

NTFS Performance Tuning Tips and Techniques

Purpose:

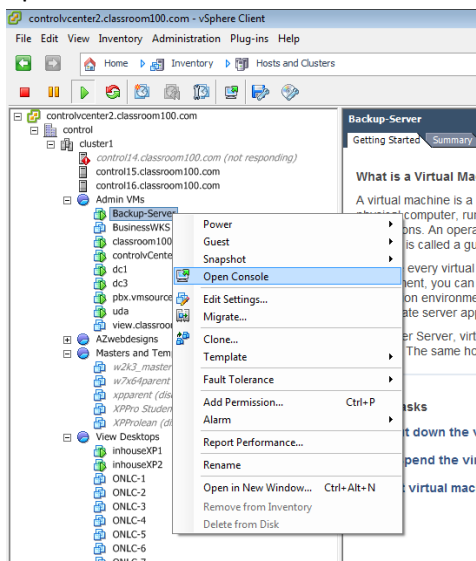
The following simple steps will help to optimize SAN utilization and Windows Performance by re-locating the Windows Paging File to a dedicated drive and changing the default value for NTFS Last Access updates in the Windows Registry.

Scope:

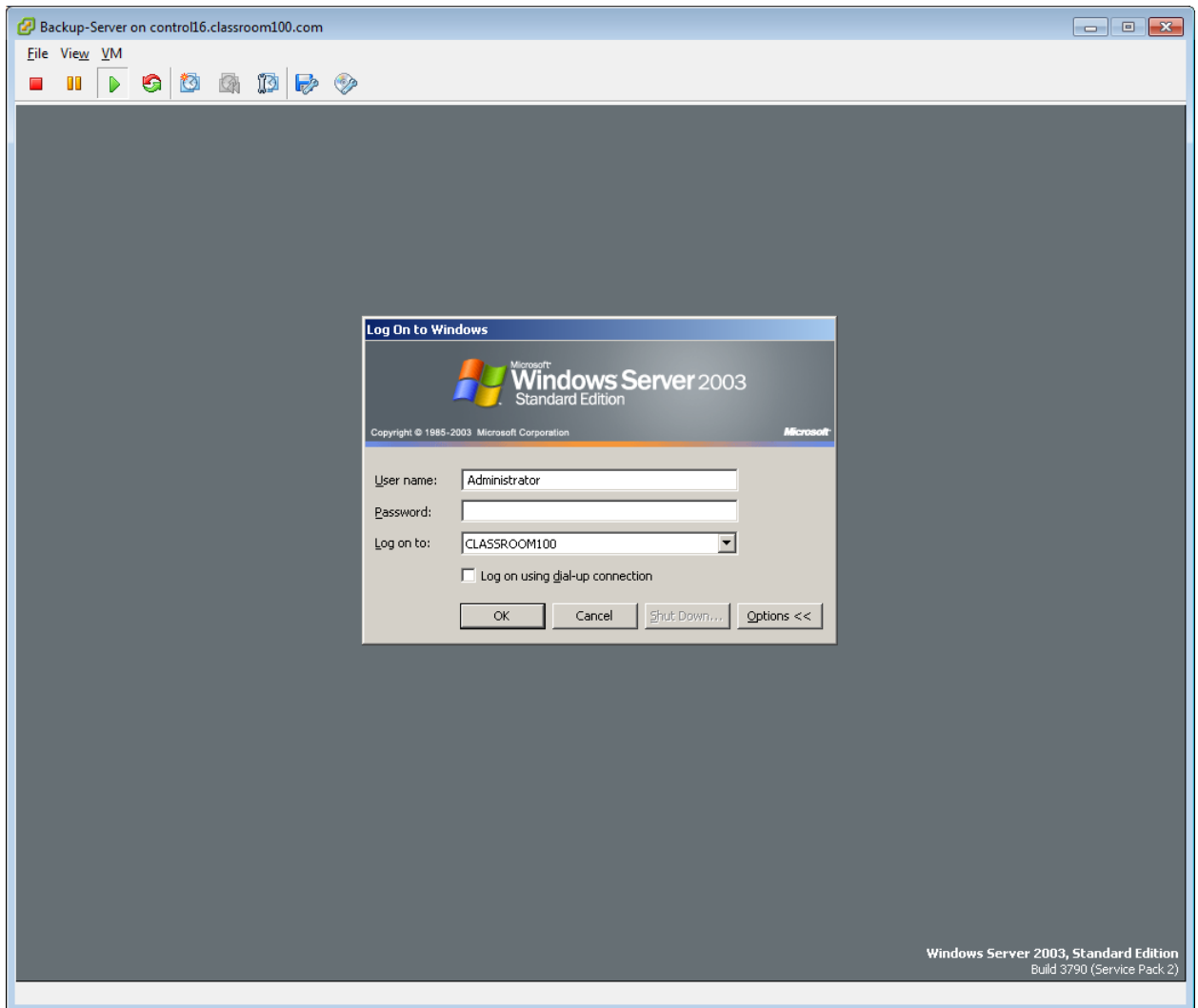
The following tasks will require the use of the Virtual Machine Remote Console Window, a prepared VMFS volume (for Paging Files) and minimal familiarity with the Windows Registry Editor. Upon completion, each modified VM will require a reboot.

