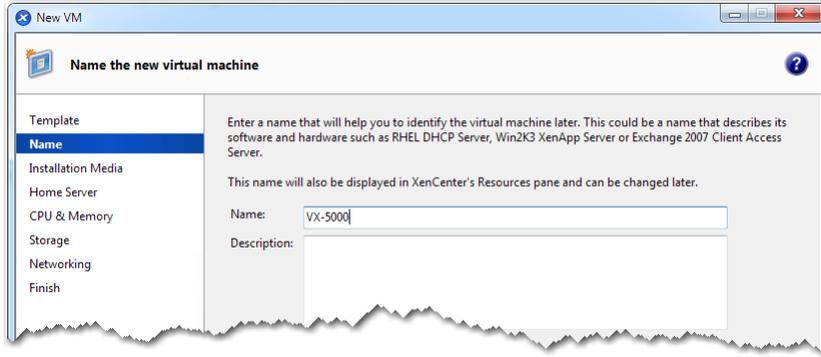
- b. Scroll down to select **Other install media** and click **Next**.



The **New VM Name** page appears.



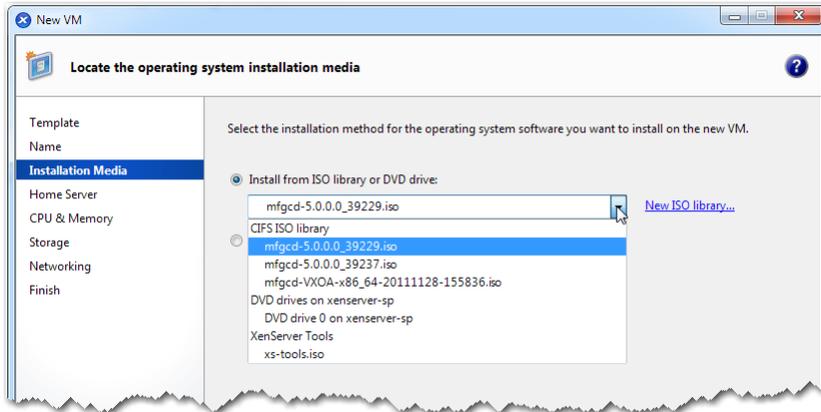
- c. In the **Name** field, enter **vx-5000** and click **Next**.



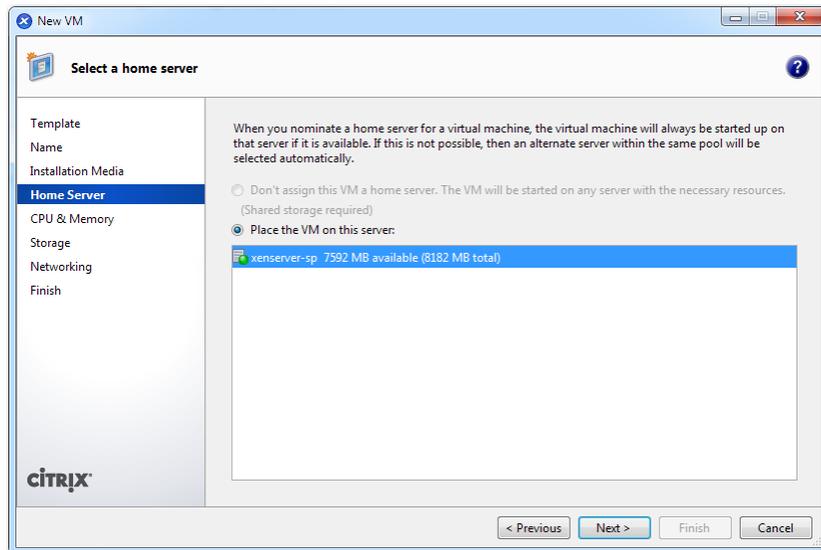
The **New VM Installation Media** page appears.

You should already have downloaded the **.iso** file to an ISO library. If that ISO library is not attached to this host, then click **New ISO library** and follow the instructions.

- d. Now, from the **Install from ISO library or DVD drive** field's drop-down menu, select the ISO file that you downloaded from Silver Peak's Support portal, and click **Next**.

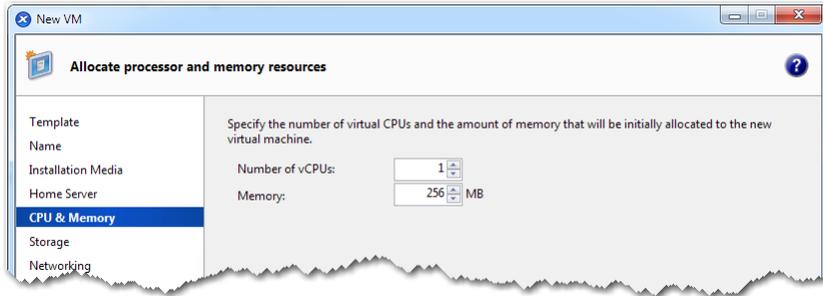


The **New VM Home Server** page appears.



