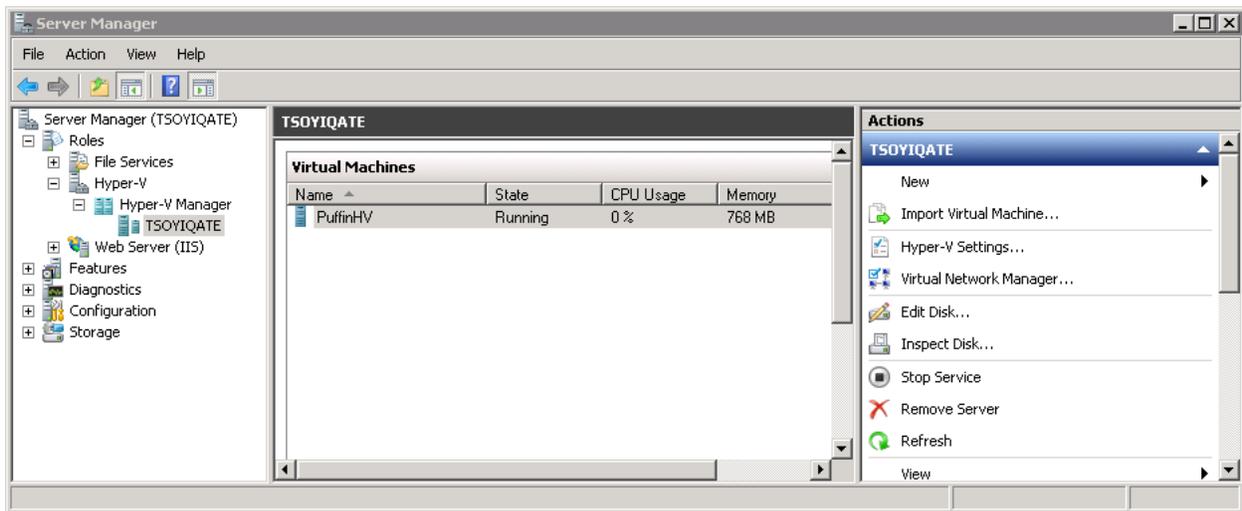


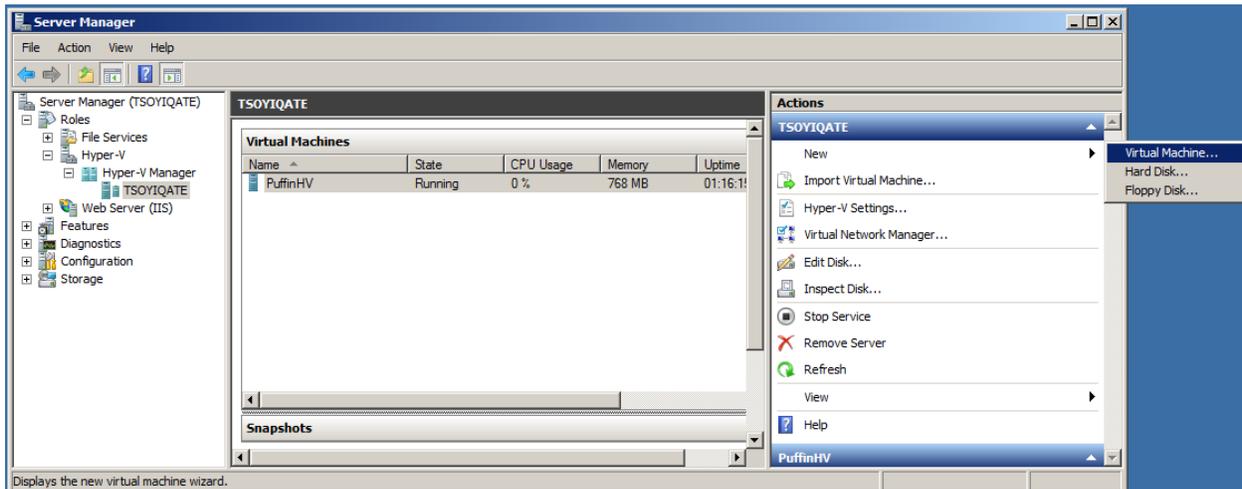
Virtual Ubuntu LAMP Server Part 2

This section describes how to configure Hyper-V to run an Ubuntu virtual server. We will be using the New Virtual Machine Wizard from your Hyper-V Manager.