Open Console and Log-In

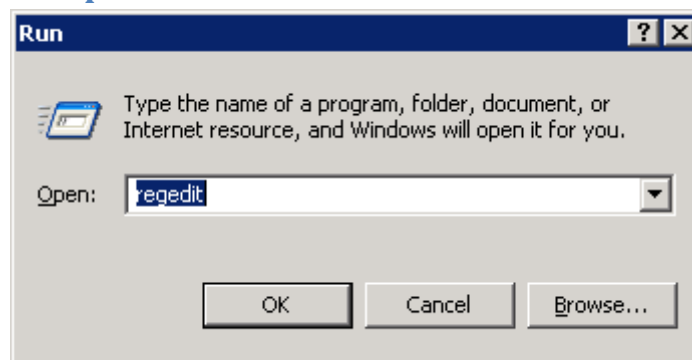
1. Open a Virtual Machine Remote Console window to a VM



2. Log-in to the domain

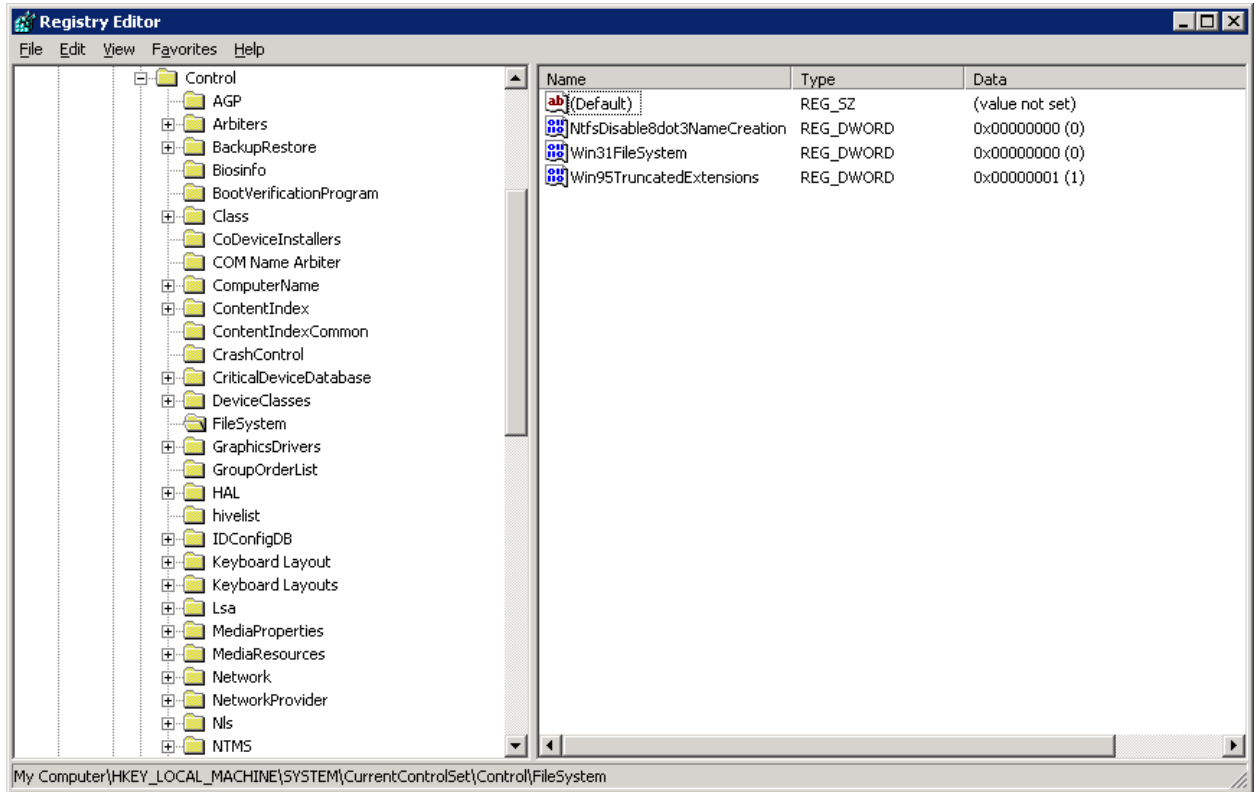


