



# Converting Image Files into Virtual Machine Disks

This technical note describes how to create virtual disks, with or without operating systems, using third party tools, compatible with VMware virtual machines.

This technical note contains the following sections:

- [Using Ghost 2003 Image Files on page 1](#)
- [Using Bart's Network Boot Disk on page 3](#)

## Using Ghost 2003 Image Files

The following describes how to use Symantec's Norton Ghost™ 2003 image files to create virtual disks compatible with VMware virtual machines.

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- [Creating the Ghost Boot Floppy on page 1](#)
- [Booting the Target Machine on page 2](#)
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Refer to your Ghost documentation and your P2V Assistant documentation for specific information.

### Creating the Ghost Image Files

Use Ghost to create a Ghost image file of the source machine and place the image file on a network share.

1. Follow the procedures as outlined in the Ghost documentation.
2. Repeat the process for each hard drive on the source machine.

### Creating the Ghost Boot Floppy

Use Ghost 2003 to create the Ghost boot floppy. This floppy is used to boot the target virtual machine, logon to the network, and mount a specified network drive.

To create the Ghost boot floppy:

1. As directed by the Ghost documentation, start Ghost 2003.
2. Select Tools > Create Boot Floppy > Network Share > AMD PCnet Family.  
In order to be compatible with the P2V Assistant processes, you must select the AMD PCnet family of network drivers.
3. Provide the information to map the network drive where the Ghost image files are located, including server name, user name and passwords.

This creates a floppy disk with the necessary components of the Ghost application and all the drivers and binaries required to boot the target virtual machine.



## Booting the Target Machine

Boot the target virtual machine using the Ghost boot floppy.

1. Prepare the target virtual machine.  
Ensure it has available virtual disk drives to accept the restored images. One virtual disk is required for each Ghost imaged disk file.
2. Place the Ghost boot floppy into the target virtual machine's floppy drive.  
Ensure the target virtual machine has a virtual floppy drive connected to the appropriate physical floppy drive.  
Alternatively, if you created the Ghost boot floppy as an ISO image, point the target virtual machine to the Ghost boot floppy ISO image.
3. Start the target virtual machine.
4. If necessary enter the BIOS and set the boot disk to the floppy drive.  
This boots the target virtual machine, maps the network drive specified when you created the boot floppy, and logs on to the network.

## Restoring the Ghost Image File

Restore the Ghost image file(s) to the target virtual machine virtual disk(s).

At the target virtual machine:

1. Remove the Ghost boot floppy disk.
2. Insert the Ghost application floppy disk.  
The floppy disk you created in [Creating the Ghost Boot Floppy on page 1](#).
3. Start the Ghost application.
4. Restore the Ghost image file. Specify:
  - The Ghost image file is the one that resides on network drive you specified when you created the Ghost boot floppy.
  - The local virtual disk attached to this (the target) virtual machine.Following the procedures outlined in the Ghost documentation.
5. Repeat for each disk you need to restore.
6. Shutdown the target virtual machine.
7. Attach the new virtual disks to virtual machine(s), as needed.

## Reconfiguring the Operating System Virtual Disk

You must perform a P2V Assistant system reconfiguration on any disk that contains an operating system in order to use that virtual disk as a boot drive in a virtual machine.

If the new virtual disk is a data disk only, you can skip this step and proceed with attaching the new virtual disk to a virtual machine.

To perform a system reconfiguration:

1. Attach the new virtual disk, with an operating system, to the P2V Assistant helper virtual machine.
2. Boot the helper virtual machine.
3. Start the P2V Assistant.



4. Select **Perform a System Reconfiguration on an existing disk that contains an operating system.**
5. Select the **Use a direct disk device option.**
6. **Specify the new virtual disk you attached to the helper virtual machine.**
7. Answer the prompts, as needed.  
Refer to your P2V Assistant documentation for specific information.

## Using Bart's Network Boot Disk

The following describes how to use Nu2's Bart's Network Boot Disk to create virtual disks compatible with VMware virtual machines. Refer to Nu2 for additional information:

[www.nu2.nu/bootdisk/network/](http://www.nu2.nu/bootdisk/network/)

### Creating an Image

1. Create a Bart's Boot Disk floppy with Networking  
[www.nu2.nu/bootdisk/network/](http://www.nu2.nu/bootdisk/network/)
2. Create a windows fileshare on your network somewhere. Place `ghost . exe` on the fileshare.  
This would normally be on the ghost boot floppy.
3. Boot the source machine with Bart's.  
Bart's already contains network drivers for about 90% of the machines and usually does not need to be customized. Refer to the Bart's site for additional drivers to add (for example, Broadcom).
4. At the Bart's DOS prompt, use the `msnet` command to logon to the Windows network and map to your fileshare.  
This does not need to be hardcoded into the boot floppy.
5. Run `ghost . exe` and create the ghost image on the fileshare.

### Restoring the Image

1. Boot the target virtual machine with Bart's.  
Alternatively, for a faster response, boot from an image of the floppy.
2. At the Bart's DOS prompt, use the `msnet` command to logon to the Windows network and map to your fileshare.
3. Run `ghost . exe` and restore the ghost image file(s) from the fileshare to your virtual machine's local drive.