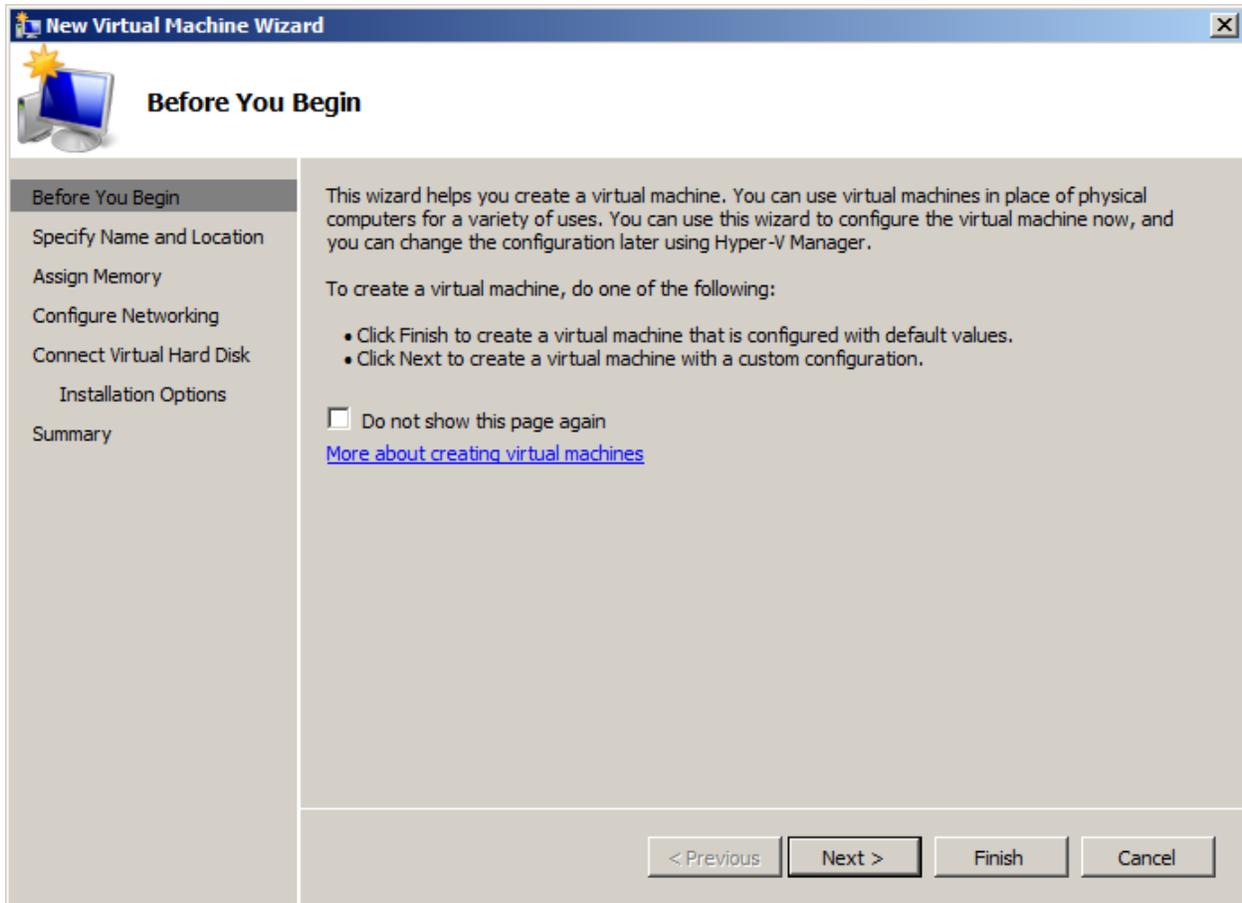
1. Once you have your Windows Server 2008 R2 running, start Server Manager, Hyper-V Manager. You should see something similar to the window below.