Disable NTFS Last-Access Updates

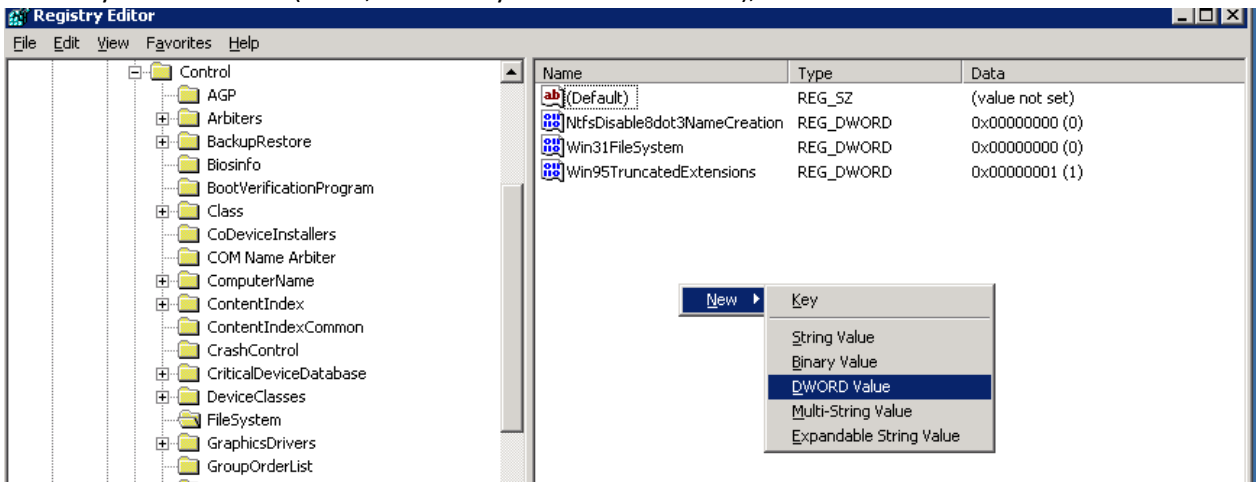


1. Start > Run > Regedit

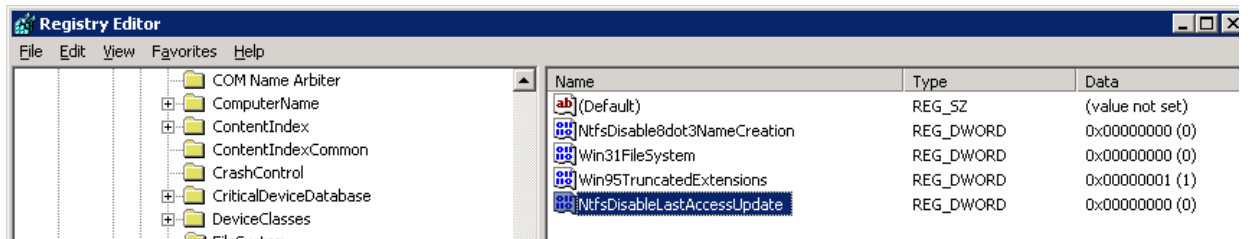
2. Locate the key: **HKEY_LOCAL_MACHINE \SYSTEM \CurrentControlSet \Control \FileSystem\NtfsDisableLastAccessUpdate**



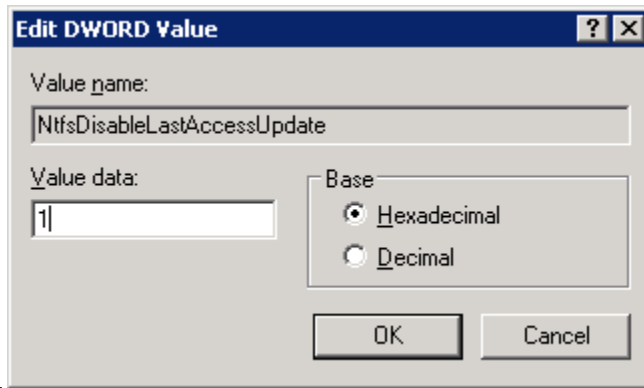
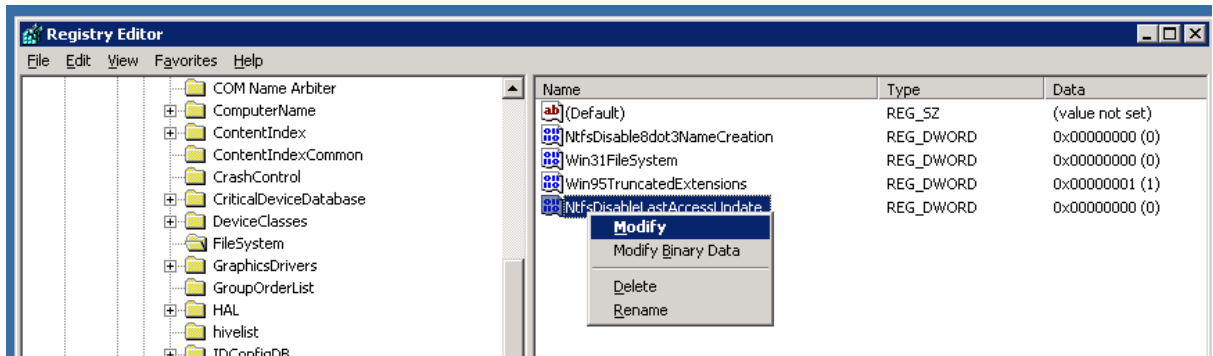
3. If the key does not exist (it will, most likely need to be created), create it