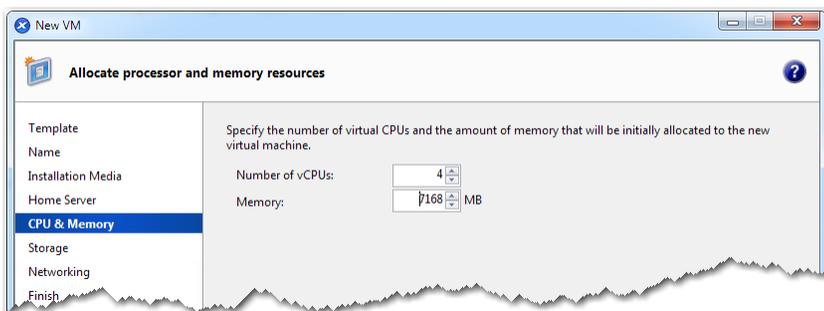
- e. Verify that the server listed is the one you created earlier, and click **Next**.

The **New VM CPU & Memory** page appears.

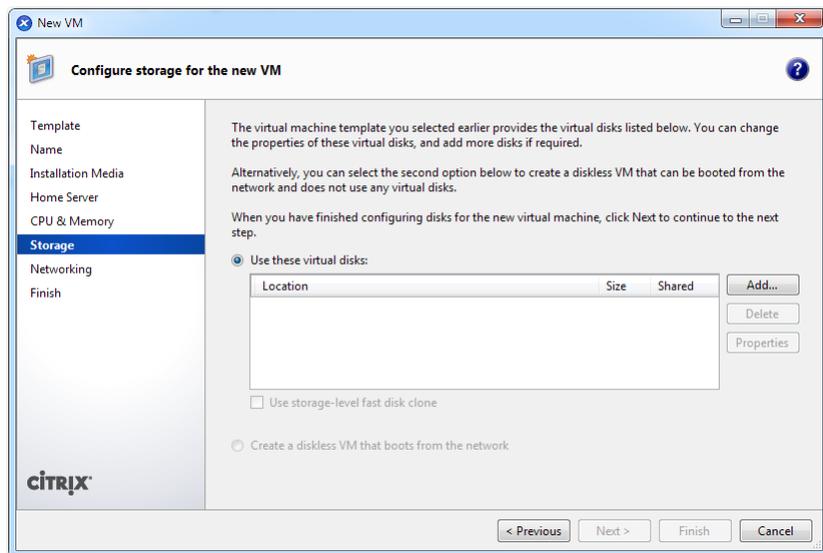


Here, refer to the [VXOA Virtual Appliance Host Requirements](#) document for the number of vCPUs and amount of memory your virtual appliance must have:

- For the **Number of vCPUs** field, look for the number of **Processor Cores** required. In this instance of the VX-5000, it's **4**.
  - For the **Memory** field, look for the number of **Memory (Gigabytes)** required. In this instance of the VX-5000, it's **7 GB**. Multiply this by 1024 MB/GB for a total of **7168 MB**.
- f. Enter these values in the appropriate fields and click **Next**.



The **New VM Storage** page appears.

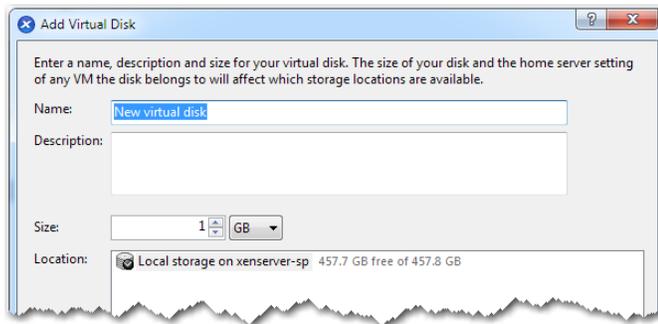


At this point, you need to add two virtual disks—one for the **System**, and one for **Network Memory**.