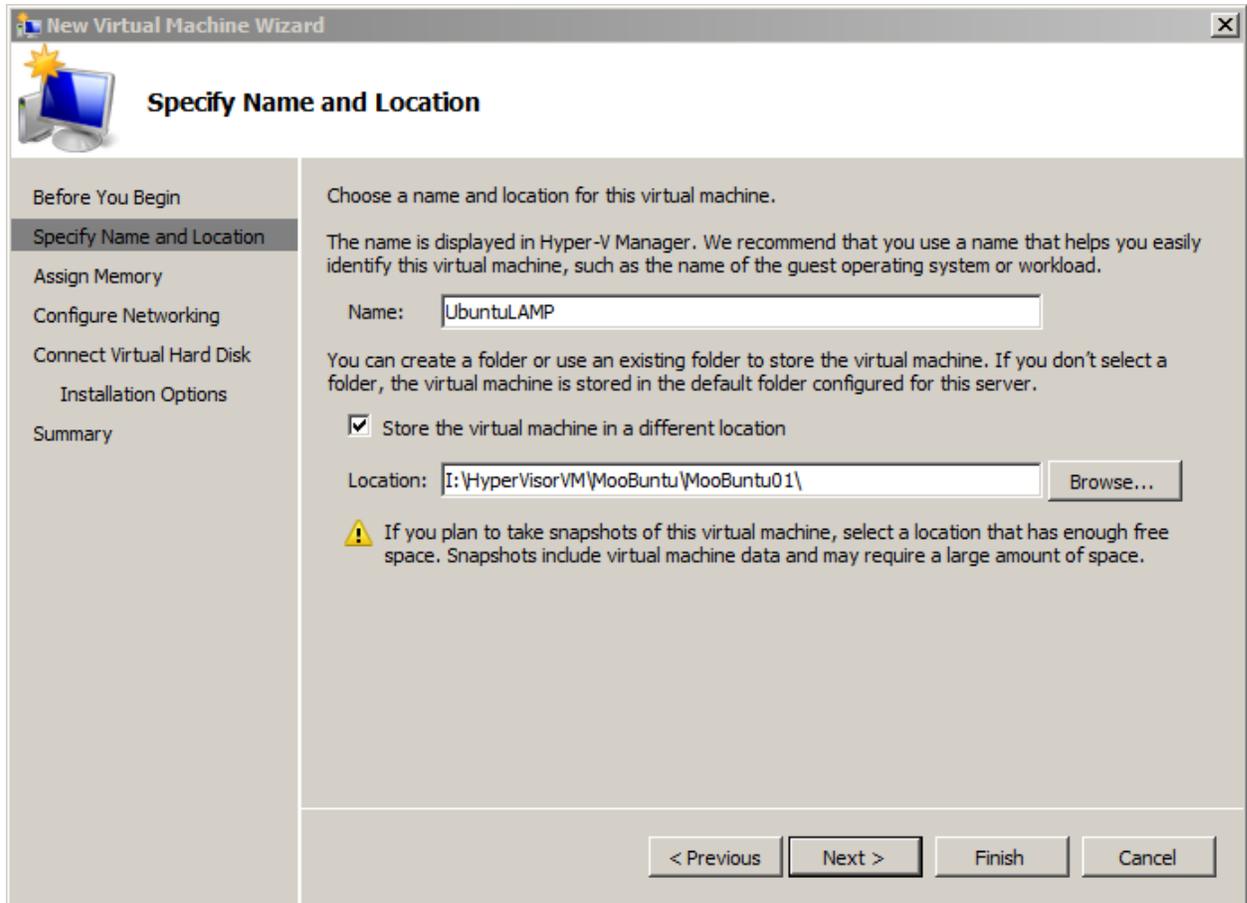
2. In the Actions pane click on *New* and then *Virtual Machine...* from the New popup menu