4. Name the key: **NtfsDisableLastAccessUpdate**

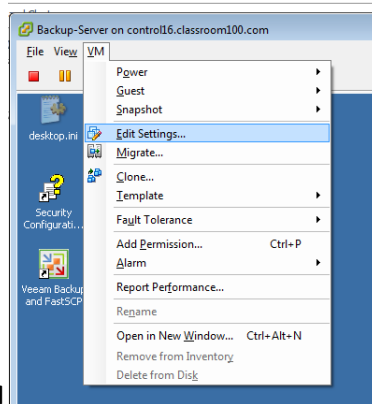


5. Right-click to modify

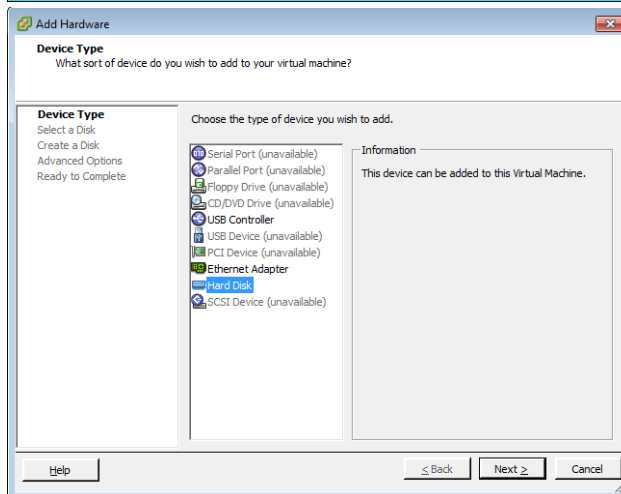
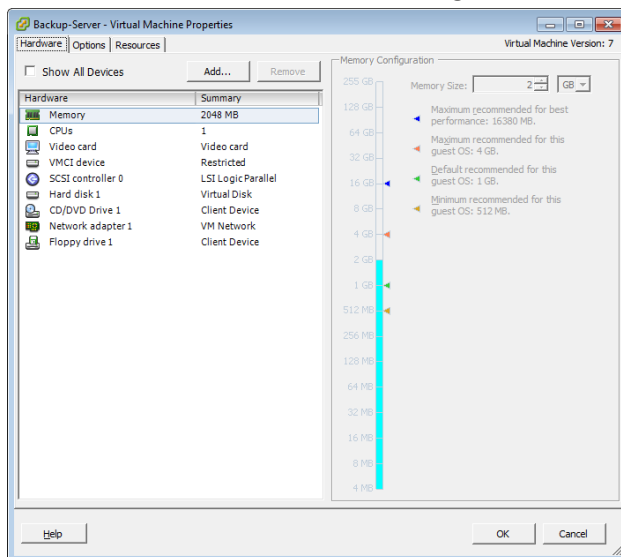