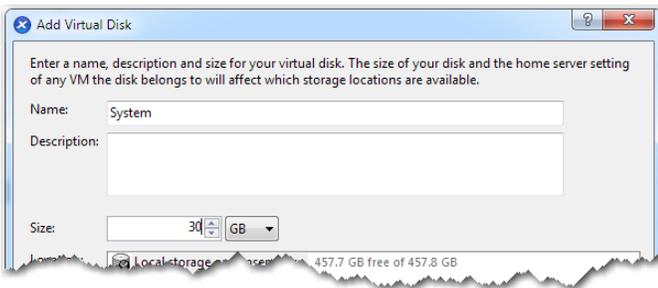
Again, refer to the [VXOA Virtual Appliance Host Requirements](#) document—this time for **Storage (Gigabytes)**.

For this example, we'll allocate a total of 100 GB for storage.

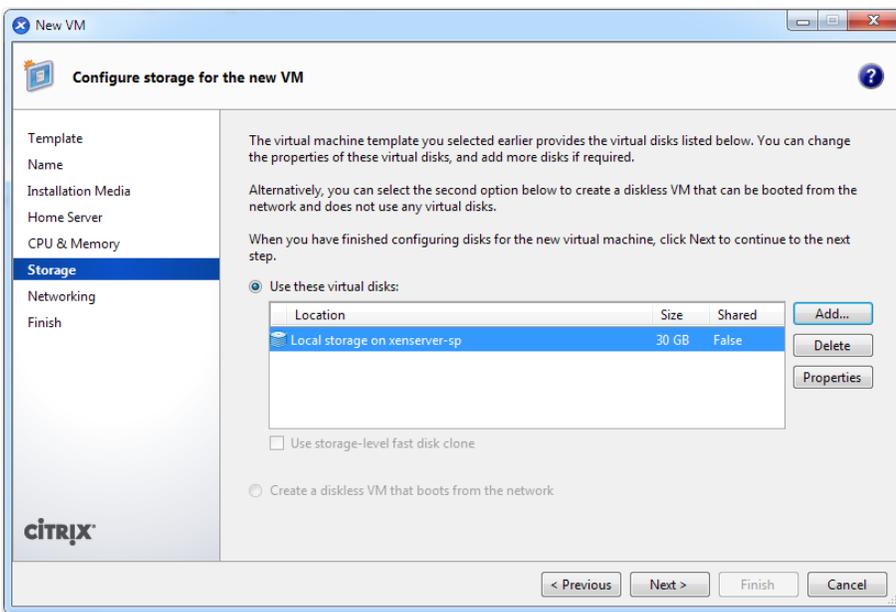
- g. Click **Add**. The **Add Virtual Disk** screen appears.



- h. In the **Name** field, enter **System**, and in the **Size** field, enter **30 GB**. This size (30 GB) is the appropriate value for all VX appliances. A larger allocation **does not** improve performance, and the excess remains unused.

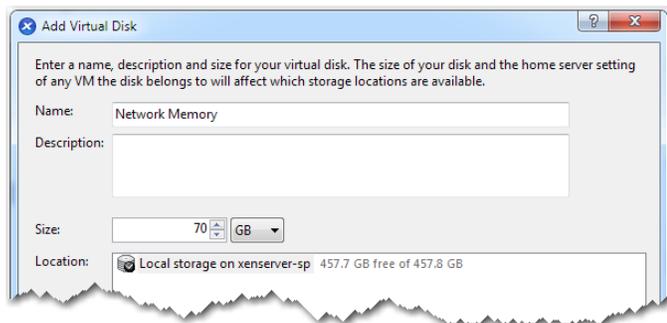


- i. Click **Add**. The **New VM Storage** screen appears, listing the newly assigned storage.