3. A *New Virtual Machine Wizard* should pop up. To create an Ubuntu LAMP Server you will have to click on the **Next** button so you can "create a virtual machine with a custom configuration."



4. In your next screen you will have to pick a name for your virtual server. I chose UbuntuLAMP. Also you are asked to pick a location for your server. If you are creating multiple servers it would help that you have a location and naming convention that allows you to keep track of all your virtual machines. Then click on *Next*.



The screenshot shows the 'New Virtual Machine Wizard' window, specifically the 'Specify Name and Location' step. The window title is 'New Virtual Machine Wizard'. On the left, there is a navigation pane with the following steps: 'Before You Begin', 'Specify Name and Location' (which is currently selected and highlighted), 'Assign Memory', 'Configure Networking', 'Connect Virtual Hard Disk', 'Installation Options', and 'Summary'. The main area of the wizard contains the following text and controls:

Choose a name and location for this virtual machine.

The name is displayed in Hyper-V Manager. We recommend that you use a name that helps you easily identify this virtual machine, such as the name of the guest operating system or workload.

Name:

You can create a folder or use an existing folder to store the virtual machine. If you don't select a folder, the virtual machine is stored in the default folder configured for this server.

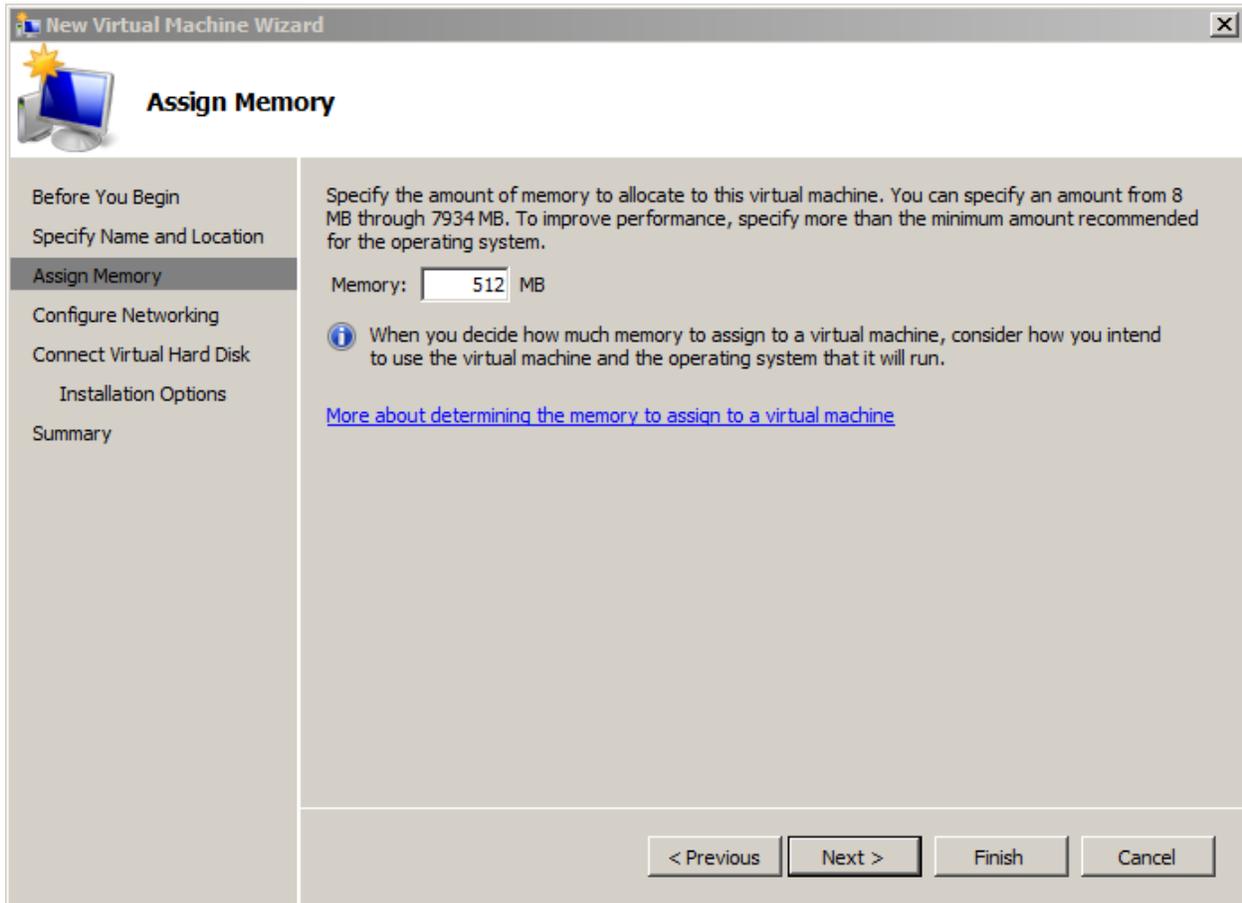
Store the virtual machine in a different location

