

# CLONING A VIRTUAL MACHINE IN "MICROSOFT VIRTUAL PC 2007"

## HIGH-LEVEL EXECUTIVE SUMMARY:

In "Microsoft Virtual PC 2007", you cannot copy a virtual machine directly. In "Microsoft Virtual PC 2007", you can copy a .VHD virtual hard drive directly using "Windows Explorer" or "My Computer".

Then you can create a new virtual machine and attach it to the cloned virtual hard drive.

## TWO METHODS FOR CLONING VIRTUAL MACHINES

There are two ways for you to clone a virtual machine in "Microsoft Virtual PC 2007":

### Method 1:

Use "My Computer", "Computer", "Windows Explorer", or a command prompt window to copy the .VHD virtual hard drive file of an existing virtual machine, giving the copied file a different file name than the original .VHD virtual hard drive file. Then use the "New" button of the "Virtual PC Console" to create a new virtual machine. When you arrive at the "Virtual Hard Disk Options" box, select "An existing virtual hard disk". Then attach the new virtual machine to the .VHD virtual hard disk that you have already created.

### Method 2:

Use "My Computer", "Computer", "Windows Explorer" or a command prompt window to make the existing .VHD virtual hard drive file of an existing virtual machine into a "Read Only" file. Then use the "New" button of the "Virtual PC Console" to create a new virtual machine, creating a new .VHD virtual hard disk that you will later discard. Finally use the "Virtual Disk Wizard" to create a new .VHD virtual hard disk file and select "Differencing" when you arrive at the "Virtual

Hard Disk options box. After finishing the "Virtual Hard Disk Wizard", delete the .VHD virtual hard disk file that you created from the "New" button.

## ADDITIONAL TECHNICAL DETAILS:

When you follow either of the two above methods to clone a virtual machine, the new virtual machine that you create will have a new, unique "UUID.BIOS" (= "computer UUID" = "motherboard UUID").

The virtual hard drive of the new virtual machine will have the same "hard disk UUID" as the virtual hard drive of the original virtual machine.

In "Microsoft Virtual PC 2007", the \*.vmc file of a virtual machine stores the "UUID.BIOS".

The "UUID.BIOS" is also known as a "motherboard UUID" or a "system UUID".

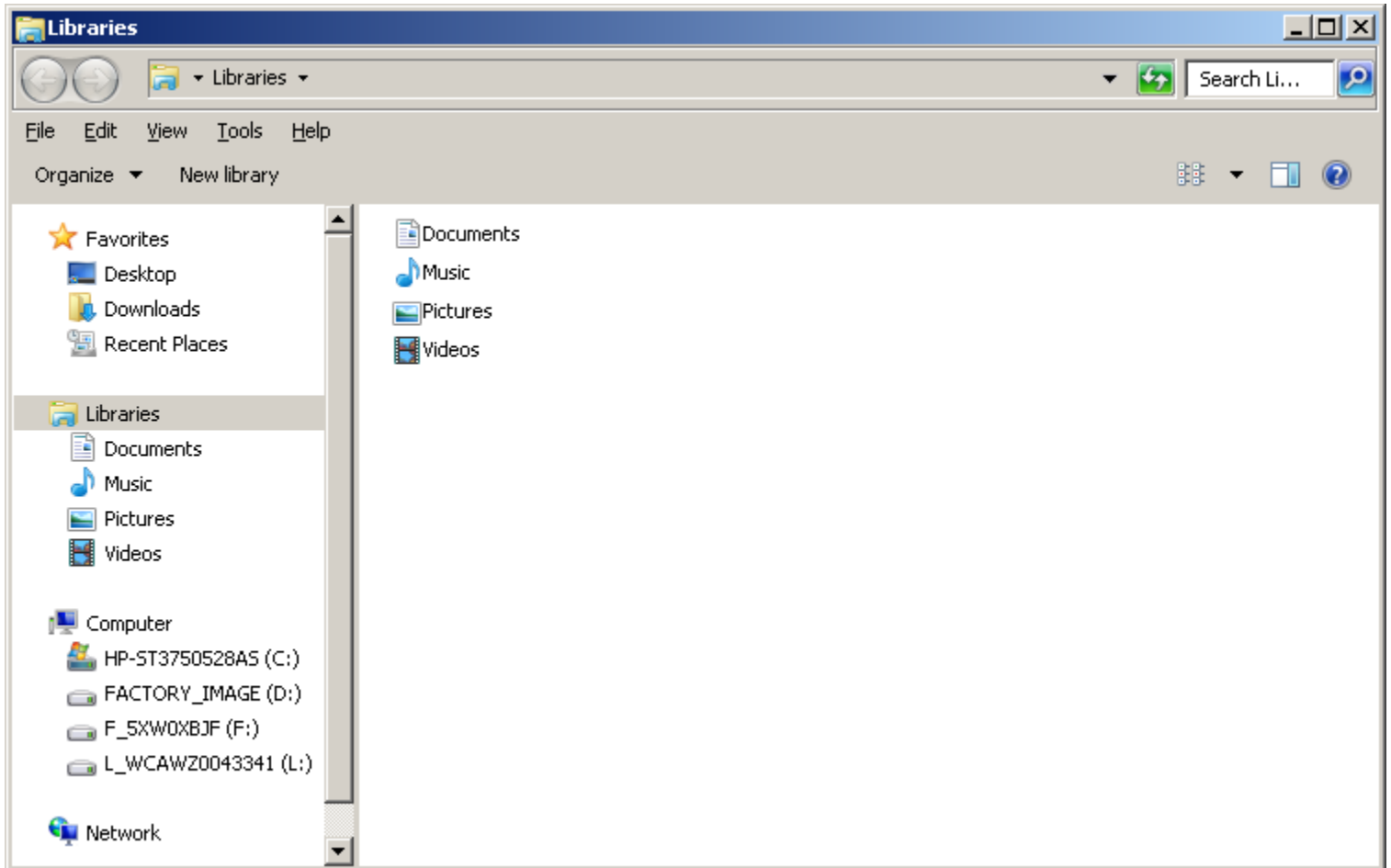
In "Microsoft Virtual PC 2007", the "hard drive UUID" is stored inside the .VHD "virtual hard drive" file.

When you follow this procedure, the new virtual network adapter that is created in the cloned virtual machine will have a unique MAC address that is different from the original virtual machine.

When you follow this procedure, the new .vhd "virtual hard drive" that is created for the new, cloned virtual machine will have the exact same Windows "SID" or "Security Identifier" as the original virtual machine. This is not an issue for virtual machines that are in the same "workgroup". This is sometimes a problem for virtual machines that are in the same "Windows Server" "domain".

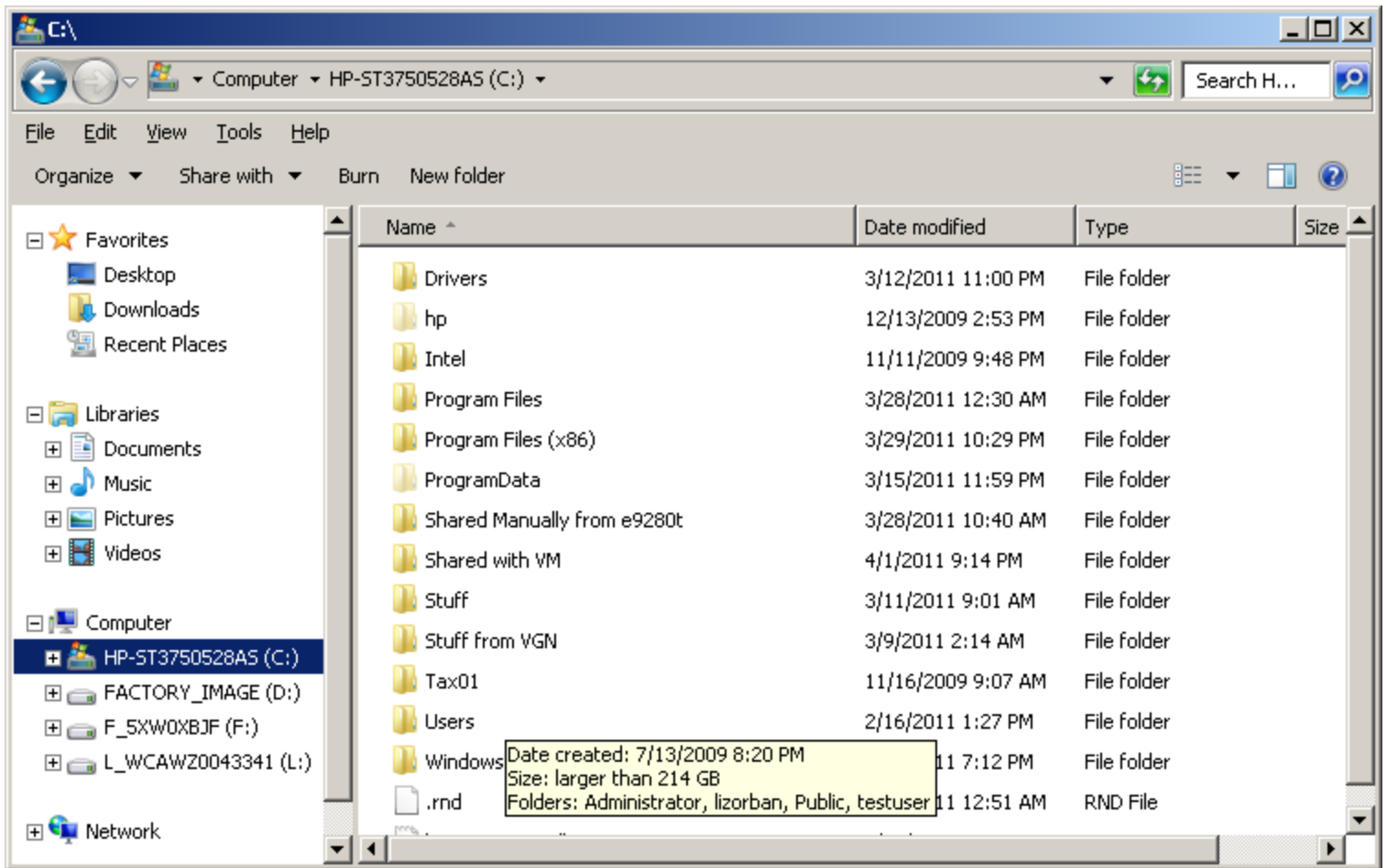
# METHOD 1 STEP-BY-STEP:

Start "Windows Explorer" or "My Computer" or "Computer":



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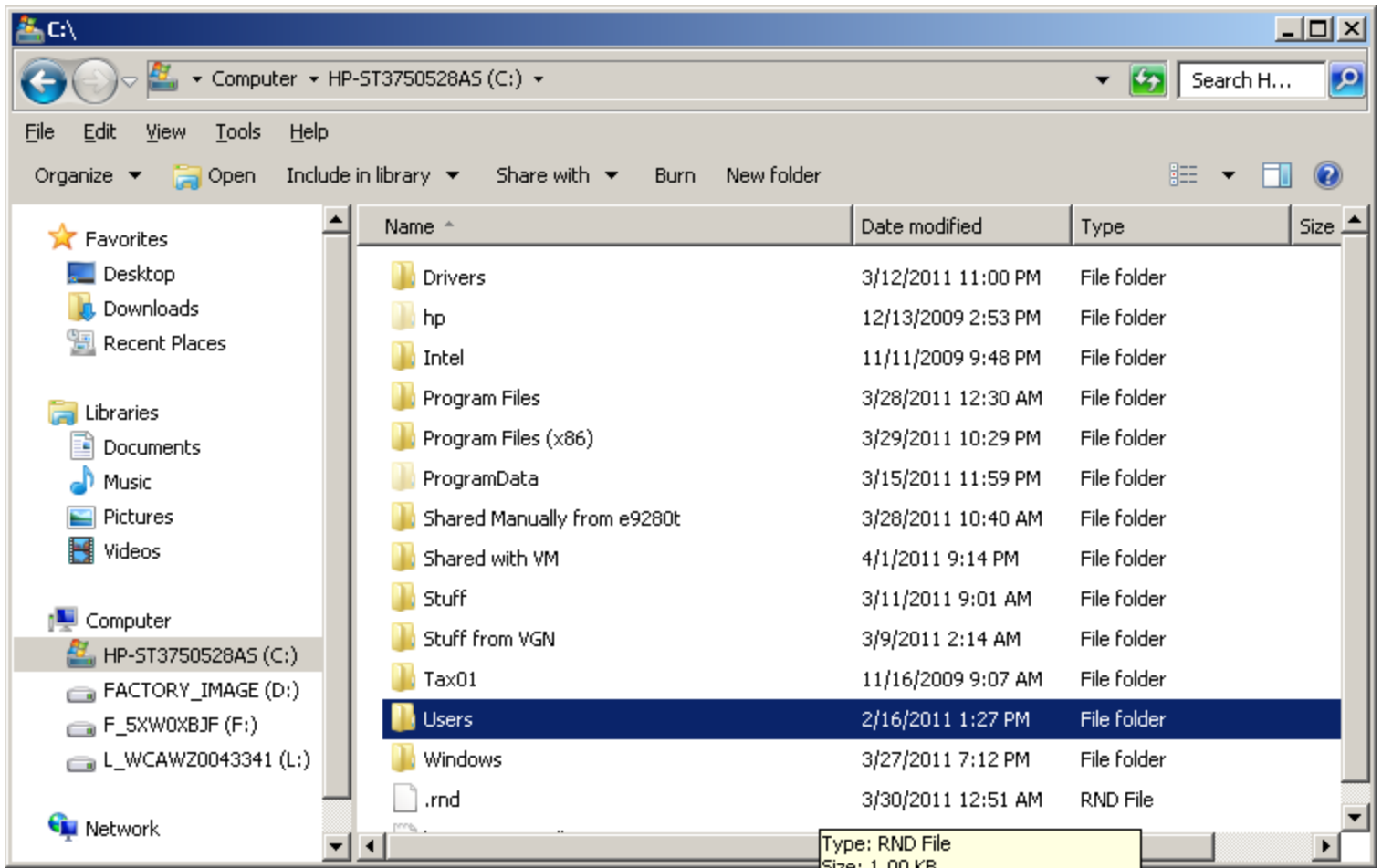
Click on the C: drive in the left-most pane:



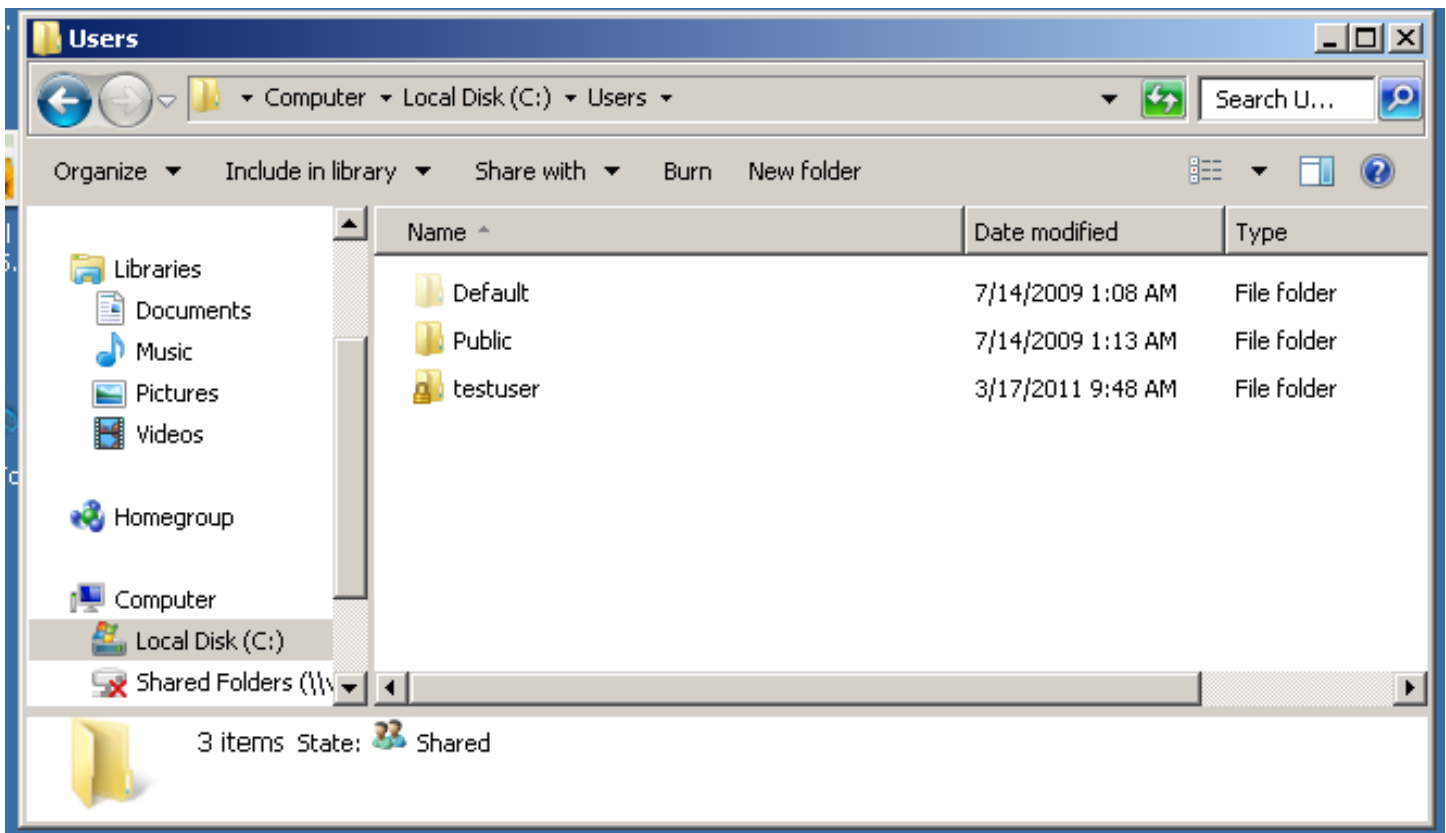
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If you are running "Windows 7" or "Windows Vista" in the host computer, double-click on "Users" in the right-most pane.