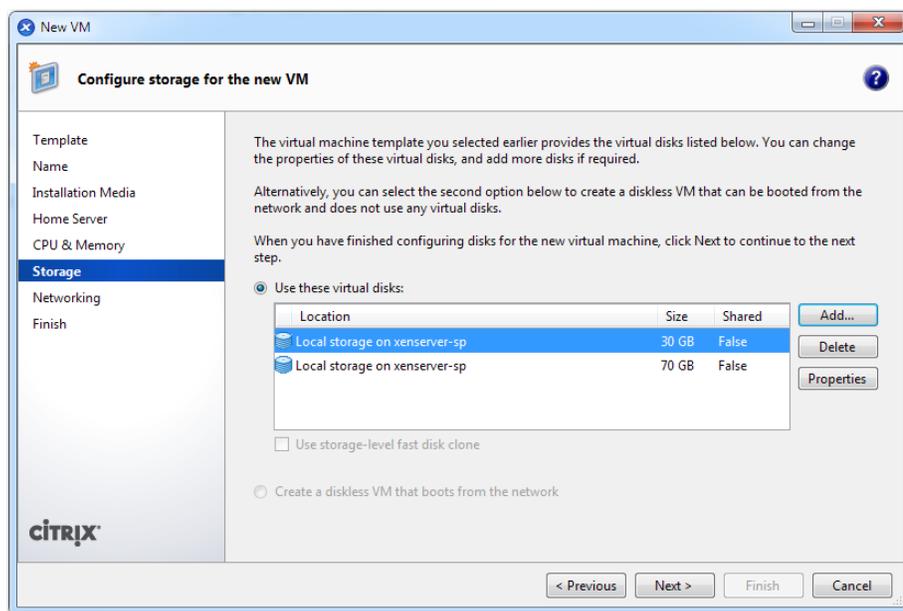


We'll allocate the remaining 70 GB (out of 100 GB) to Network Memory.

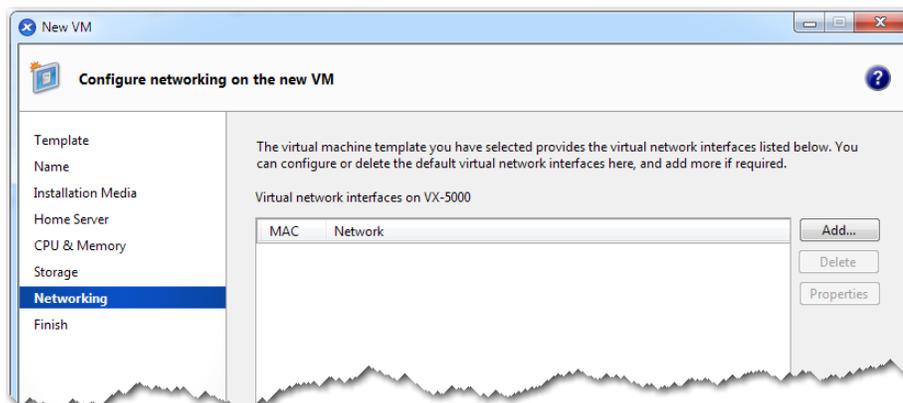
- j. Click **Add**. The **Add Virtual Disk** screen appears.
- k. In the **Name** field, enter **Network Memory**, and in the **Size** field, enter **70 GB** and click **Add**.



The **New VM Storage** screen reappears, listing all the assigned storage.



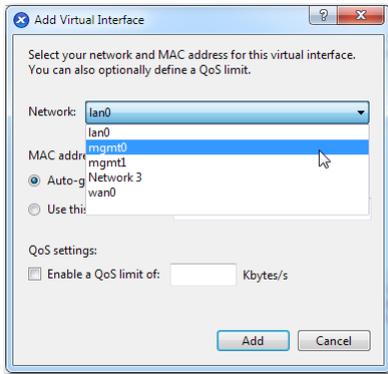
- l. Click **Next**. The **New VM Networking** page appears. It is blank.



Now you must add the four virtual network interface in the required sequence:

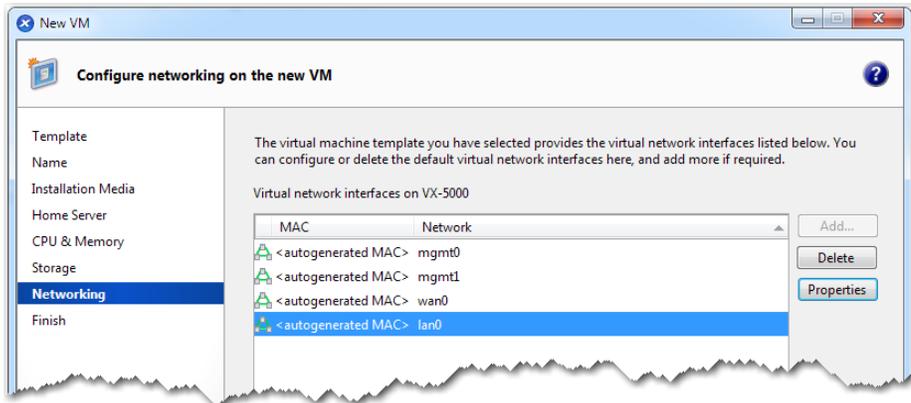
1. **mgmt0**
2. **mgmt1**
3. **wan0**
4. **lan0**

- m. With that in mind, click **Add**. The **Add Virtual Interface** screen appears. In the **Network** field, pull down the menu to select **mgmt0**.