Location:

 If you plan to take snapshots of this virtual machine, select a location that has enough free space. Snapshots include virtual machine data and may require a large amount of space.

At the bottom of the wizard, there are four buttons: '< Previous', 'Next >', 'Finish', and 'Cancel'.

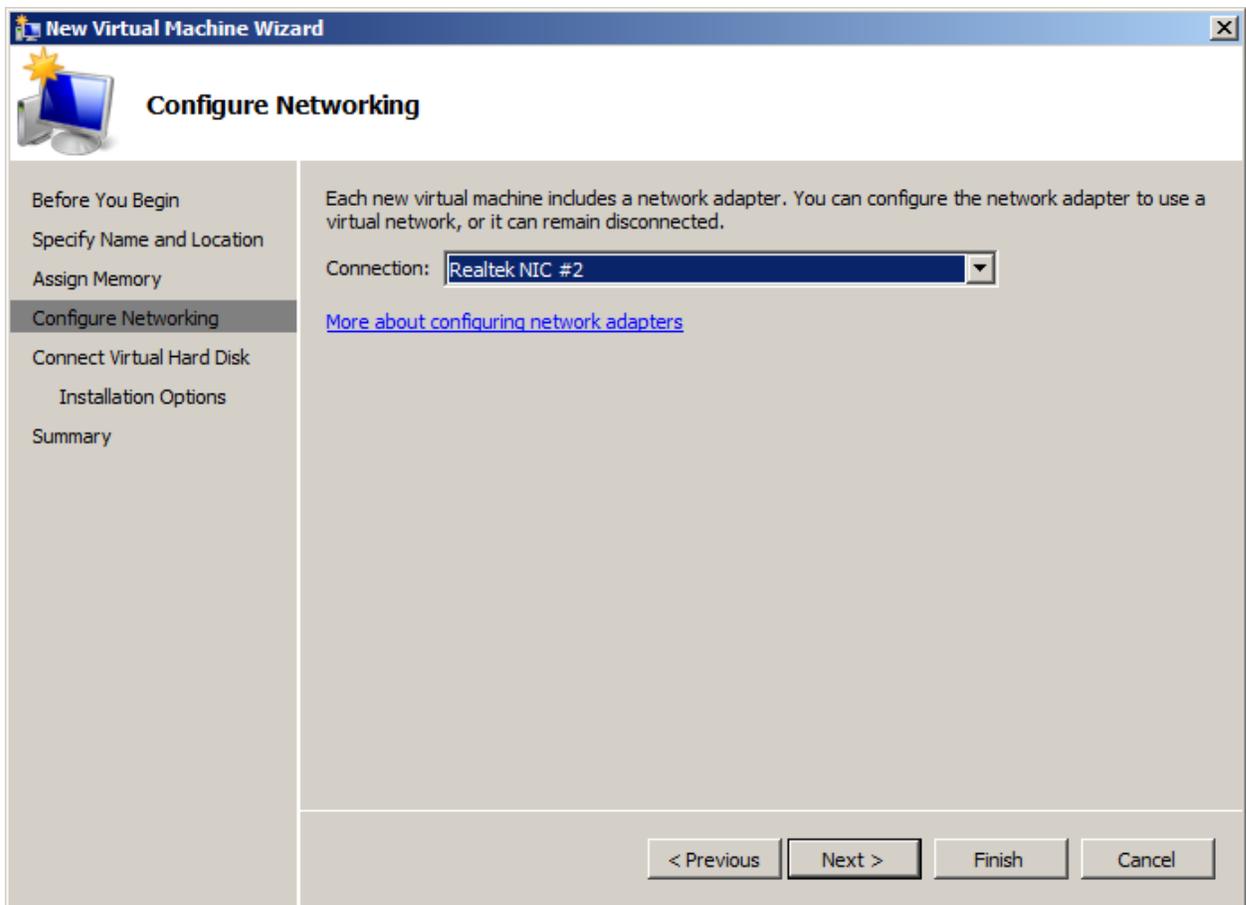
5. After you have specified Name and Location your next step is to assign a certain amount of memory. The default value is 512 MB but if you have more memory on your machine you should assign more for an Ubuntu LAMP server. Don't forget you have to include the amount of memory required to Windows Server R2 Hyper-V as well as the amount of any other virtual machines you are running at the same time or concurrently. Finally click on **Next**.



- The next step is to assign a network interface card or NIC to your Ubuntu server. You should have a separate NIC from the one that is connected to Hyper-V. Thus your computer should have at least two network cables coming into it.

Also Hyper-V allows for two types of network adapters. The first which is simply called "network adapter" is known as a synthetic network adapter that requires integration services to be installed in your Ubuntu server. The other type of network adapter is known as a "legacy network adapter" and is used when integration services would not be used. The legacy network adapter is slower and not something you would want your server to use. Ubuntu plays better with the legacy network adapter but documentation for hooking up the synthetic network adapter for Ubuntu will be provided.

So simply pick choose the NIC you wish to use for your Ubuntu LAMP server from the list. Then click on *Next*.



7. Now create a virtual hard disk. Make sure you browse to the directory folder that you have selected for your virtual machine. When you create snapshots later it is very easy to get your virtual machines confused. After you have chosen your NIC click on **Next**.

The screenshot shows the 'New Virtual Machine Wizard' window with the 'Connect Virtual Hard Disk' step selected in the left-hand navigation pane. The main area contains the following text and controls:

A virtual machine requires storage so that you can install an operating system. You can specify the storage now or configure it later by modifying the virtual machine's properties.

Create a virtual hard disk

Name:

Location:

Size: GB (Maximum: 2040 GB)