If you are running "Windows XP" in the host computer, double-click on "Documents and Settings" in the right-most pane.

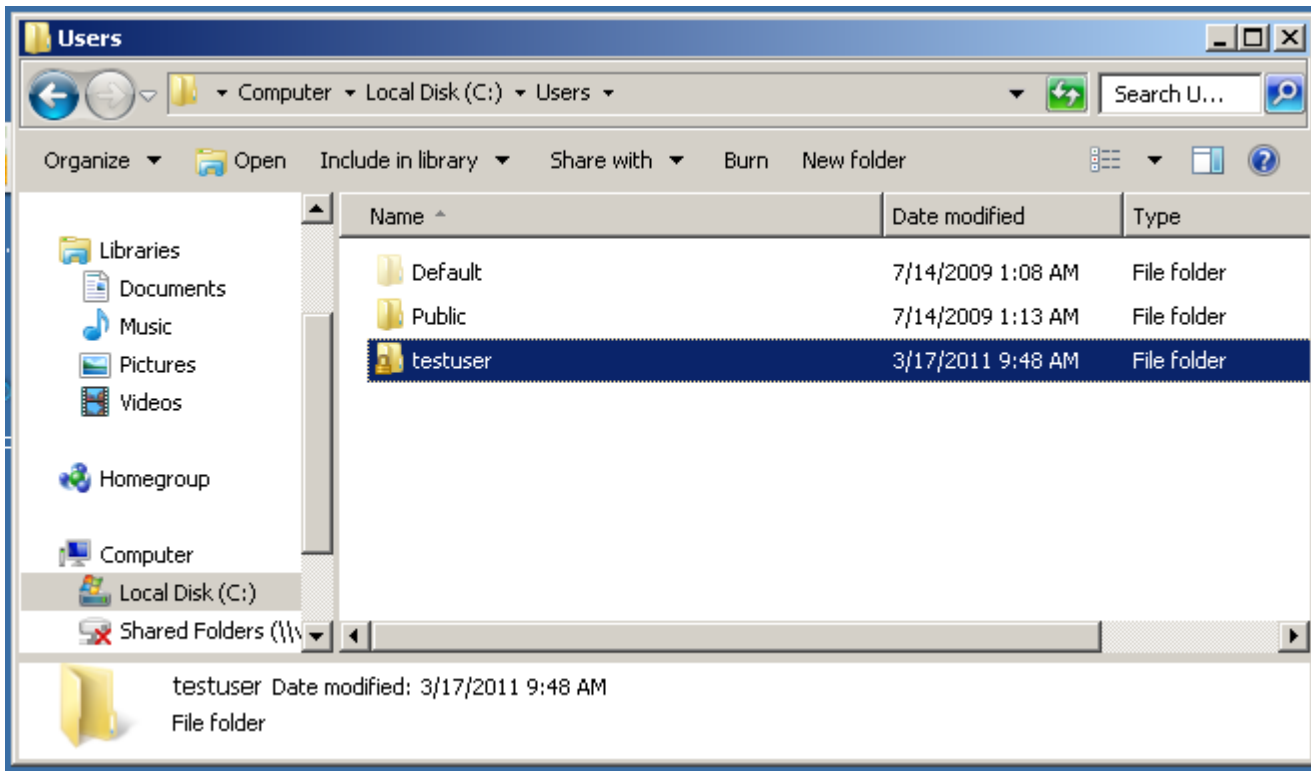


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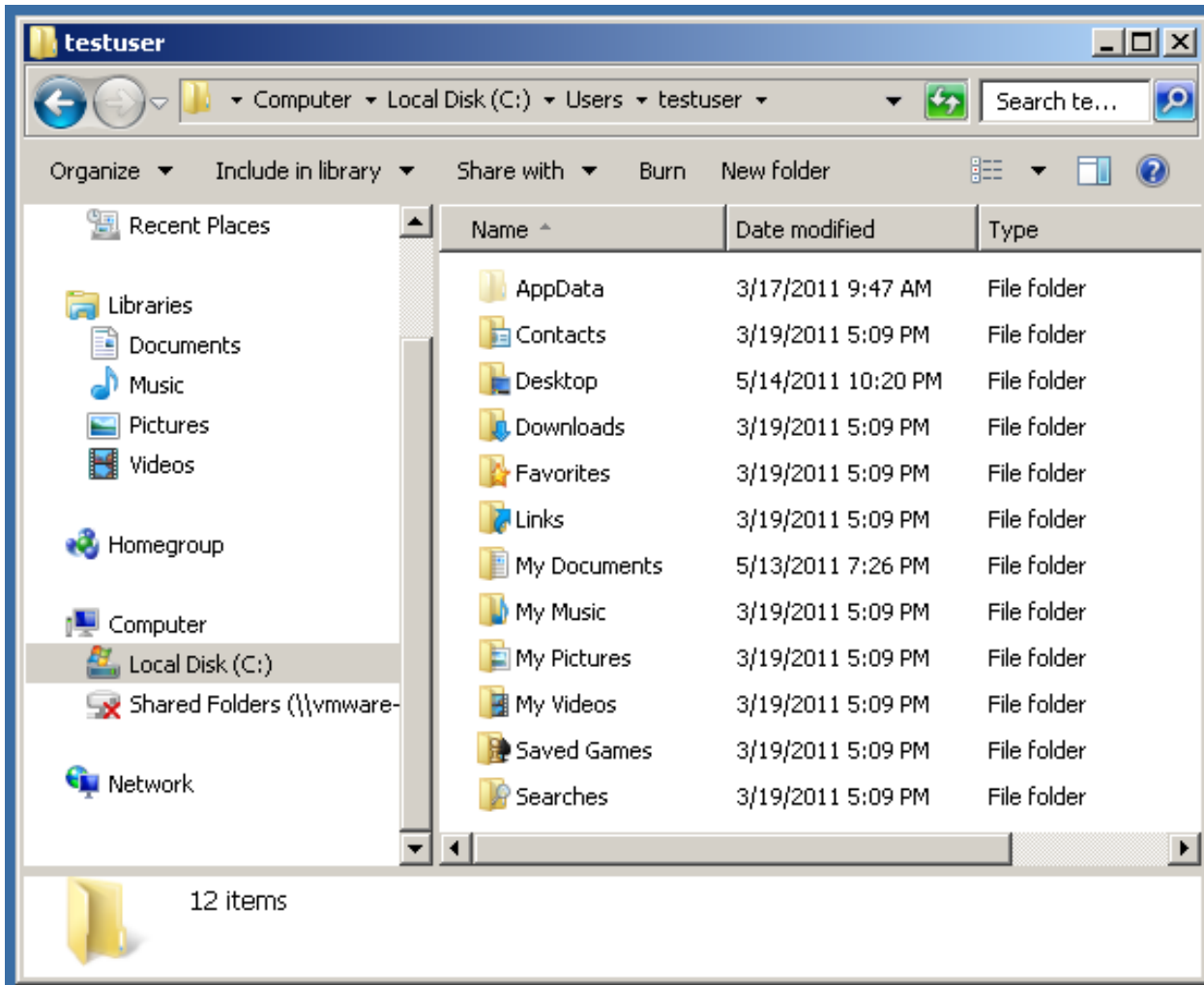
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Double-click on your user profile folder in the right-most pane:

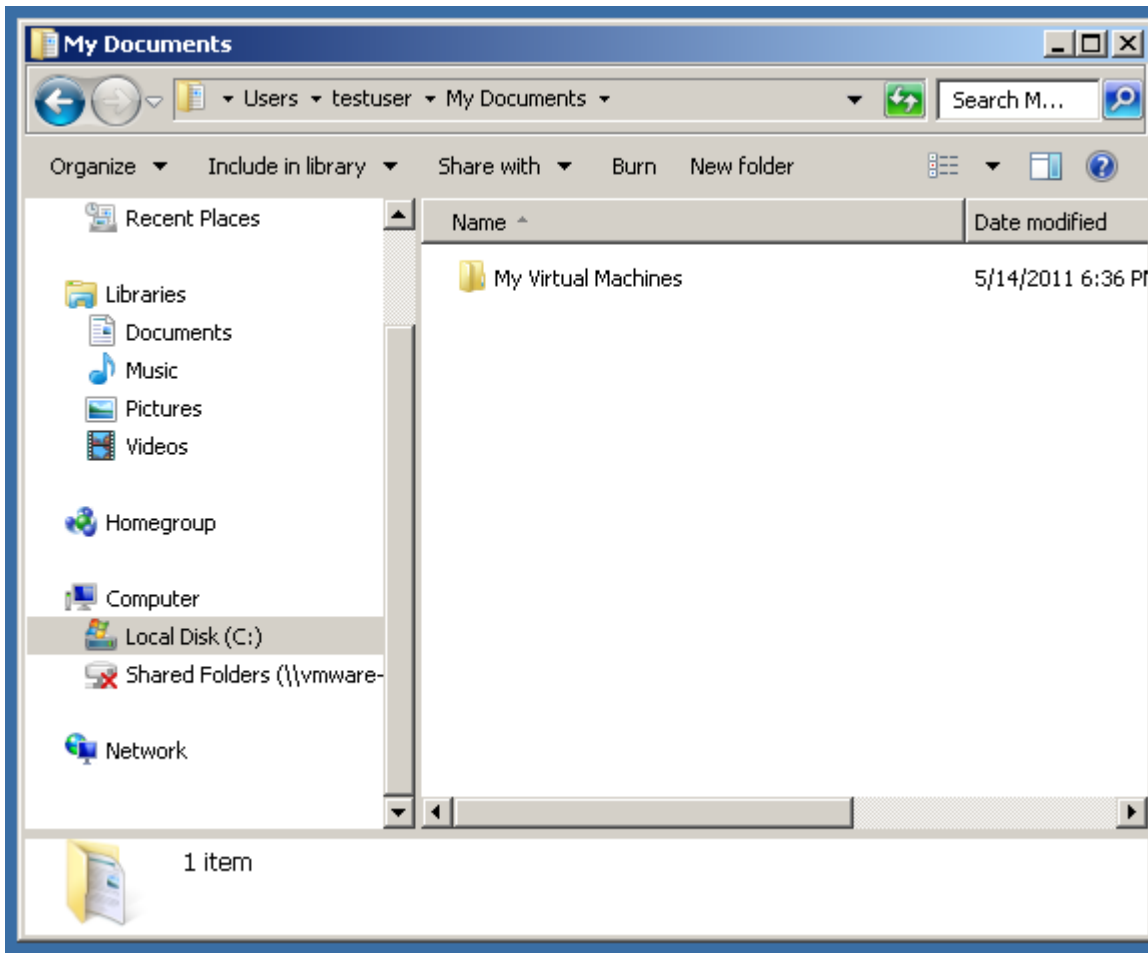


In this example, we double-clicked on the "testuser" folder.

Double-click on the "My Documents" folder:

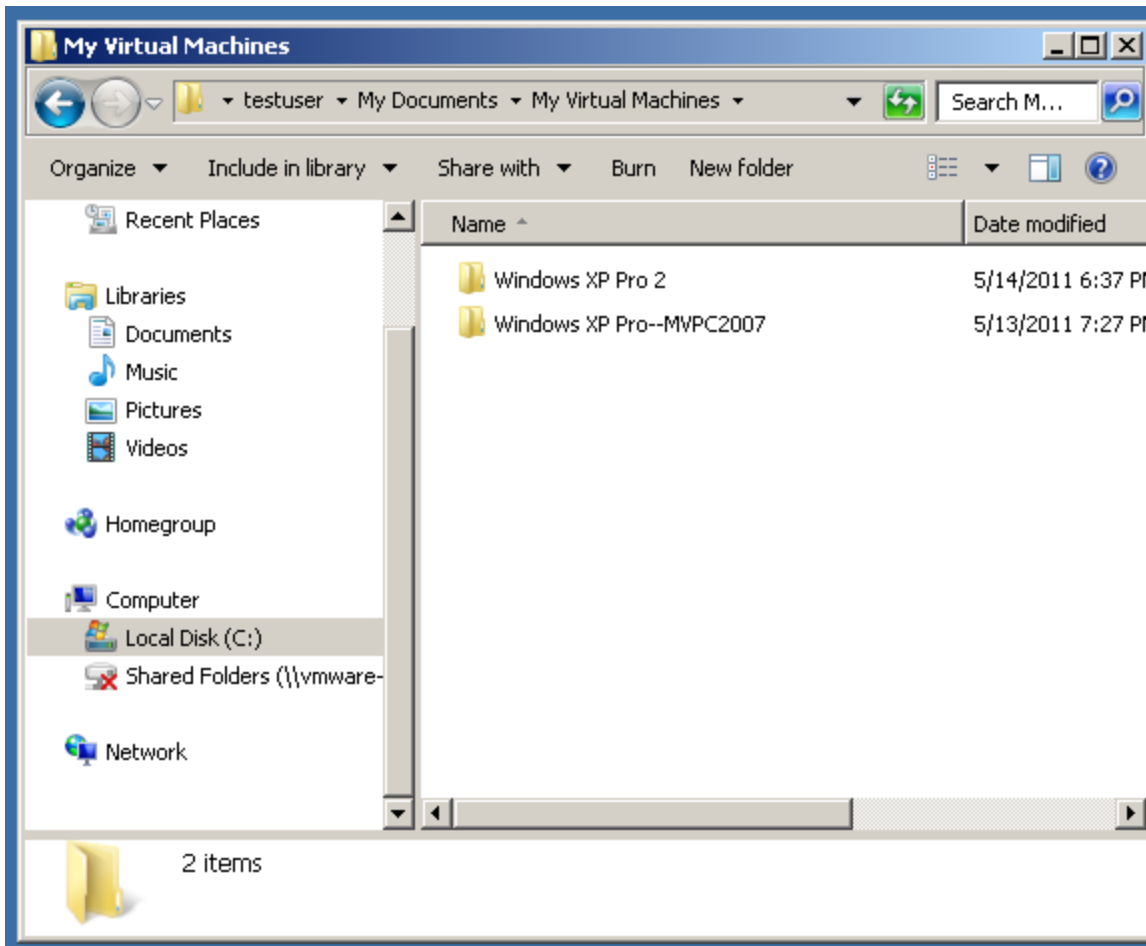


Double-click on the "My Virtual Machines" folder:

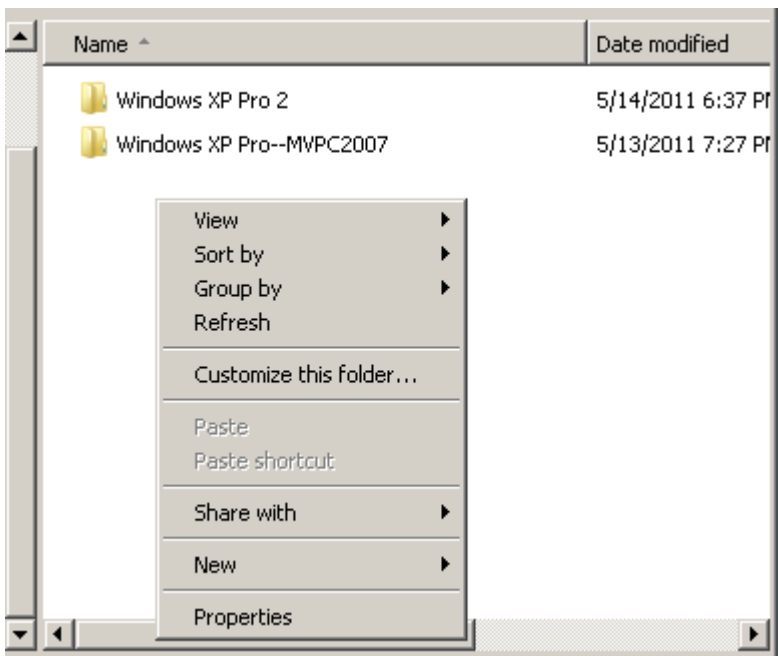


Each of the virtual machines that you have already created in "Microsoft Virtual PC 2007" resides in a separate folder:

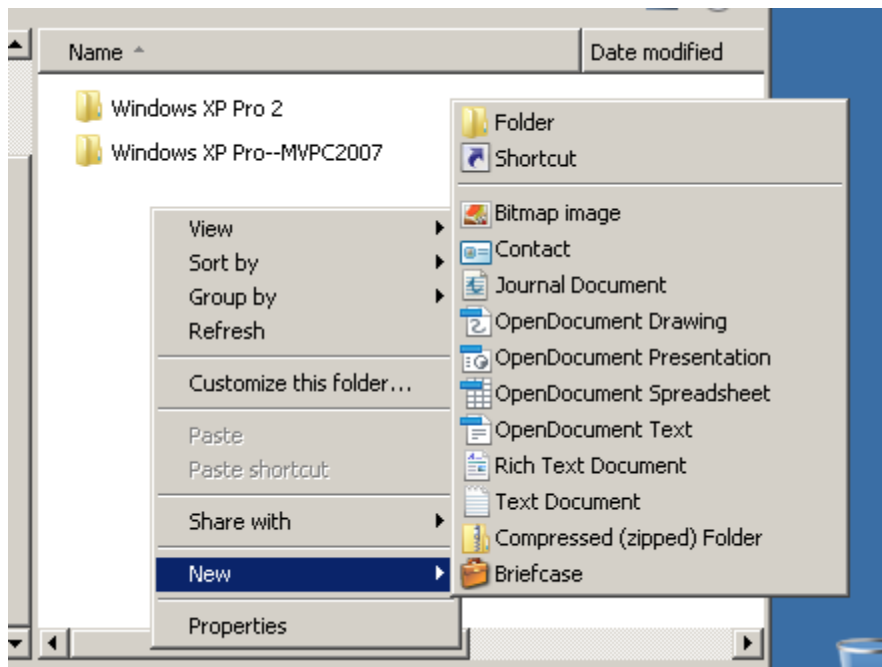




Use the right mouse button to click in white space beneath the folders in the right-most pane:



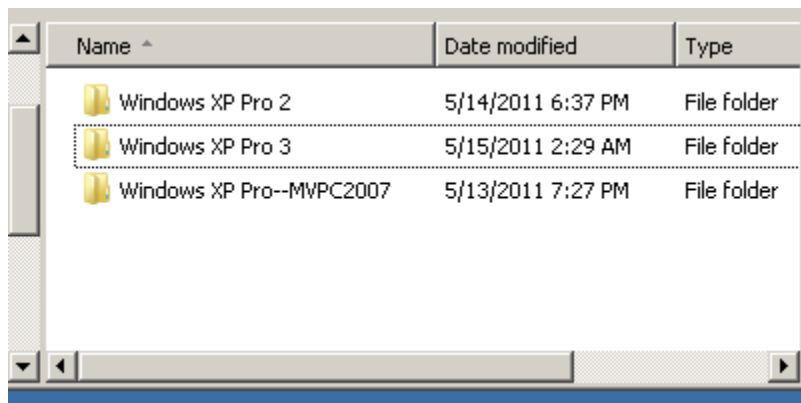
Click on "New" in the pop-up context menu. A pop-up submenu will be displayed:



Click on "Folder" in the pop-up submenu.  
A new folder called "New folder" will appear.

Type in a logical name for the cloned virtual machine.  
In this example, we typed in  
"Windows XP Pro 3"

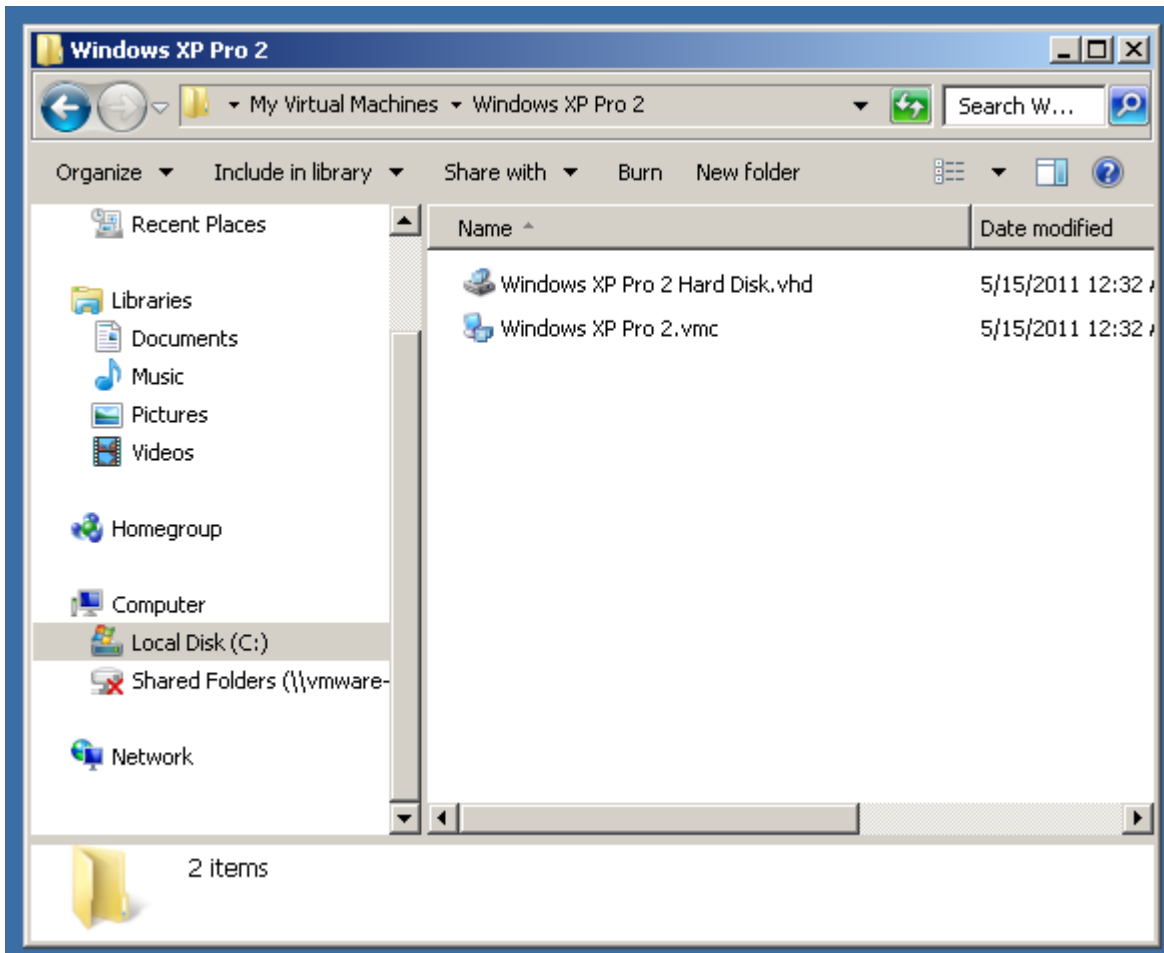
Hit the "Enter" key to lock in the name for the new folder:



Double-click on the folder that belongs to the virtual machine that you wish to clone. In this example, we double-clicked on the folder called "Windows XP Pro 2":

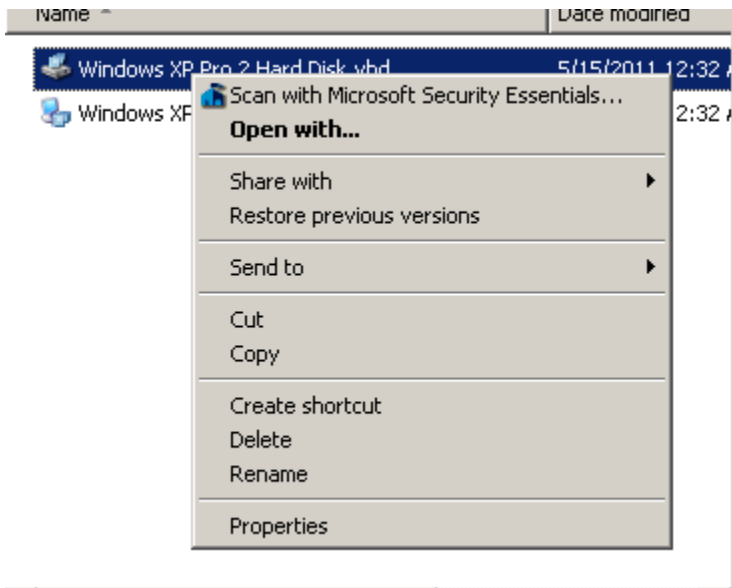
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Inside the virtual machine folder, you will find a \*.VMC file and a \*.VHD file:



Use the right mouse button to click on the file called Windows XP Pro 2 Hard Disk.vhd

A pop-up context menu will be displayed:

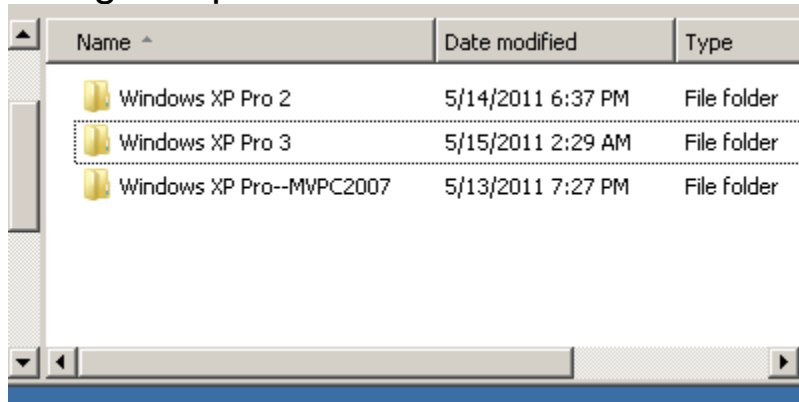


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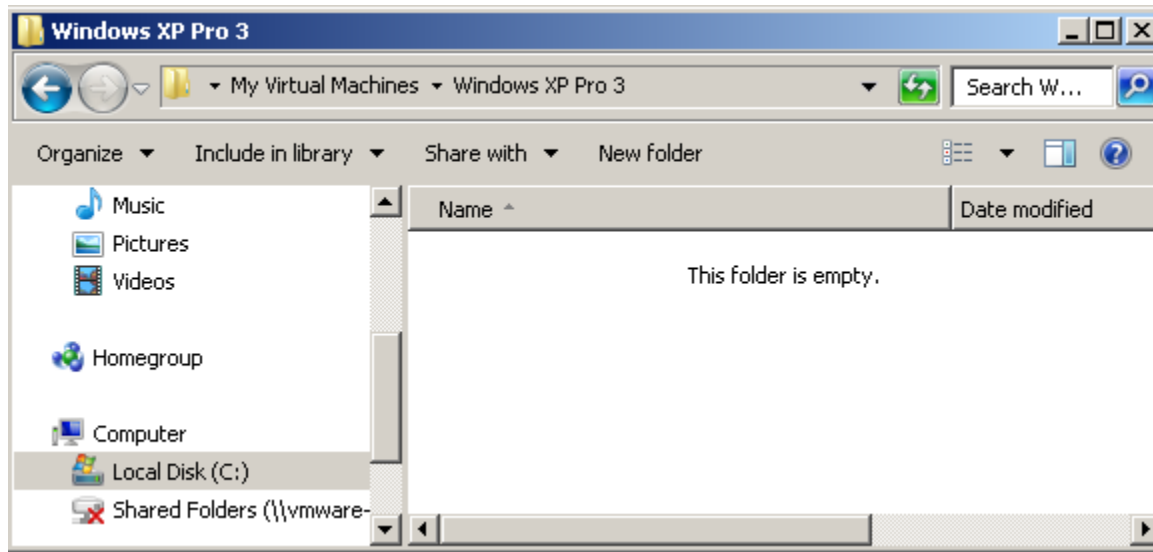
Click on "Copy" in the pop-up context menu.

The pop-up context menu will disappear.

Navigate up one level:

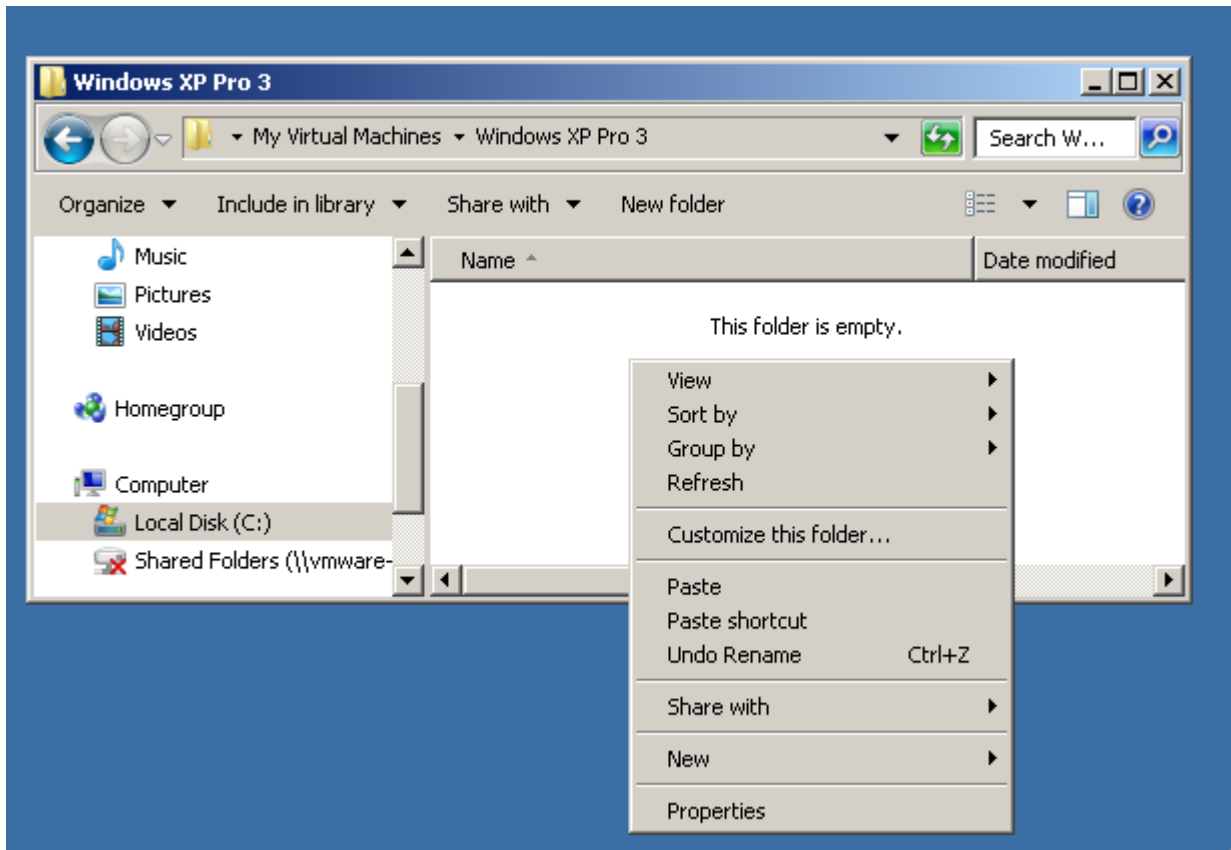


Double-click on the new folder to open it:

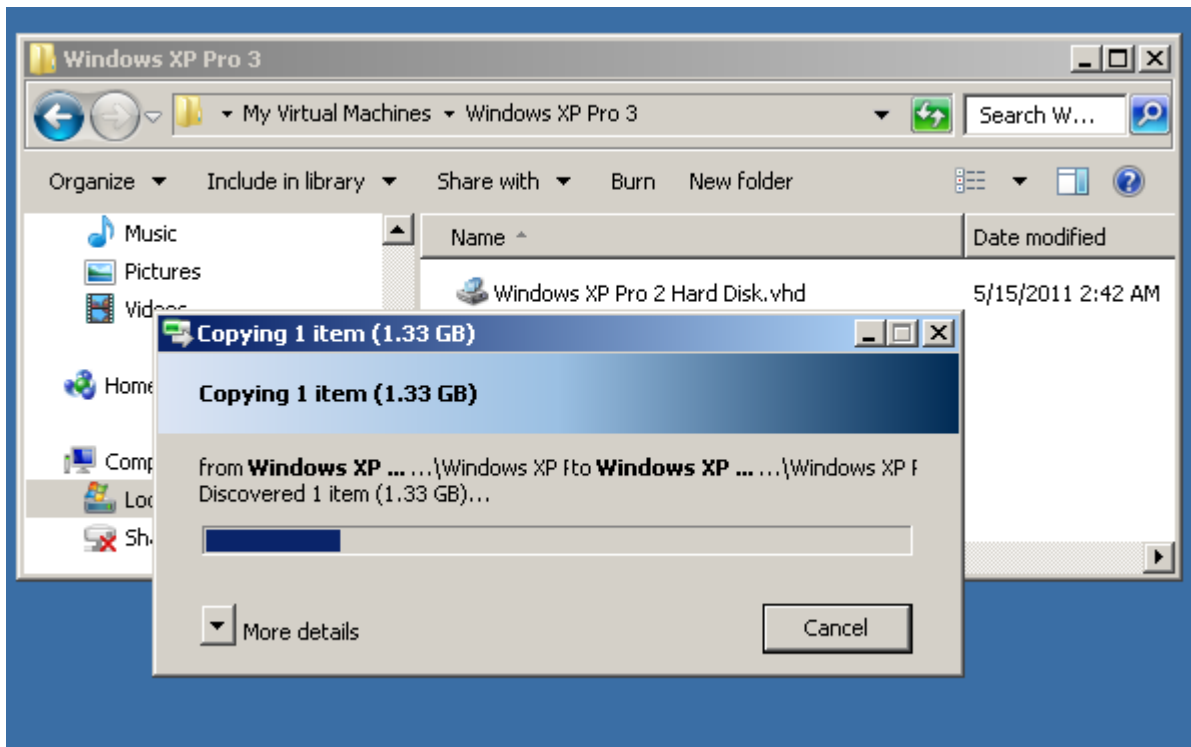


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Use the right mouse button to click in the right pane of the new folder.  
A pop-up context menu will be displayed.  
Click on "Paste".