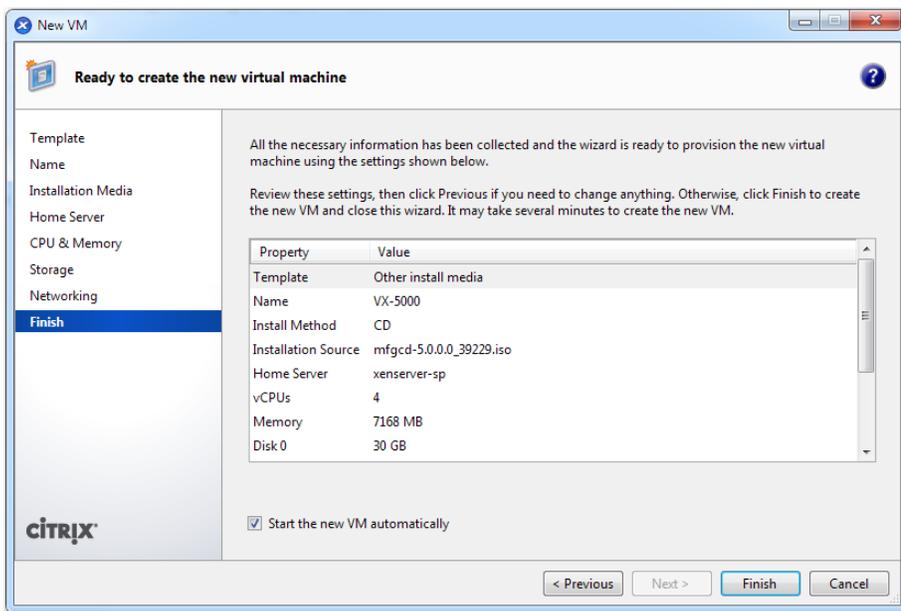


- n. Click **Add**. The updated **New VM Networking** page appears.
- o. Repeat the previous step to add the remaining three interfaces, sequentially, in the required order.

The updated **New VM Networking** screen appears.

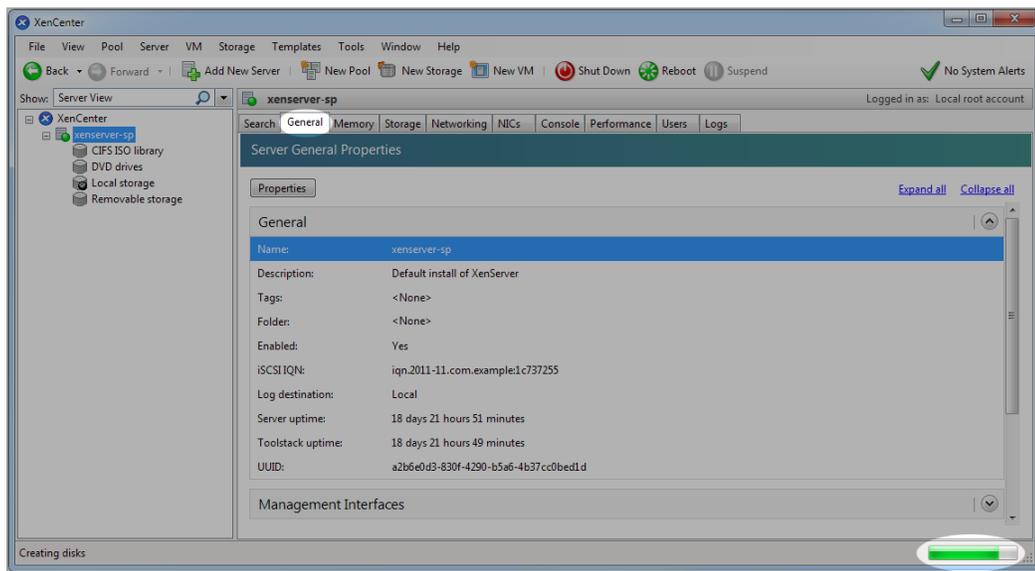


- p. Click **Next**. The **New VM Finish** page appears.