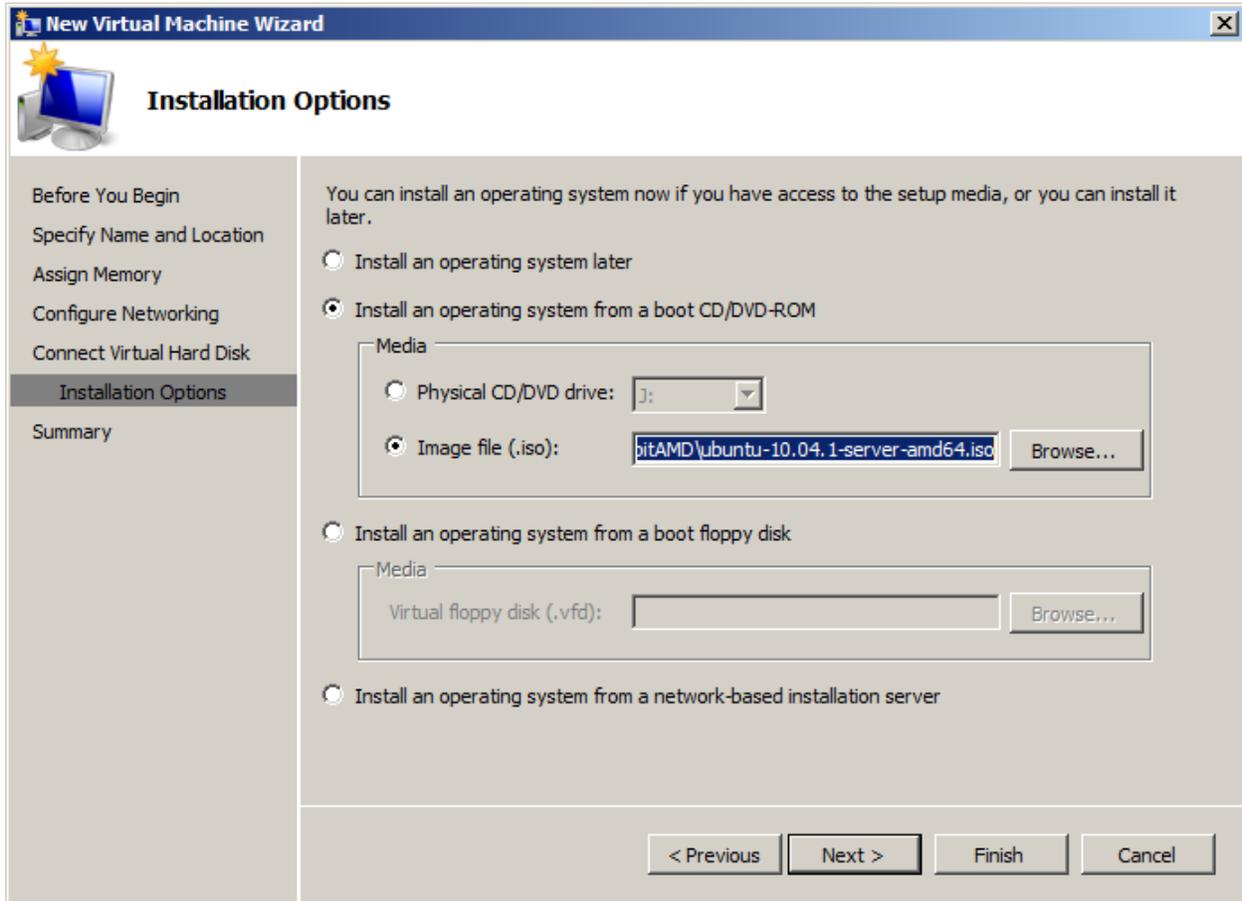
Use an existing virtual hard disk

Location:

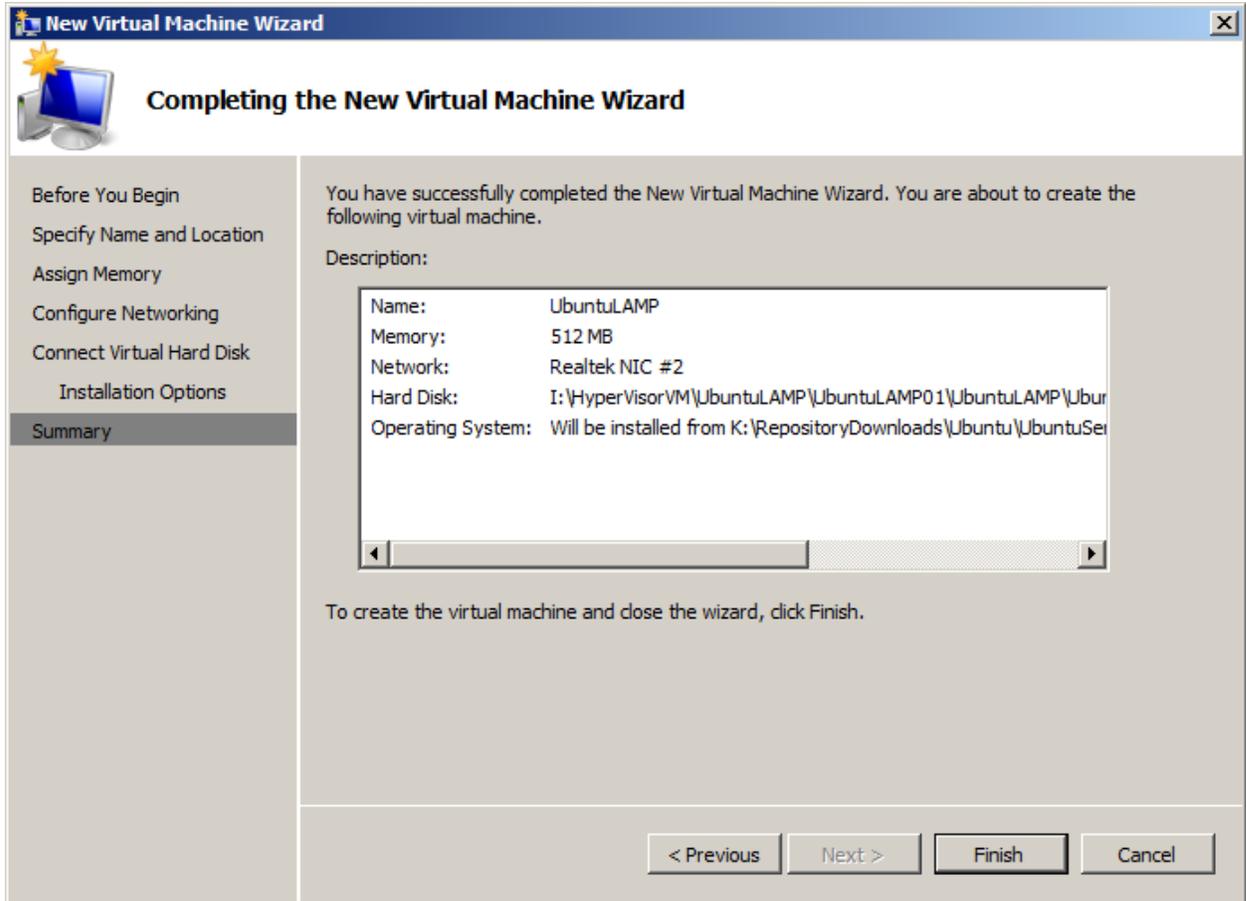
Attach a virtual hard disk later

At the bottom of the wizard are four buttons: '< Previous', 'Next >', 'Finish', and 'Cancel'.

8. Now select the directory or folder where you downloaded your Ubuntu Server image file and make sure your file is highlighted. After you selected your image file click on **Next**.



9. Finally check that everything is the way you want it. Notice that my machine has only 512 MB of memory. This would work as long as you are not going to install a desktop on your server. If you have more memory and need more memory you can go into the *Settings* menu of in your Hyper-v panel and change the settings after you click the *Finish* button.



10. You should now see your Ubuntu LAMP server setup in the Hyper-V manager. Use the menu to start this virtual machine and you should be able to install an Ubuntu LAMP server.