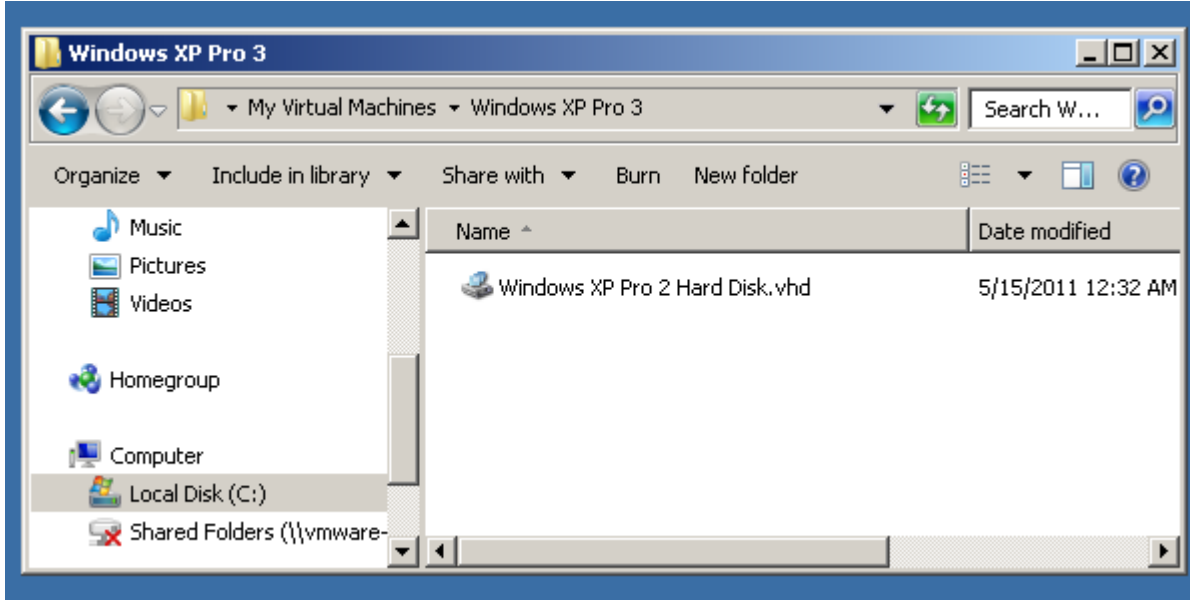


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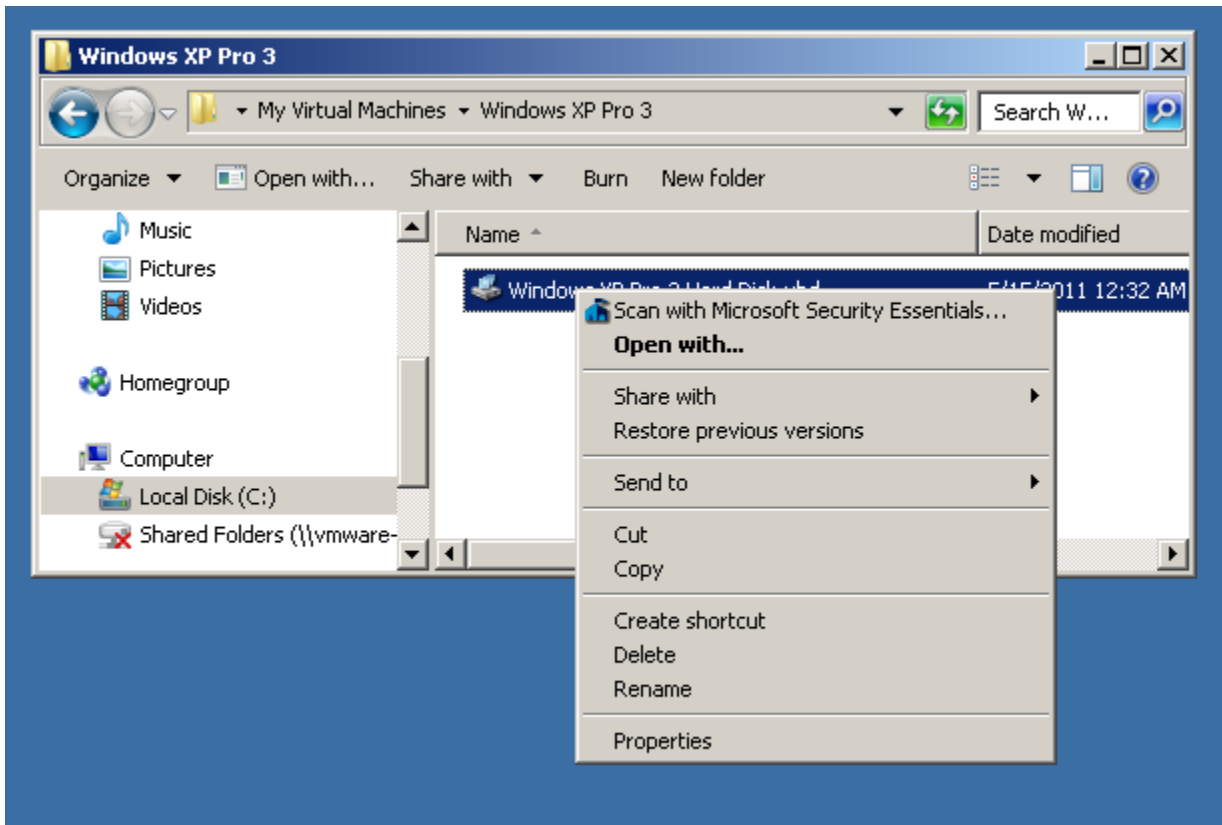
A copy of the .VHD virtual hard drive file will now reside in the new virtual machine folder:



Use the right mouse button to perform a click on this new file:

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A pop-up context menu will be displayed:



Click on "Rename" in the pop-up context menu:

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Type in an appropriate name for the new .VHD file:

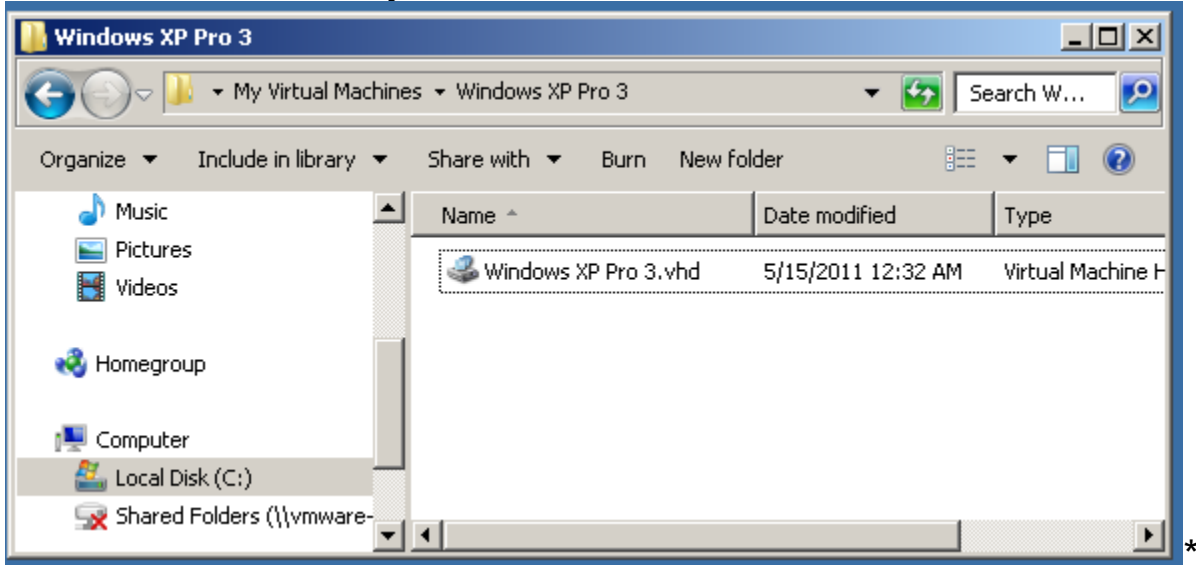
In our example, we typed in

Windows XP Pro 3.vhd

since it is a good practice to give virtual hard drive files the same name as the virtual machines that they belong to.

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Press the "Enter" key to lock in the name file name:

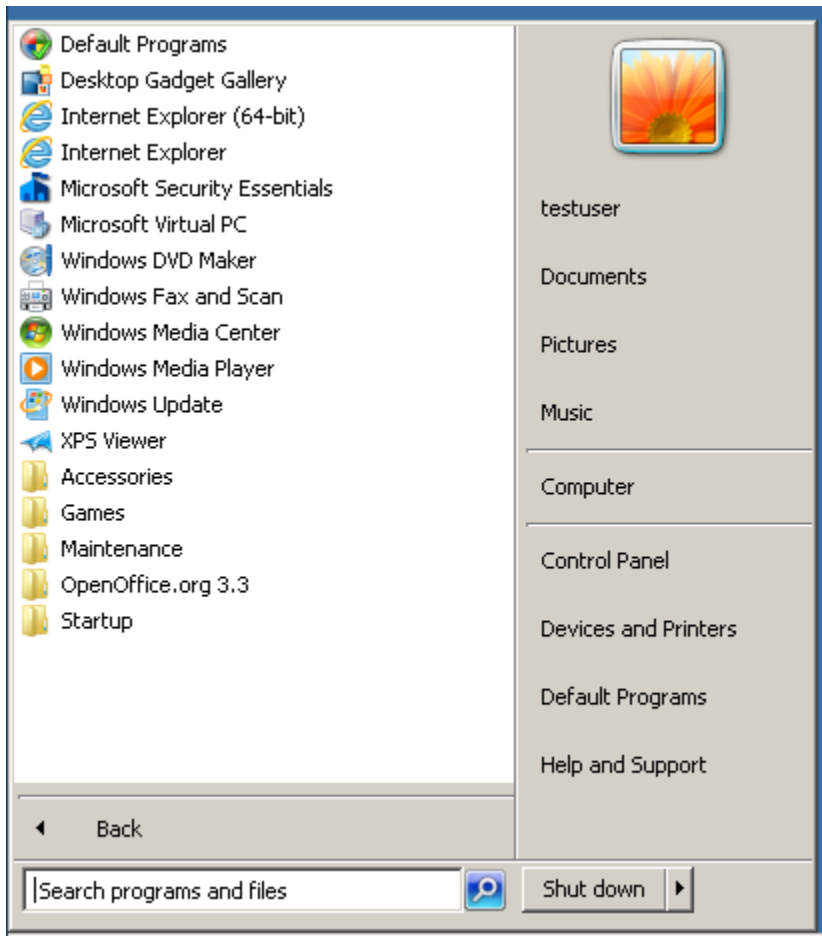


Click on the Windows "Start" button.

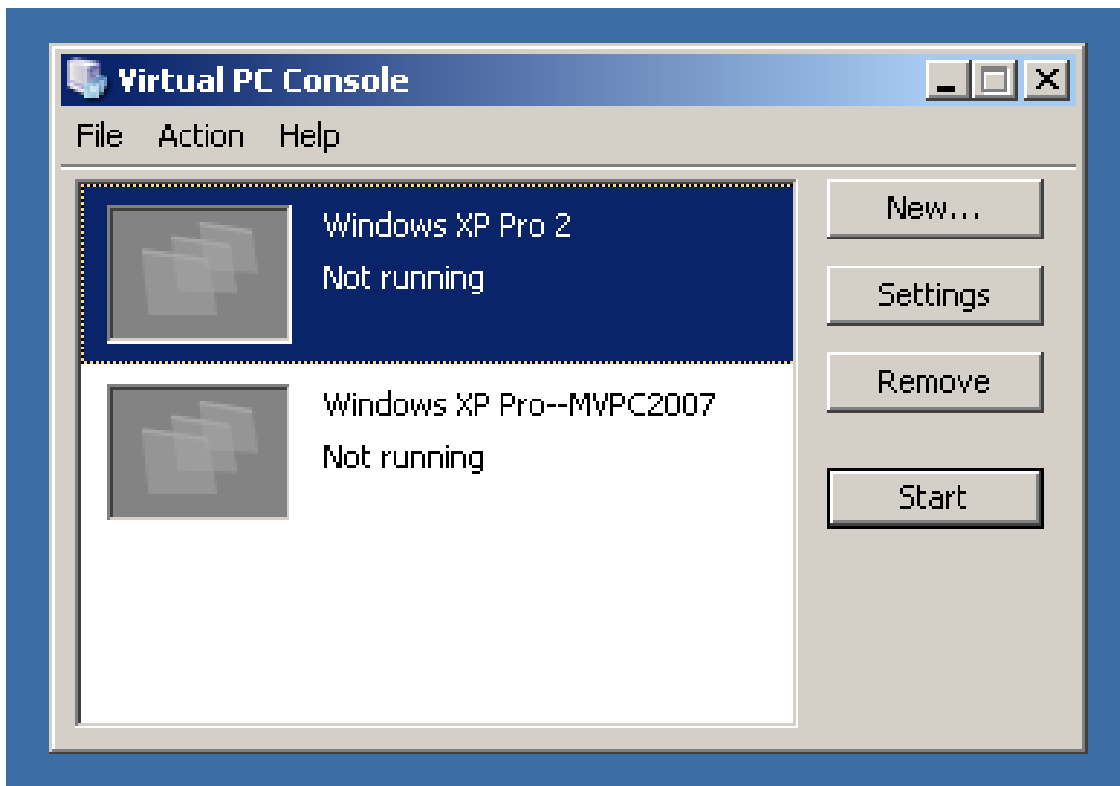


Click on "All Programs".  
Click on "Microsoft Virtual PC".