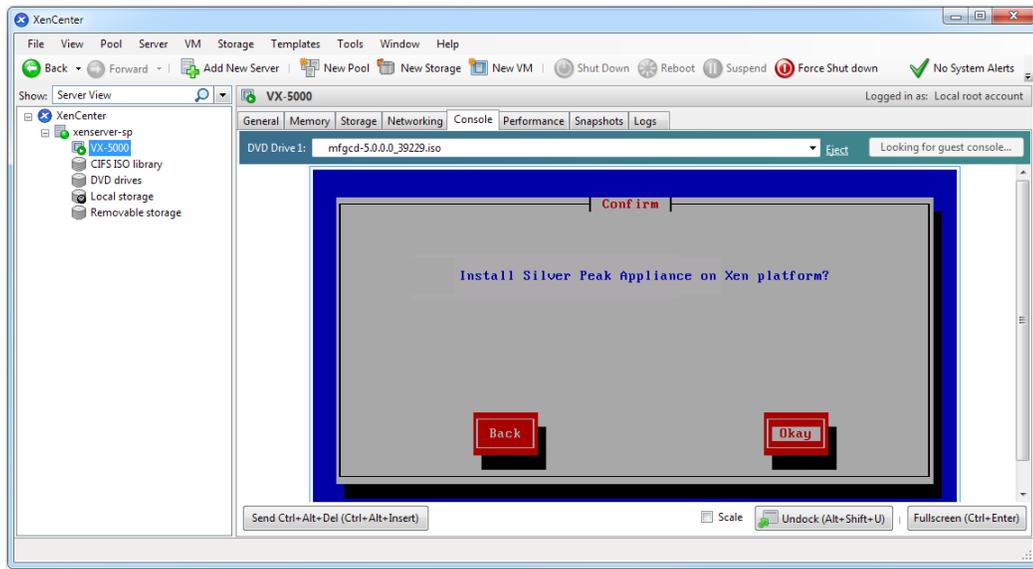


- q. After reviewing the settings, click **Finish**.

The VM starts automatically, and the **XenCenter General** tab appears, with a progress bar in the lower right corner.

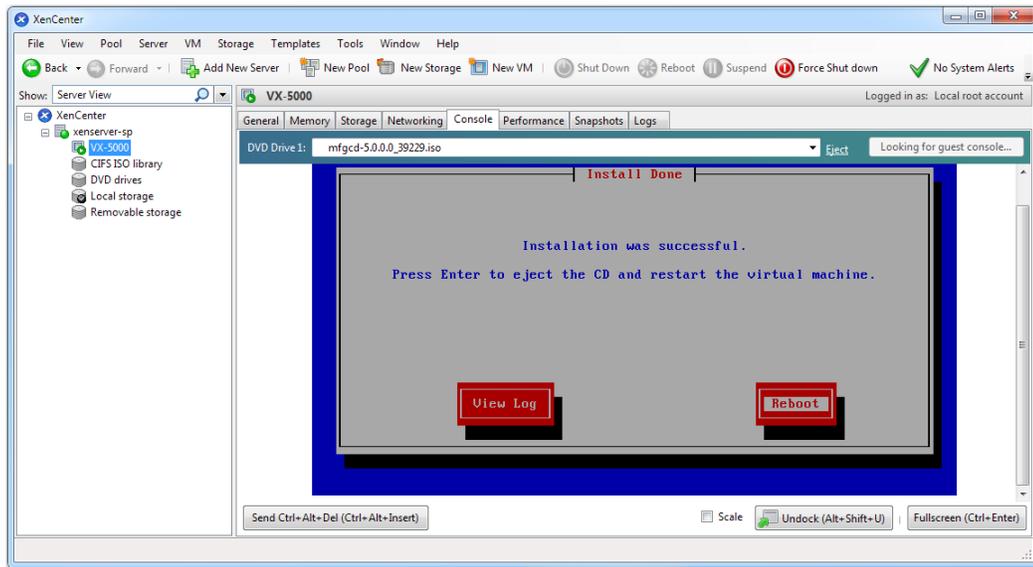


- r. When the console displays the **Confirm** screen, asking, “Install Silver Peak Appliance on Xen platform?”, press **Enter** to accept **Okay**.