6. Set a value of: 1

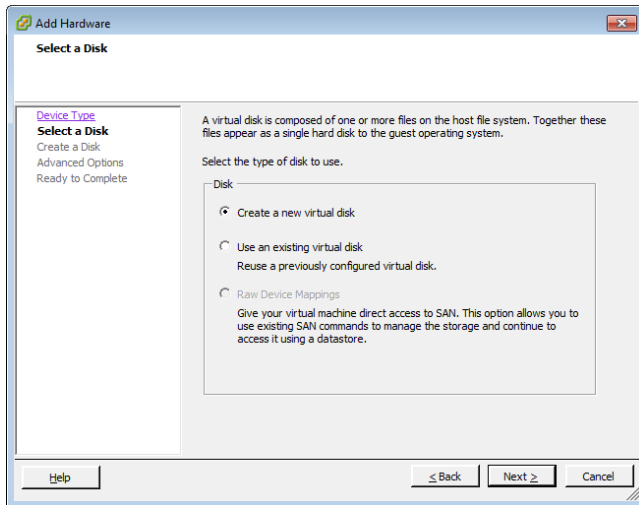
Relocate Windows Paging File



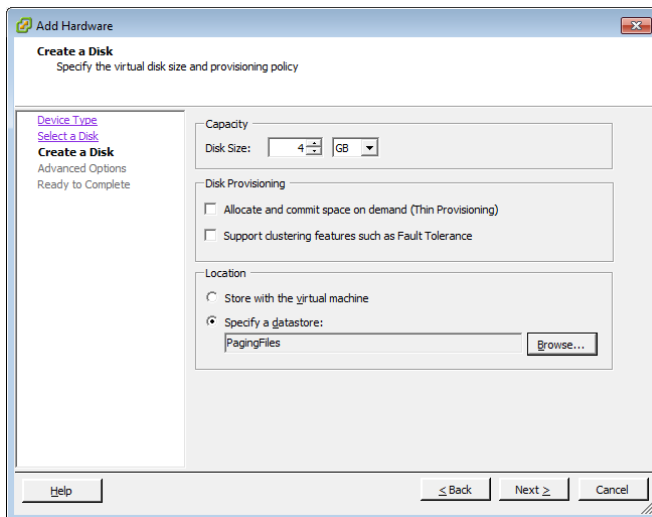
1. Edit the settings of the VM
2. Add a new HDD on the datastore designated for Windows Paging Files



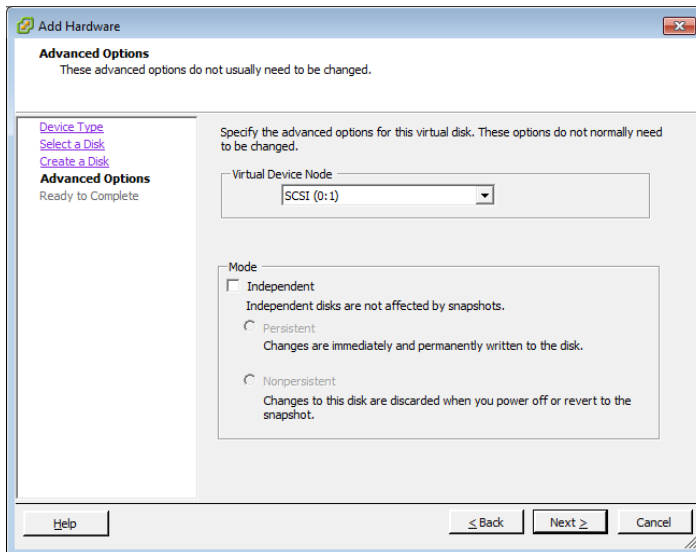
- 3.

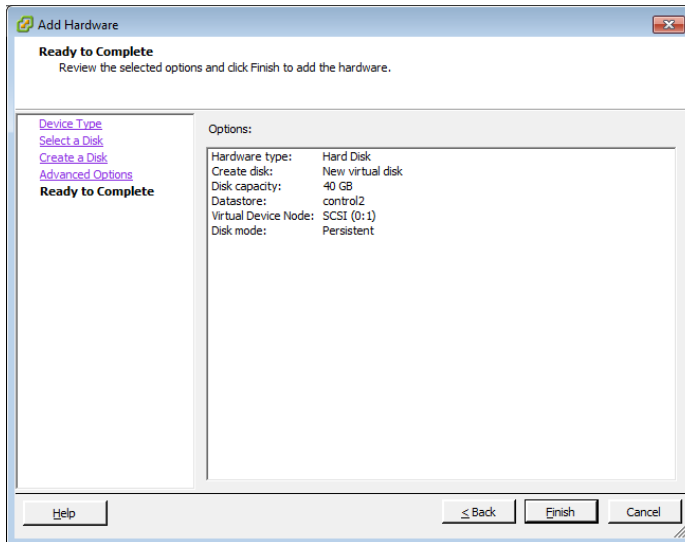


- 4.
5. Set the size of the new disk to be 2X (twice) the configured RAM for the server and specify the datastore for Windows Paging Files as the Location