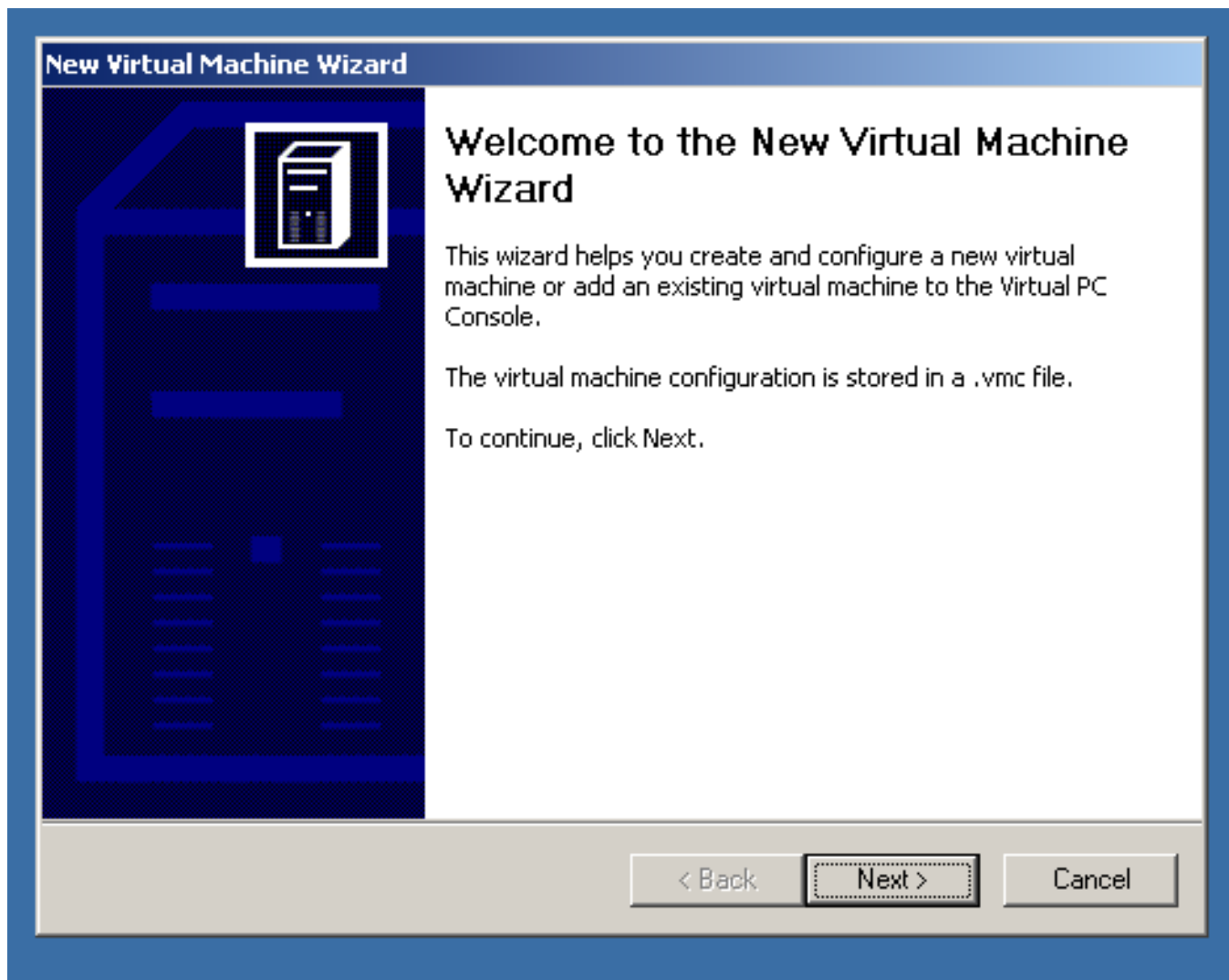


A "Virtual PC Console" window will be displayed:



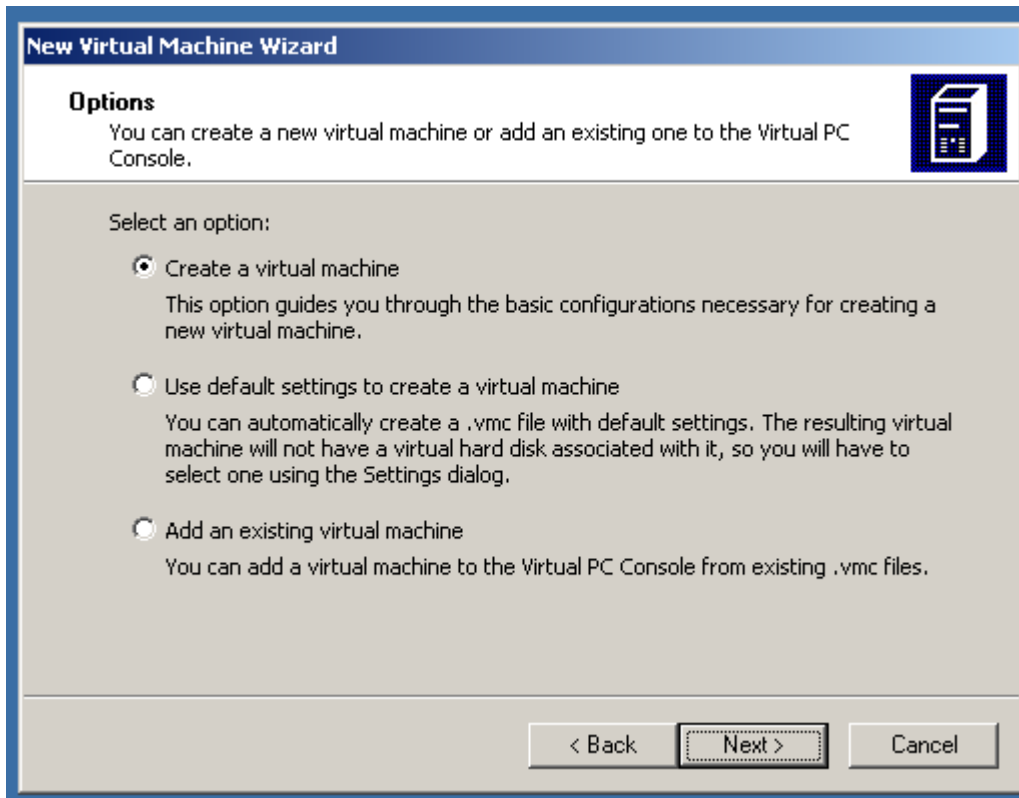
Click on the "New" button.

A "New Virtual Machine Wizard" box will be displayed:



Click on its "Next" button.

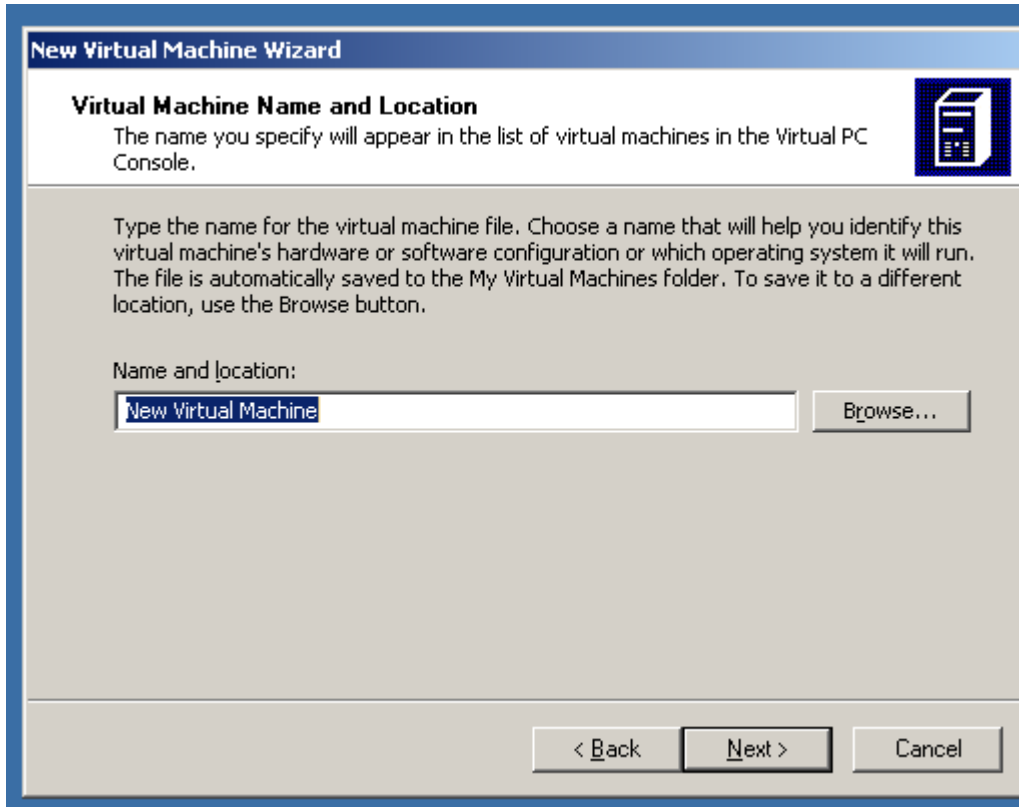
An "Options" box will be displayed:



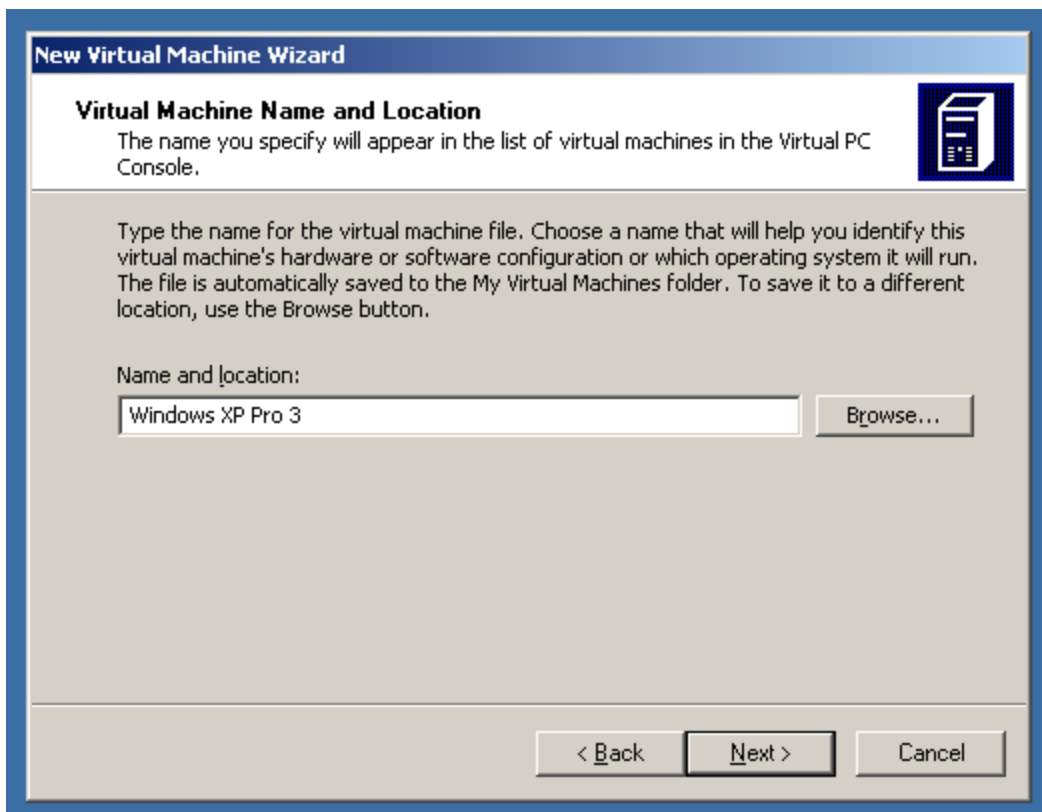
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Make sure that the "Create a virtual machine" option is selected. Click on the "Next" button.

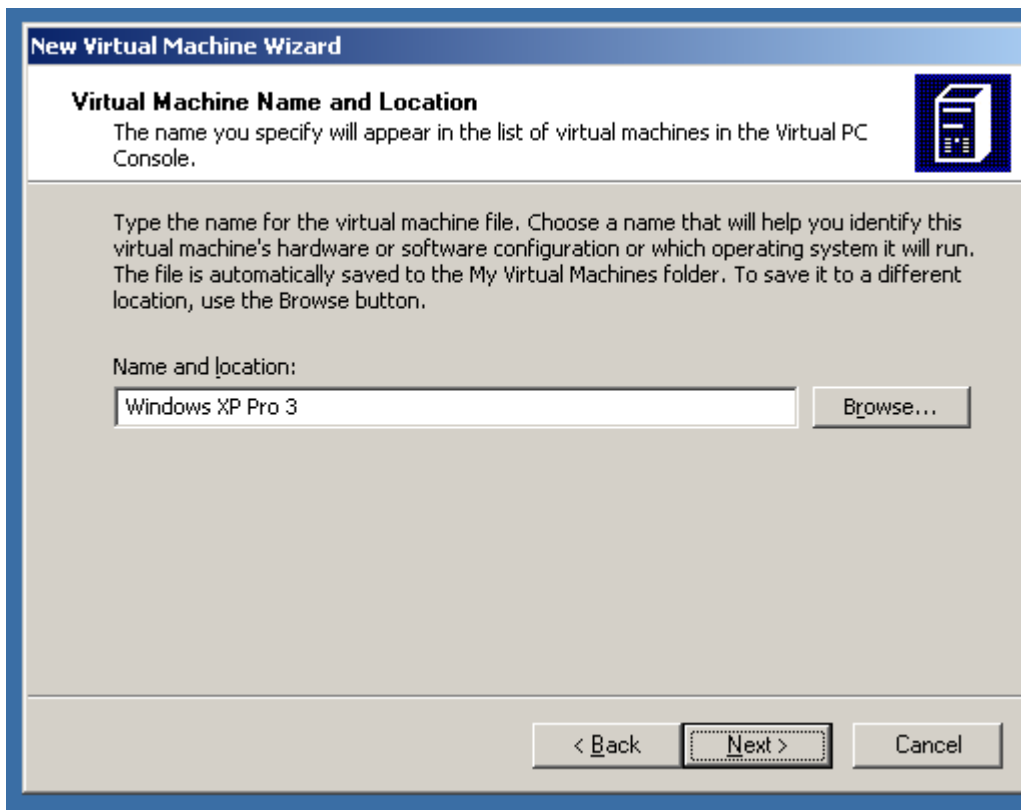
A "Virtual Machine Name and Location" box will be displayed:



Type in the exact name of the folder that you created earlier:

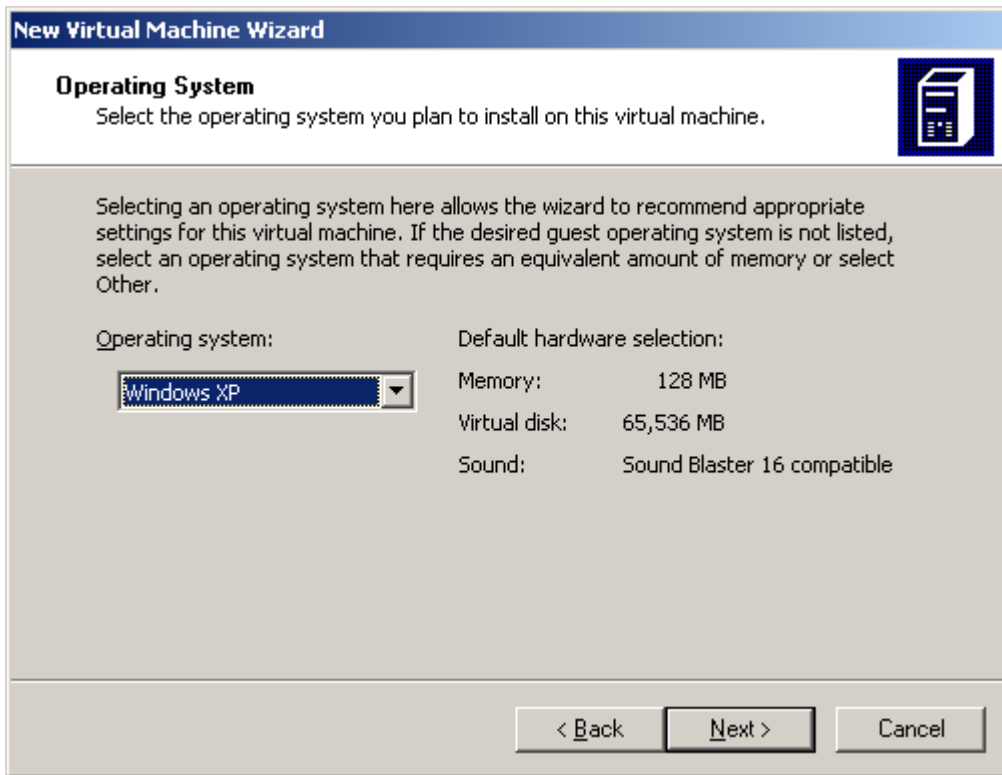


In this example, we typed in "Windows XP Pro 3".  
Click on the "Next" button:

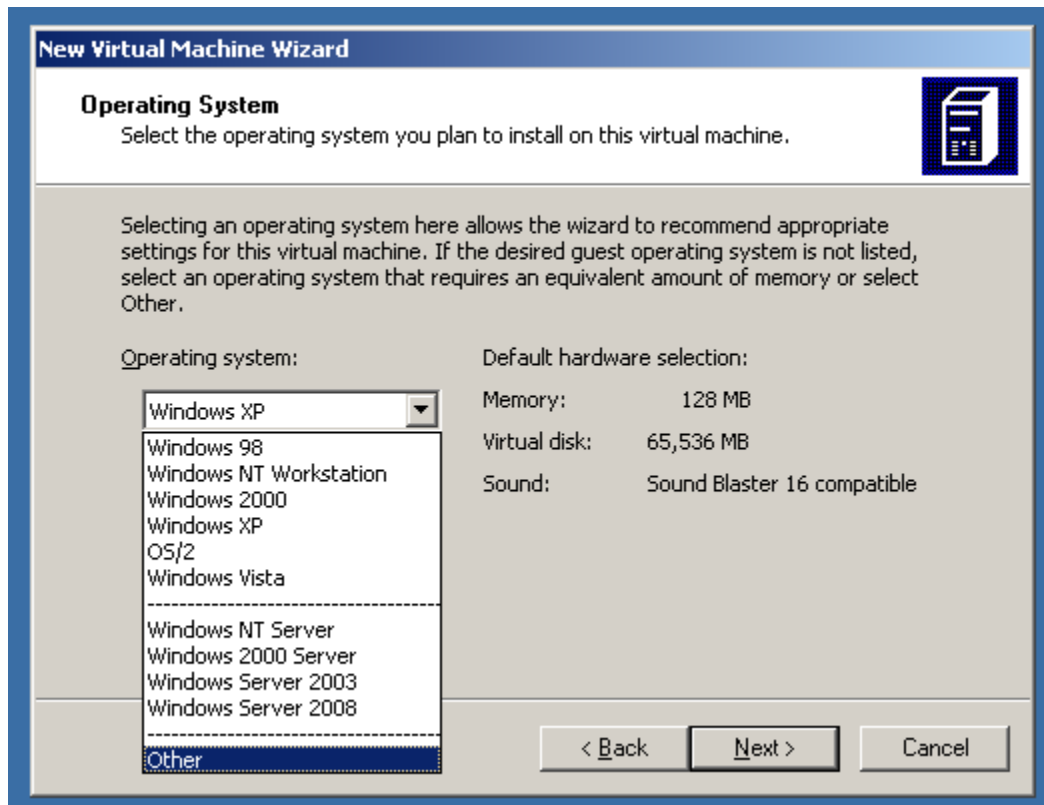


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Change the default location for virtual machine, if you want to.  
Click on the "Next" button:

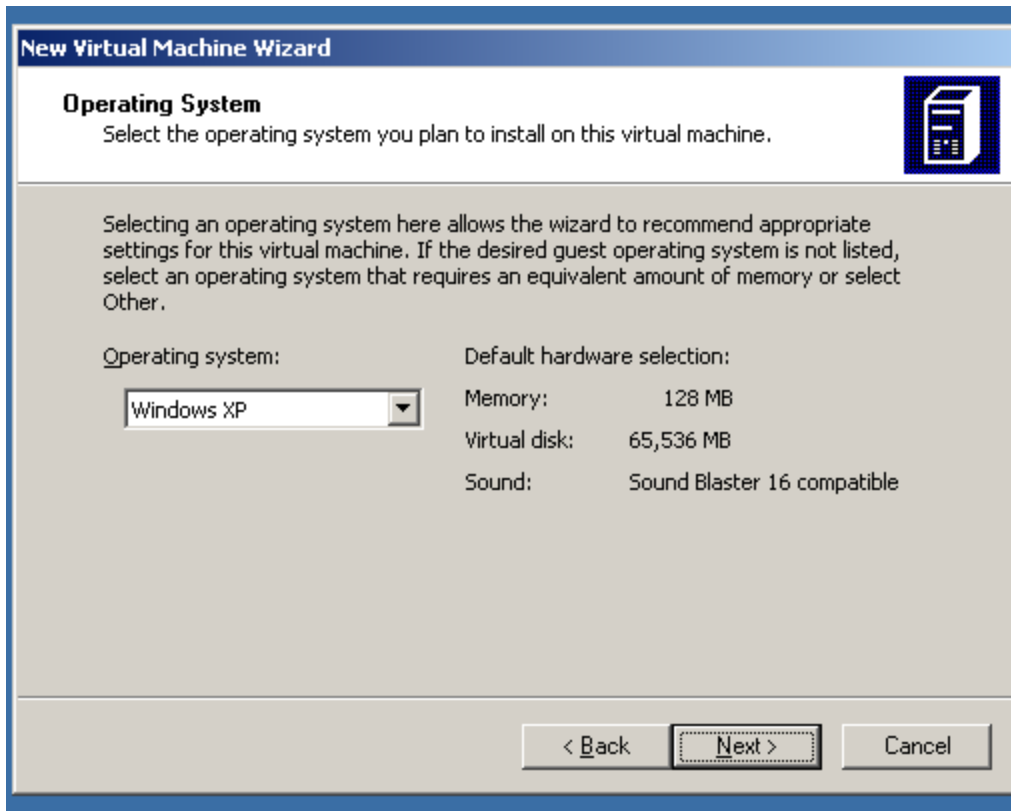


Use the drop-down list button to select the correct operating system for the cloned virtual machine:



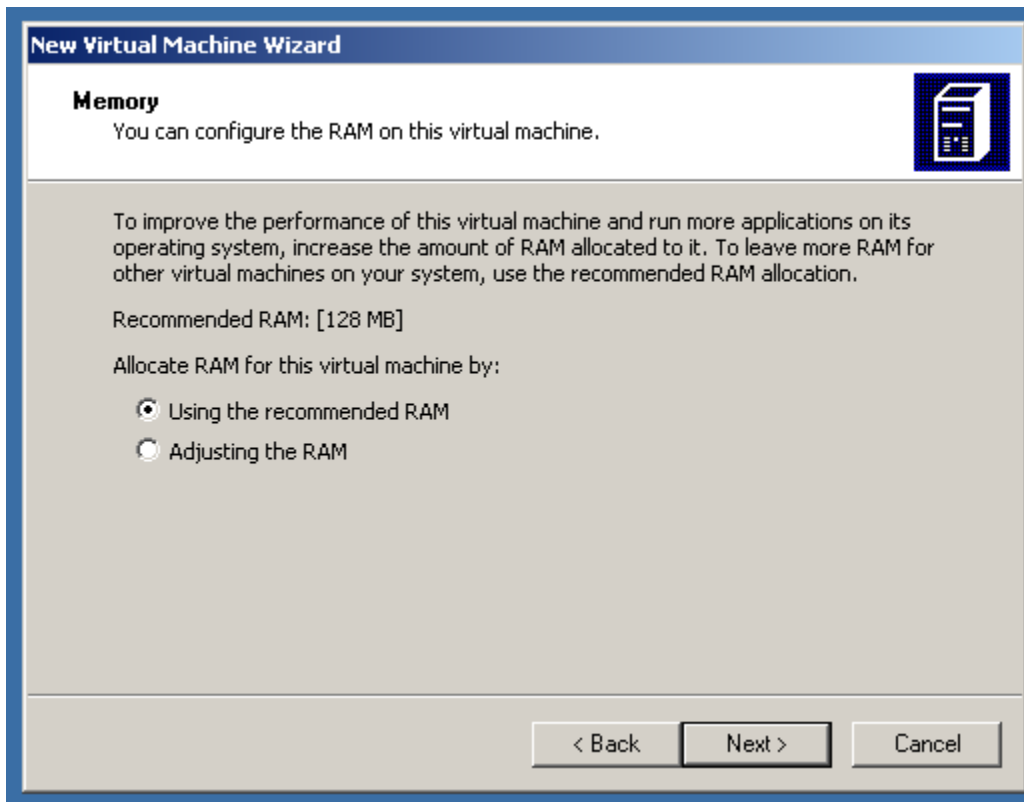
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Click on the "Next" button:

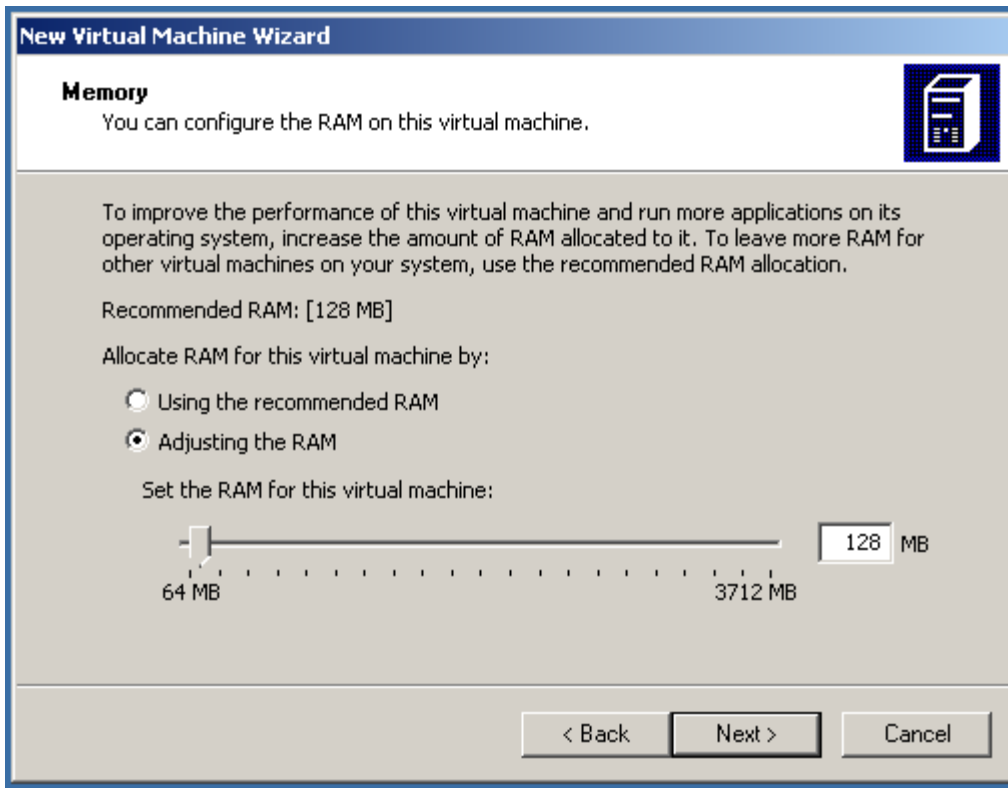


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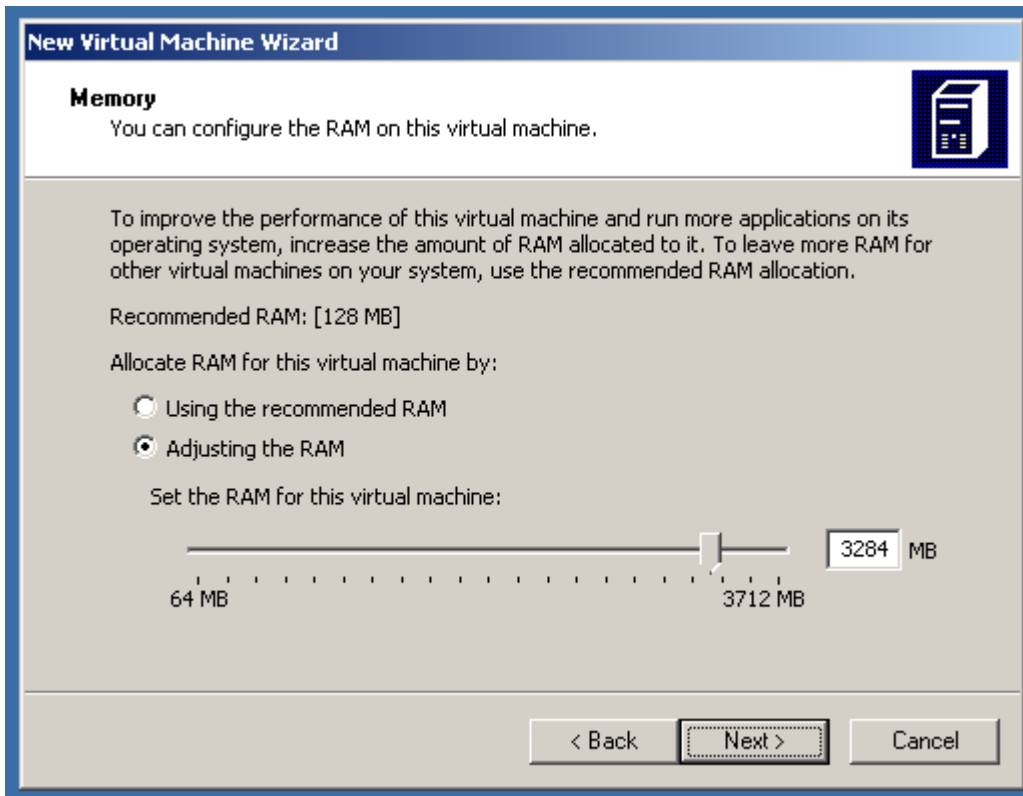
Select the "Adjusting the RAM option":



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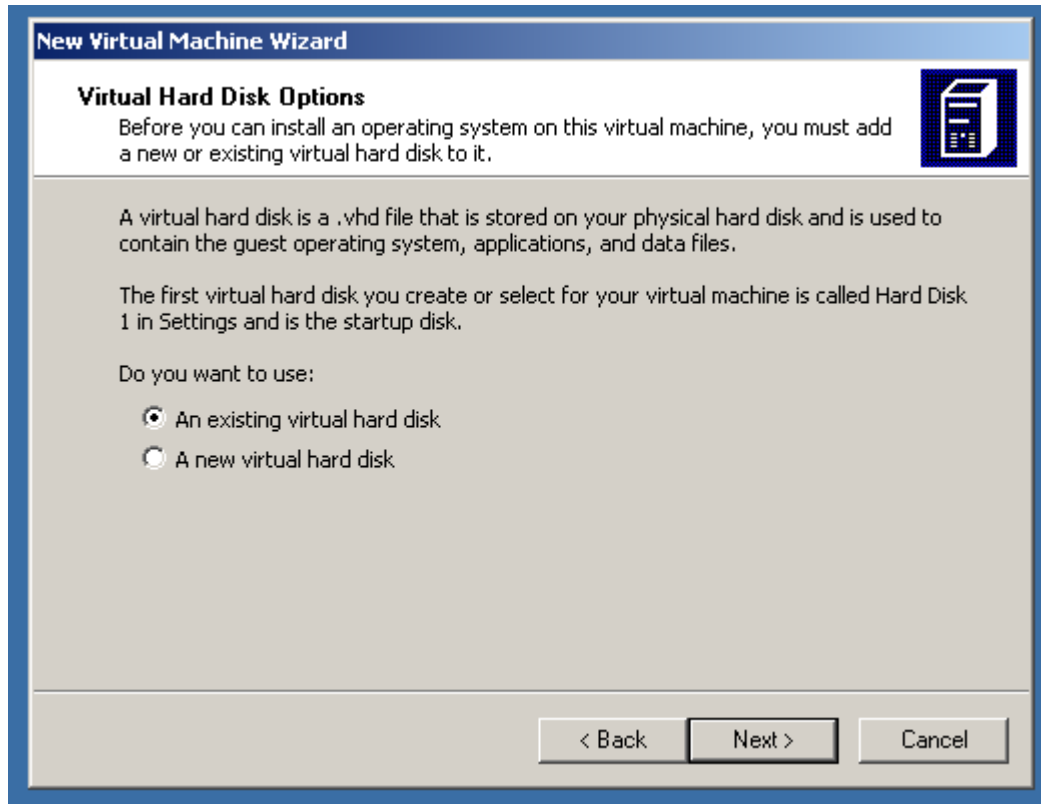


Move the slider and/or type in the text box for an appropriate amount of RAM to allocate to the new virtual machine. Adjust the memory to a value that is less than half the amount of RAM in the host computer. Take into account how many virtual machines that you wish to run at the same time:

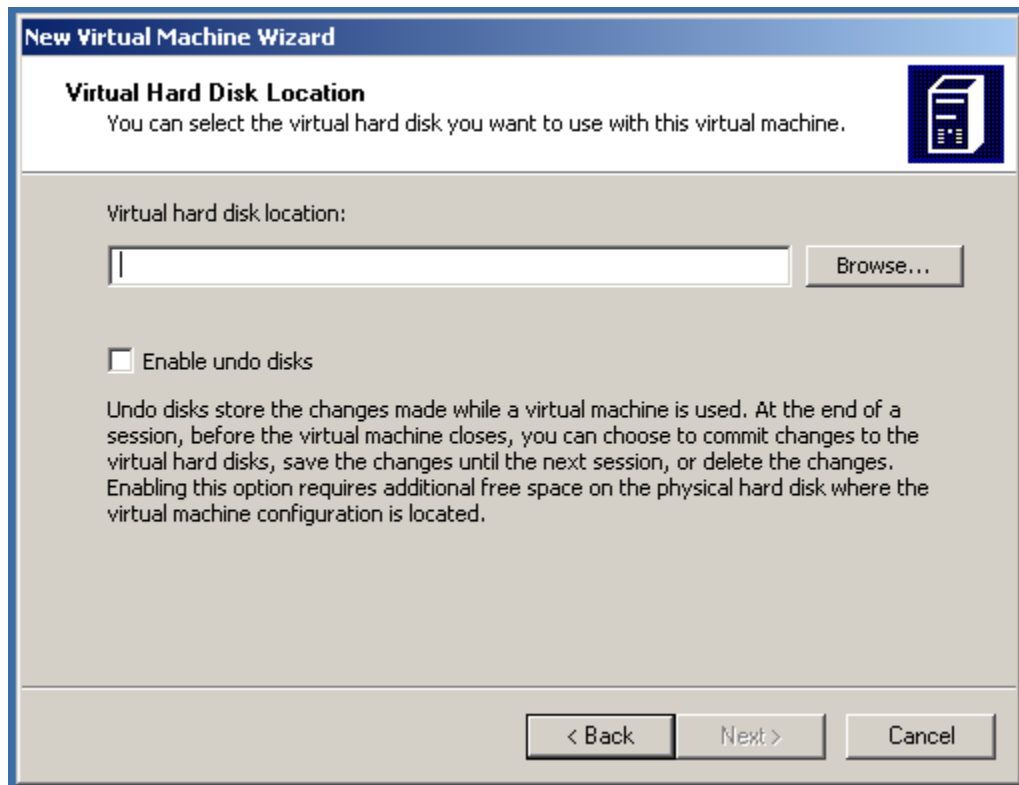


Click on the "Next" button.