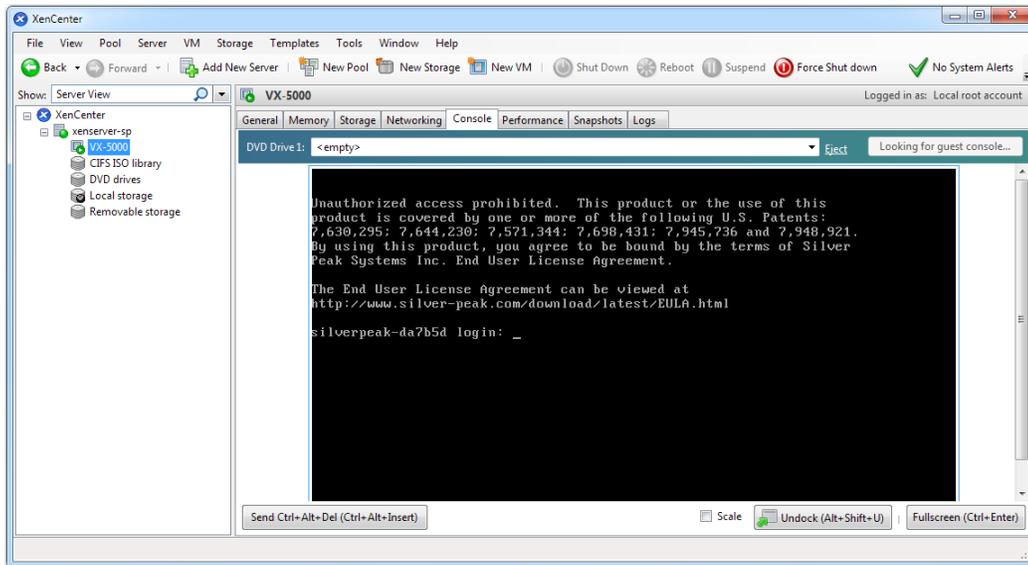


The appliance installs on the Xen platform. This may take a few minutes to complete.

- s. When installation is complete, press **Enter** to eject the CD. Afterwards, the virtual machine restarts automatically.



After the appliance boots up, it arrives at the login prompt.



## 4 Configure the Virtual Appliance

To access the VX-5000's user interface, you'll need to discover the IP address for its **mgmt0** interface and enter it into a browser.

NOTE: You'll be entering commands in the console. If you ever need to click outside the client window, press **CTRL+ALT** simultaneously.

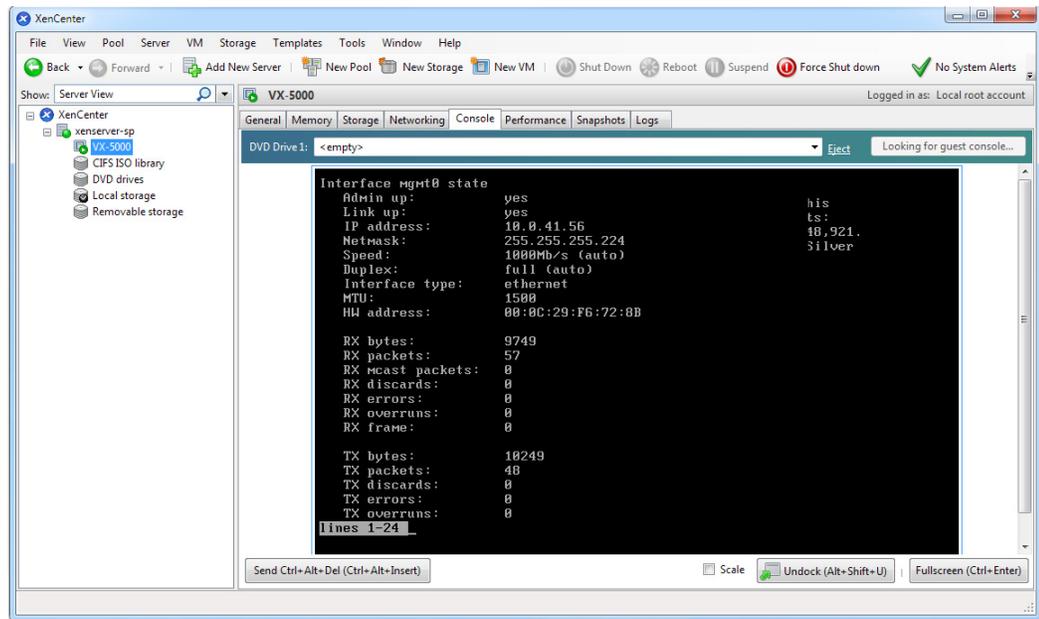
- a. Log in as follows:

```
[vx name] login: admin          [ENTER]
Password: admin                 [ENTER]
[vx name] > enable             [ENTER]
[vx name] #
```

- b. To discover **mgmt0**'s IP address, enter the following:

```
[vx name] # show interfaces mgmt0 [ENTER]
```

The console displays the **mgmt0** IP address and netmask.



NOTE: To get to the login prompt from this point, enter **q** for quit, or hit the **spacebar** to continue paging through the returned information.

By default, the appliance tries to acquire the **mgmt0** IP address by using DHCP. If this fails (as would be the case if your network doesn't use DHCP), then the **mgmt0** IP address and netmask display no values. In that case, you'll need to configure both with a static IP address and add a default gateway. Make sure you have both addresses before continuing.

In this example, we'll say **mgmt0** = 10.0.41.56/24 and its default gateway is 10.0.41.193.