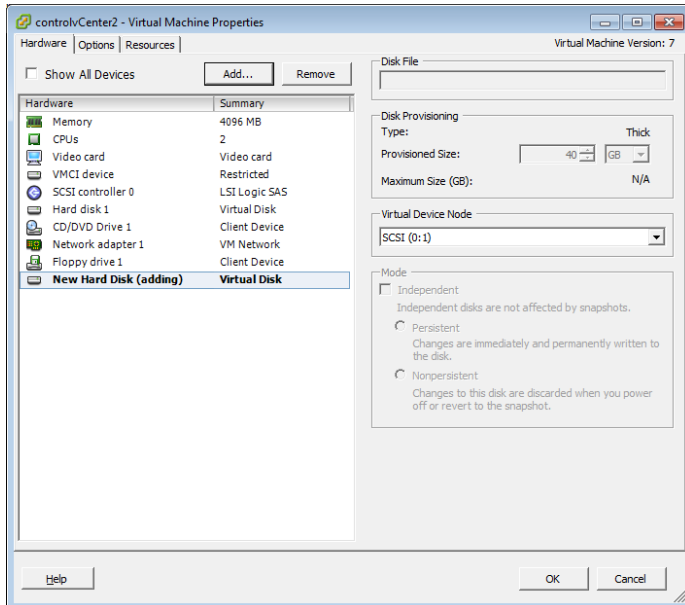


6. Use default values: DO NOT set to Independent



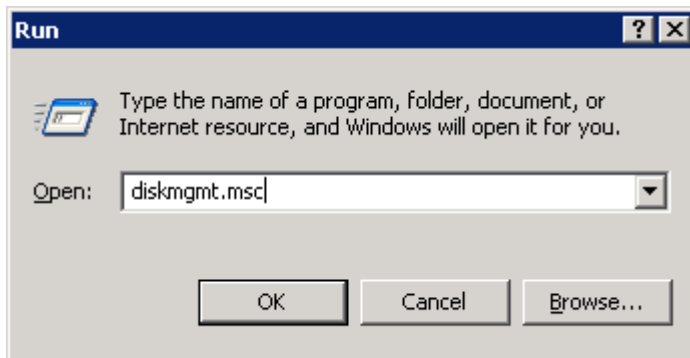


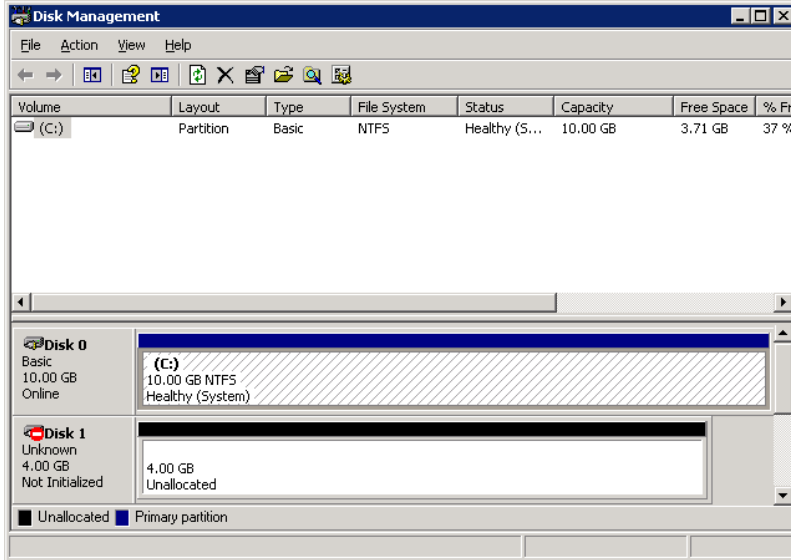
7.



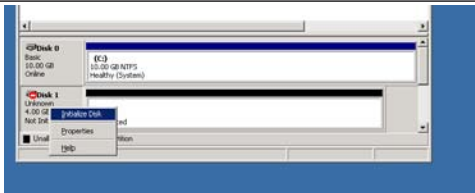
8.

