

Preface: This how-to covers the procedure of increasing a volume size of a Windows virtual machine running on VMware ESX-Server using vmkfstools and the windows utility DISKPART.

Environment:

Host Machine: Dell PowerEdge 2850 running ESX Server 3 (dali)

Guest VM: Windows 2003 Server

Note: Before you start make sure that the virtual machine is powered off, and not in a running or paused state.

1. First you will need to find out where the volume file you wish to expand is located on the ESX Server.

Typically it can be located here:

`/vmfs/volumes/storage1/[virtual machine name]/[virtual machine name].vmdk`

If you are using the Virtual Infrastructure Client (VIC) you can find the *.vmdk file by:

- A. Right Click the machine and select "Edit Settings..."
- B. Click the Hard Disk you wish to expand.
- C. The "Disk File" field will display the location of the virtual disk file.

Note: [storage1] would be the same as `/vmfs/volumes/storage1/`

2. Now that you know where the volume file is located you can use vmkfstools to increase the size of the virtual disk file to the desired size. Run the command:

```
#> /usr/sbin/vmkfstools -X [desired total size in MB]m [file location from step 1]
```

```
Eg: #> /usr/sbin/vmkfstools -X 20480m /vmfs/volumes/storage1/mymachine/mymachine.vmdk
```

3. In the example we increased the total volume size of virtual disk to 20480MB or 20GB. You are not finished yet! Now you will want to start up the virtual machine and expand the volume using the built-in windows utility DISKPART.

4. Inside the virtual machine open up a command prompt and run the command:

```
\>diskpart
```

5. You now should see the DISKPART> prompt. Now type the following command to list the available volumes:

```
DISKPART> list volume
```

6. You should see a list of volumes. Select the volume that represents the virtual disk that you would like to increase in size. Run the command:

DISKPART> select volume [number]

Eg: DISKPART> select volume 2

7. Now that you have selected the correct volume run the command:

DISKPART> extend

8. Congratulations! Windows should now recognize the increased volume size for your virtual disk.