- 
- c. To configure **mgmt0**, enter the following command sequence:

[vx name] # **config t** [ENTER]

[vx name] (config) # **interface mgmt0 shutdown** [ENTER]

[vx name] (config) # **no interface mgmt0 dhcp** [ENTER]

[vx name] (config) # **interface mgmt0 ip address 10.0.41.56 /24** [ENTER]

[vx name] (config) # **no interface mgmt0 shutdown** [ENTER]

[vx name] (config) # **show interfaces mgmt0** [ENTER]

- d. To configure the default gateway, enter the following command sequence:

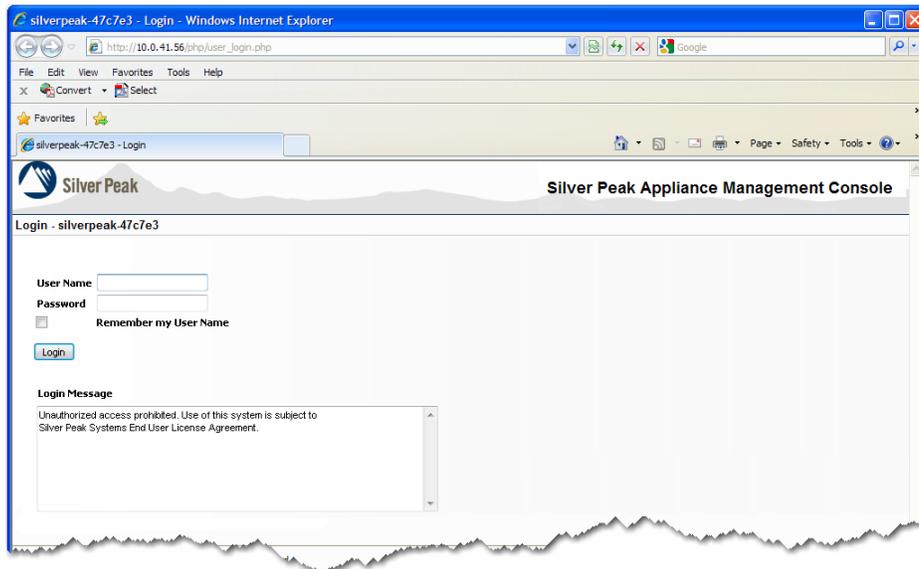
[vx name] (config) # **ip default-gateway 10.0.41.193** [ENTER]

[vx name] (config) # **show ip default-gateway** [ENTER]

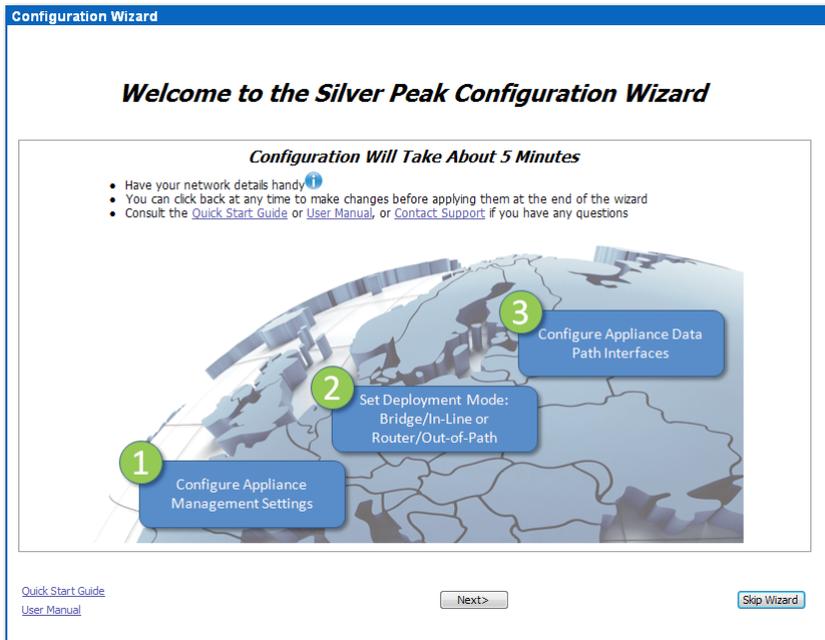
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## 5 Run the Appliance Manager initial configuration wizard

- a. In a browser, enter the **mgmt0** IP address you just discovered or configured. The Silver Peak Appliance Management Console login page appears.



- b. For both the **User Name** and **Password**, enter **admin**. The initial configuration wizard appears.



- c. Complete the remaining wizard screens.
- If desired, change the **Hostname**. This is the name by which the Silver Peak software knows the virtual appliance.
  - When the wizard asks for the license number, it also provides a hyperlink to the Silver Peak Support portal. From there you can retrieve the key and paste it into the **License** field.
  - Be sure to select **Bridge** mode.

- d. On the last wizard screen, click **Apply**.  
The Appliance Manager takes a few minutes to reboot and return to the login page.

You are now ready to start using the appliance.

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