Make sure that the "An existing virtual hard disk" option is selected. Then click on the "Next" button:

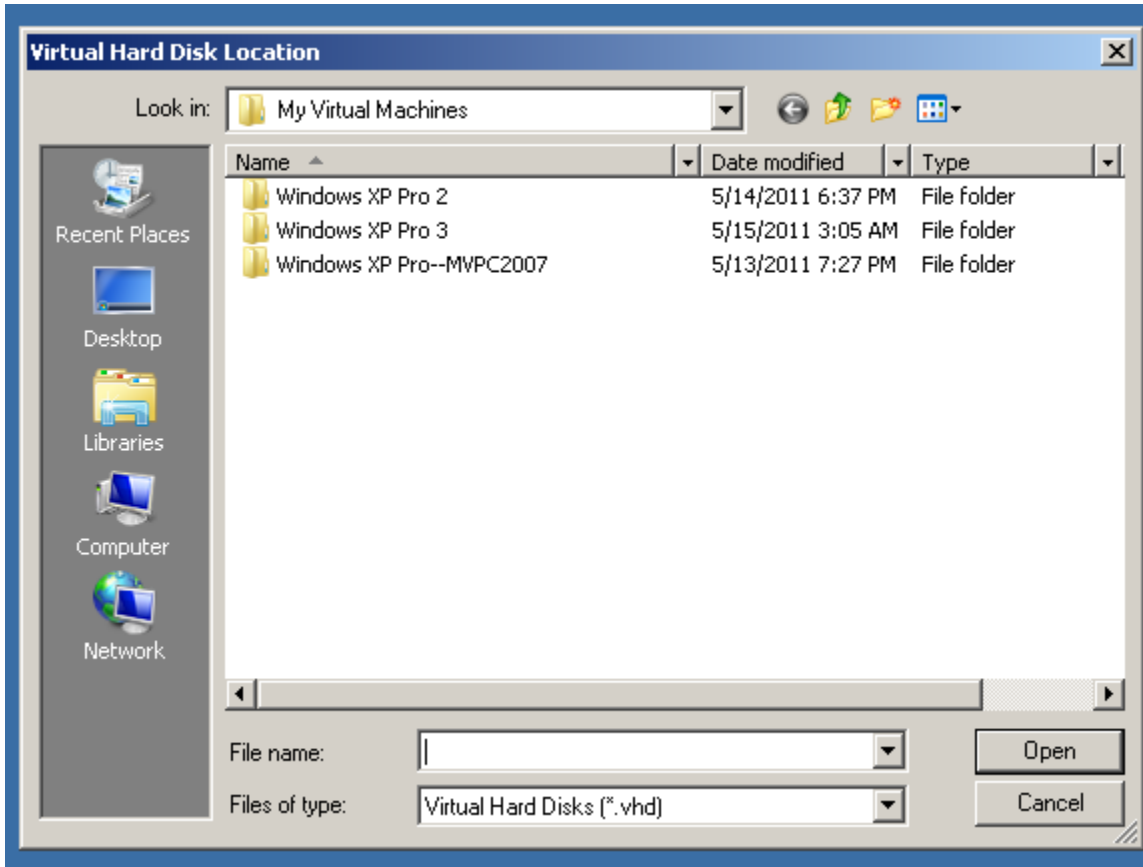


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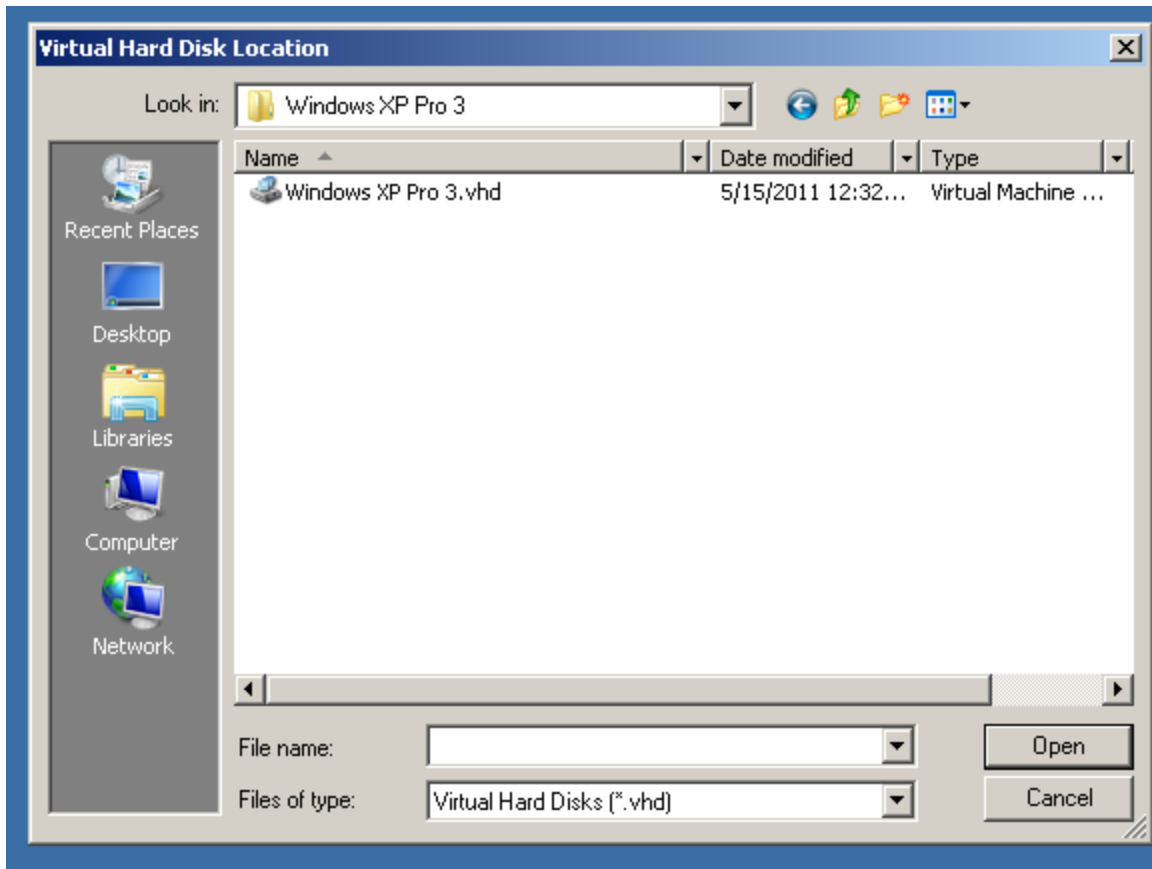




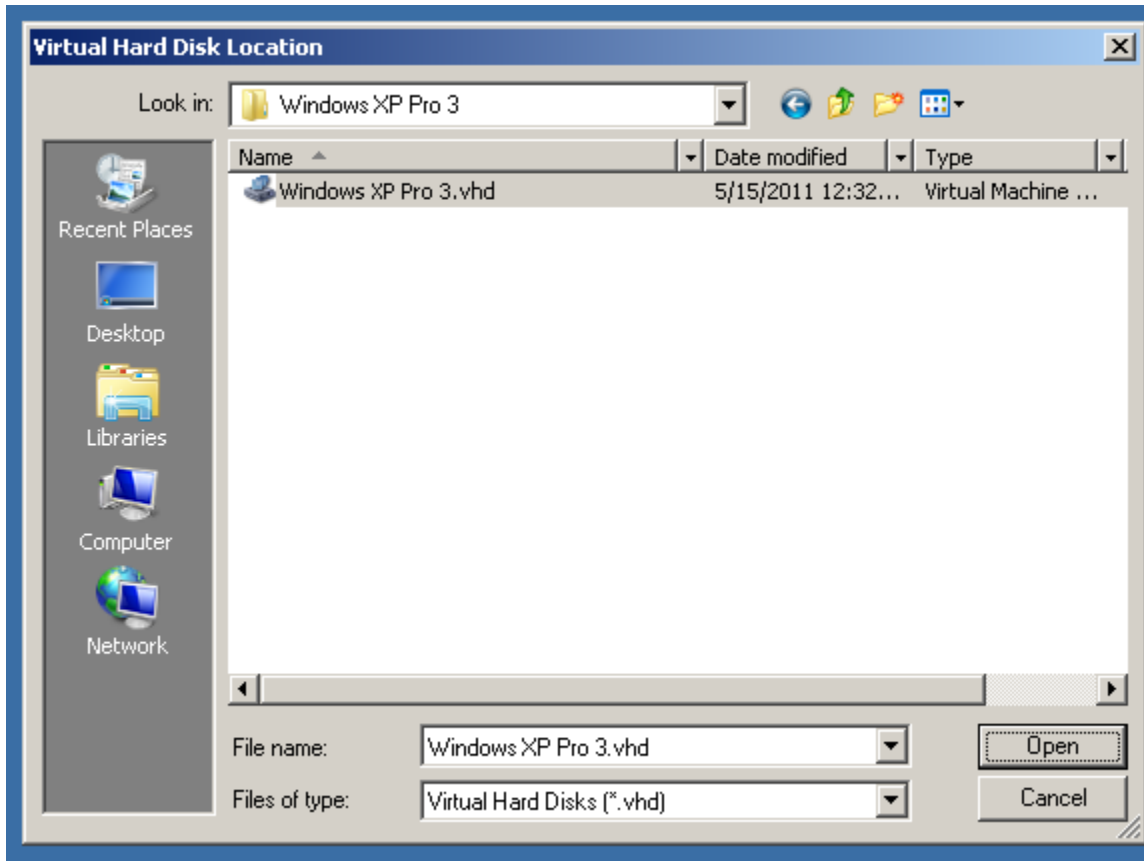
Click on the "Browse" button so that you can navigate to the location of the \*.VHD hard drive file that was created earlier:



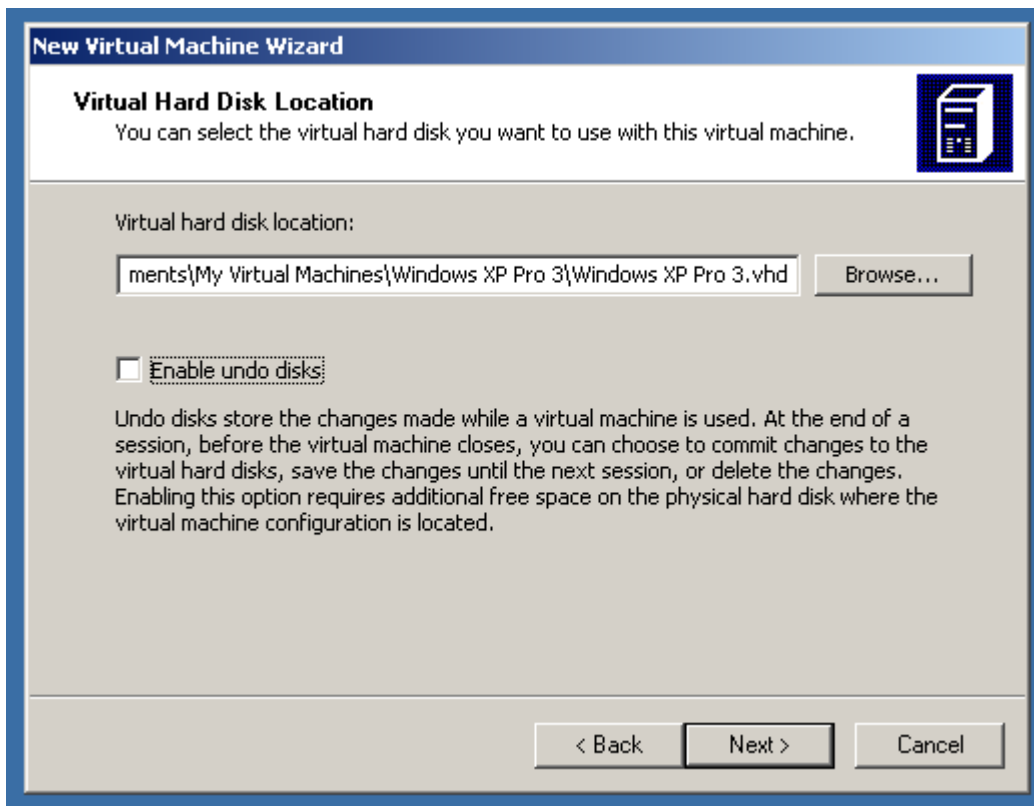
In this example, we double-clicked on the "Windows XP Pro 3" folder:



Then we clicked on "Windows XP Pro 3.vhd".

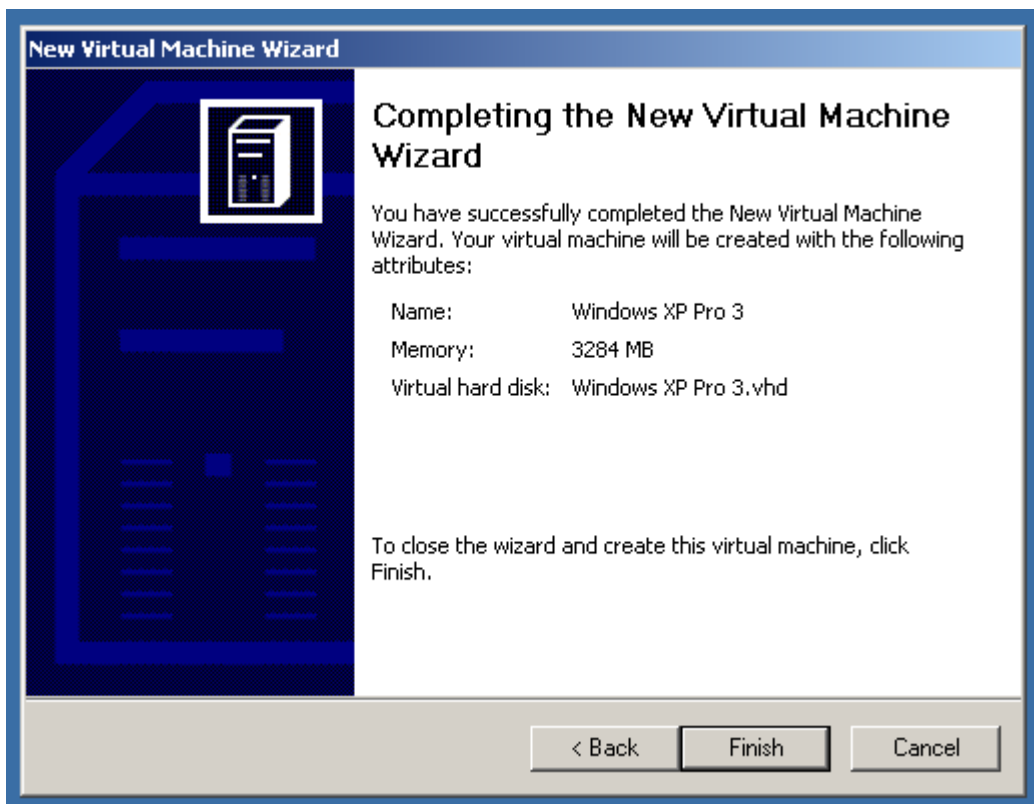


Click on the "Open" button.



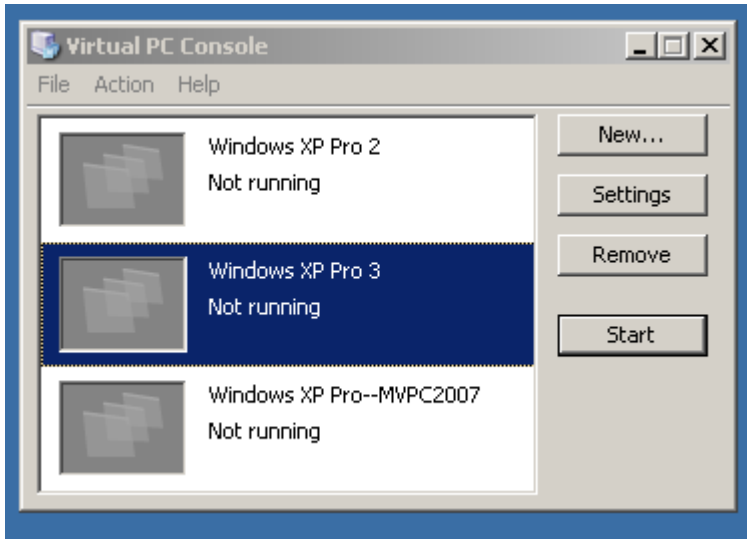
Decide whether you want to "Enable undo disks" and place a checkmark next to it if you want this security feature for the .VHD virtual hard disk.

Click on "Next".



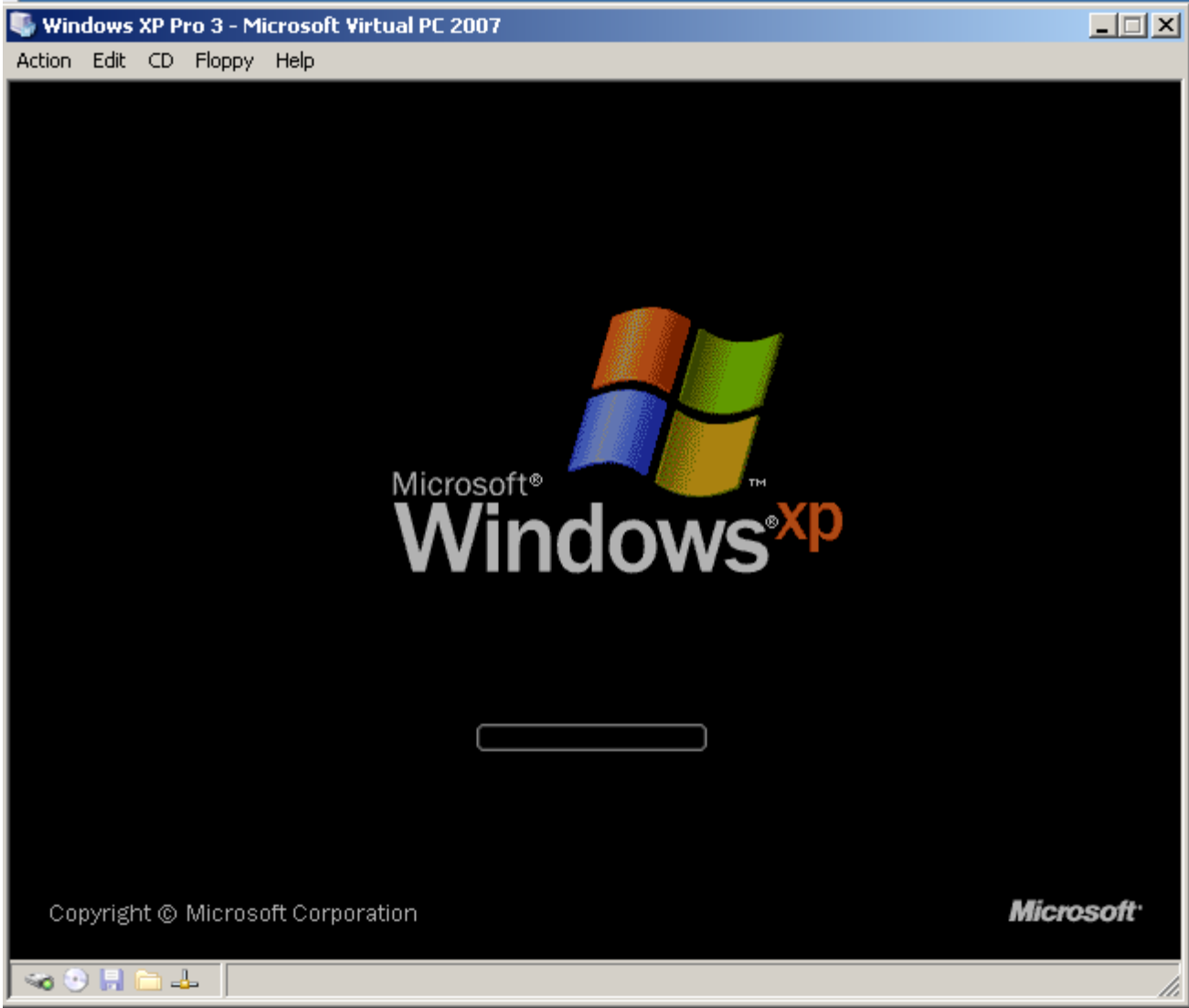
Click on the "Finish" button.

The new virtual machine now appears in the "Virtual PC Console".

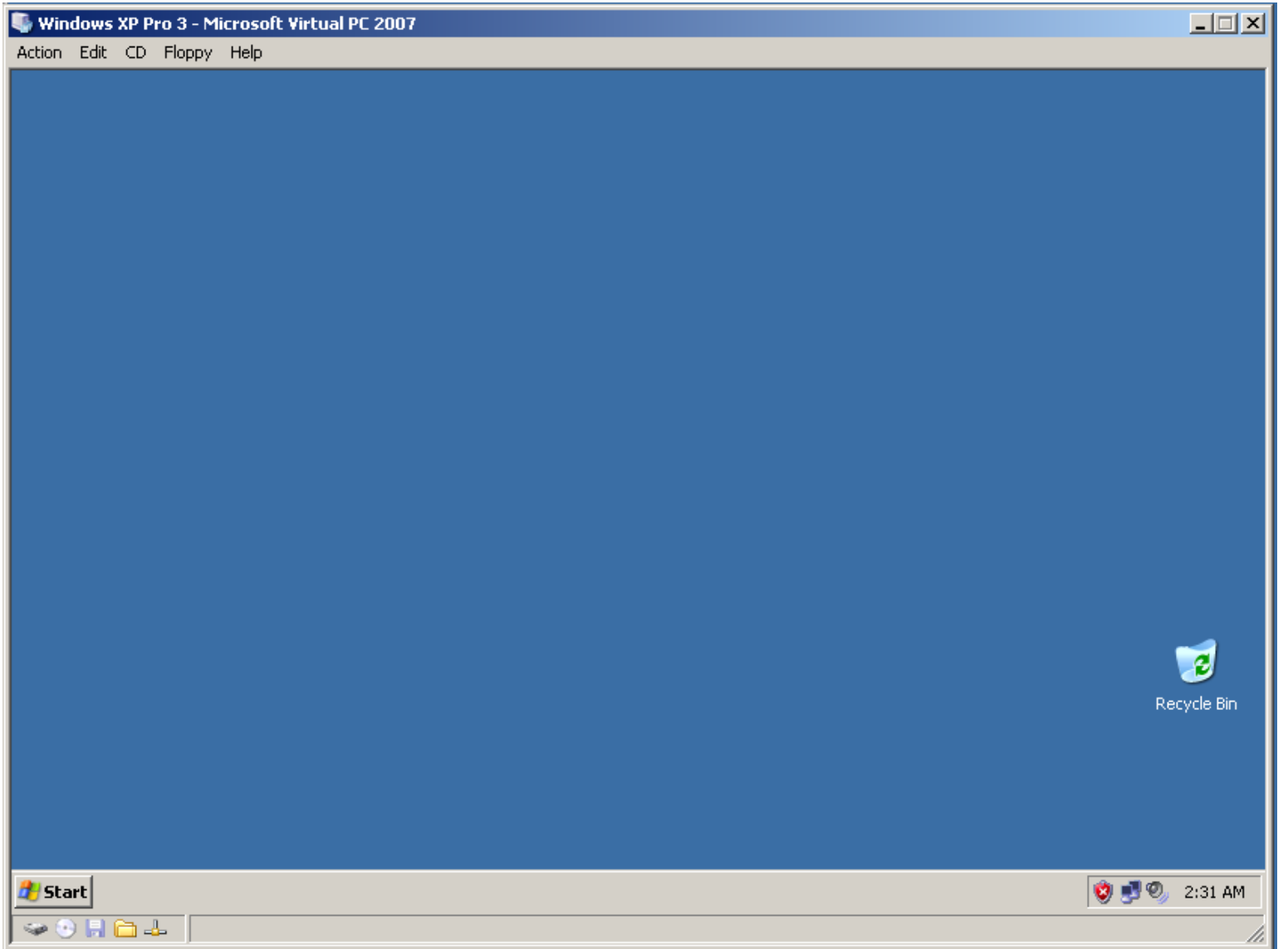


Make sure that the newly-cloned virtual machine is highlighted.

Click on the "Start" button of the "Virtual PC Console".



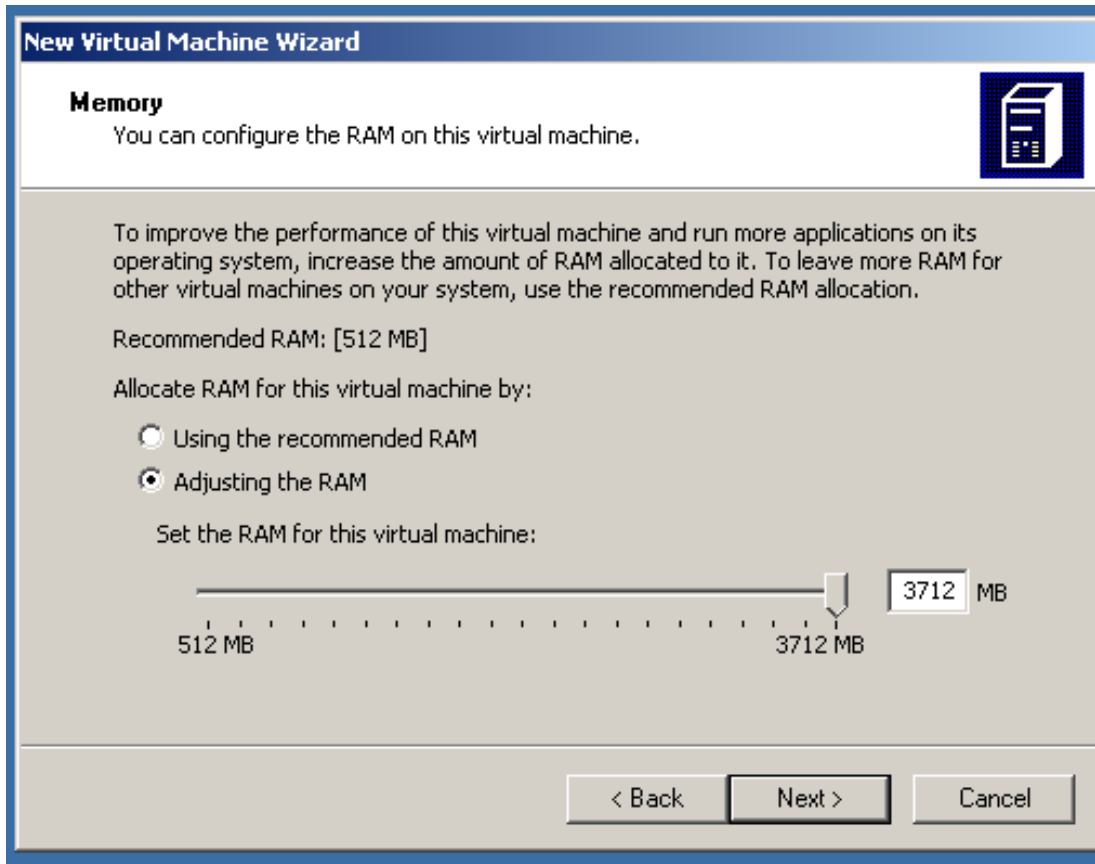
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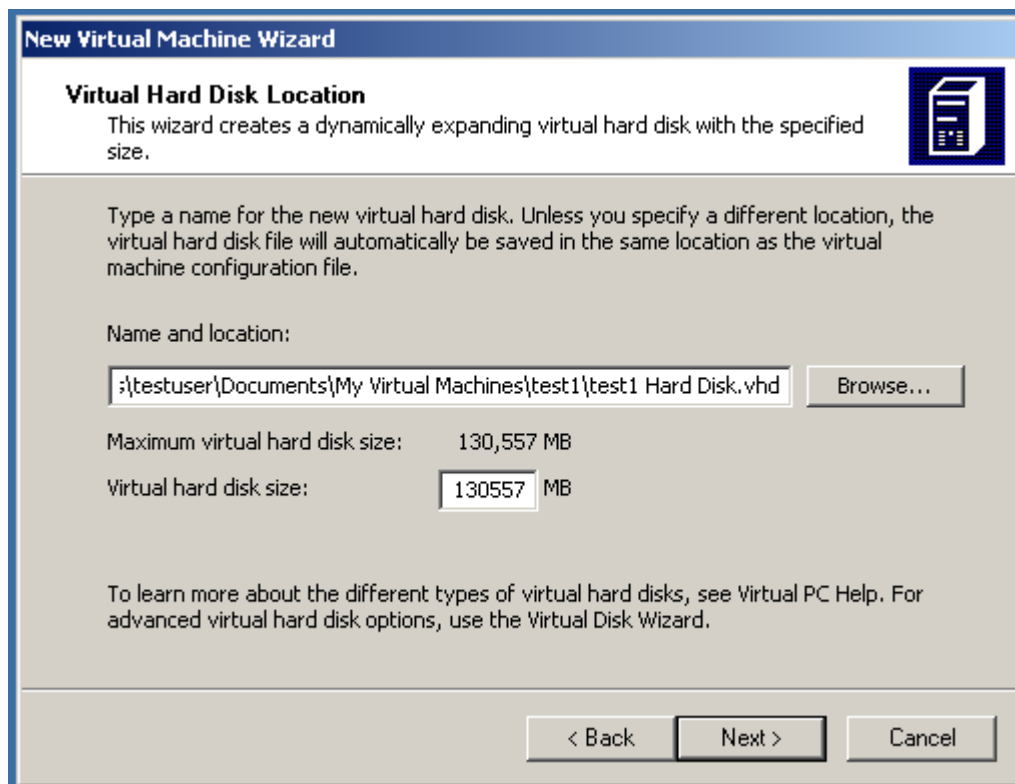
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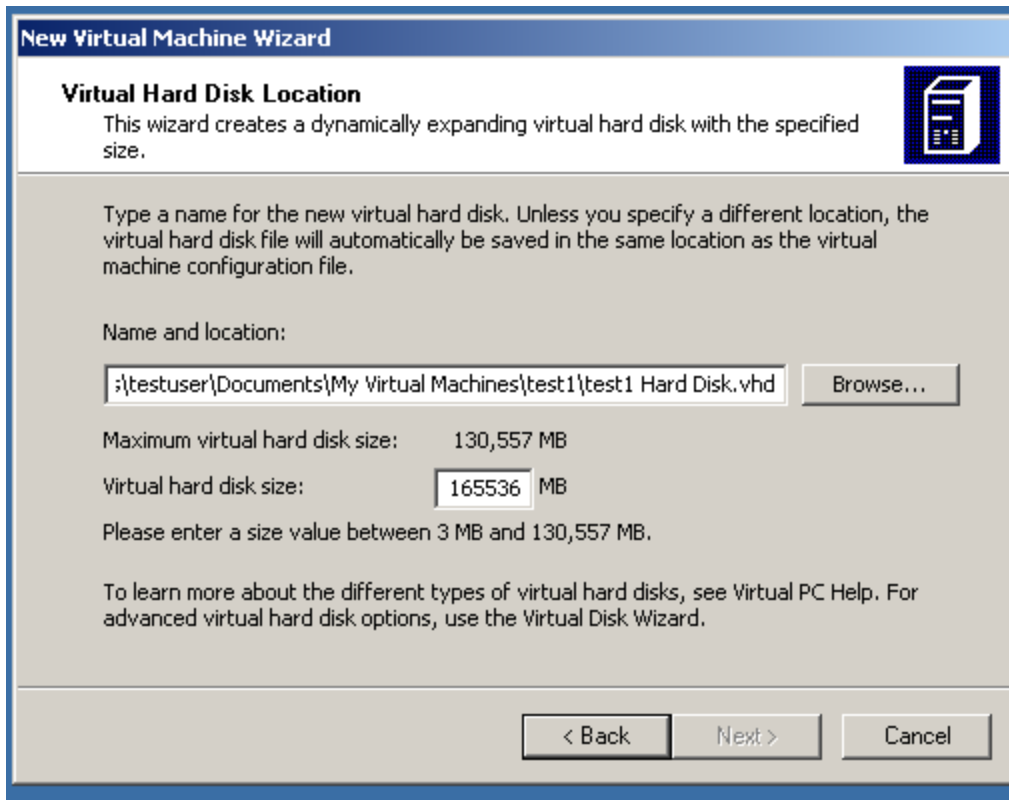
Note that for "Microsoft Virtual PC 2007" virtual machines, you cannot have more than 3.712 Gigabytes of memory allocated to any single virtual machine:



Please also note that in "Microsoft Virtual PC 2007", a .VHD virtual hard disk cannot exceed 130557 Megabytes in size.







## METHOD 2:

See

<http://www.sysprobs.com/clone-virtual-machine-virtual-pc-2007-10-seconds>