9. Once the disk is added, go to disk management

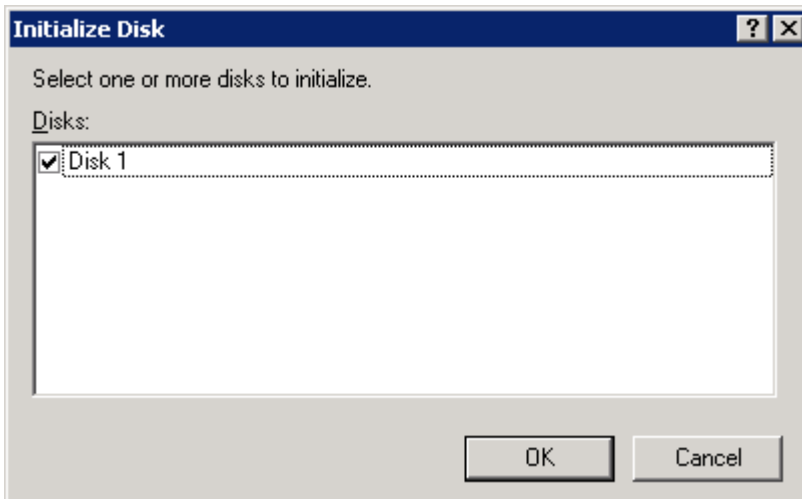




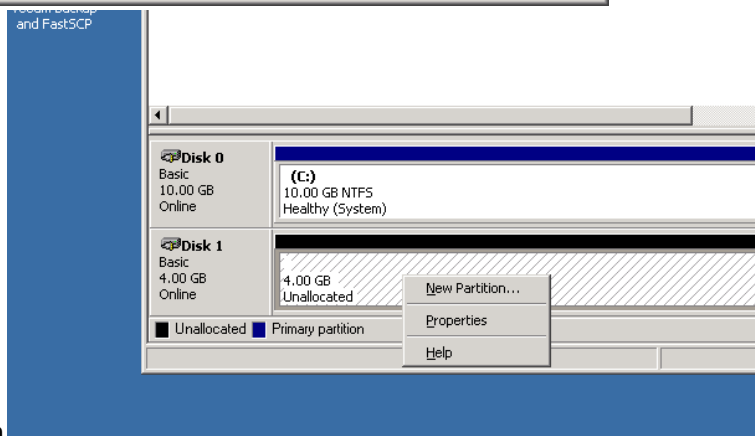
10.



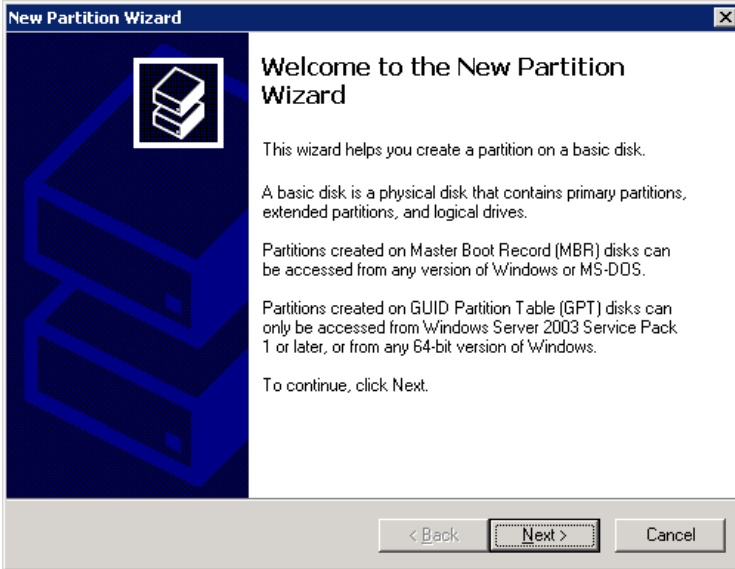
11. Initialize the disk



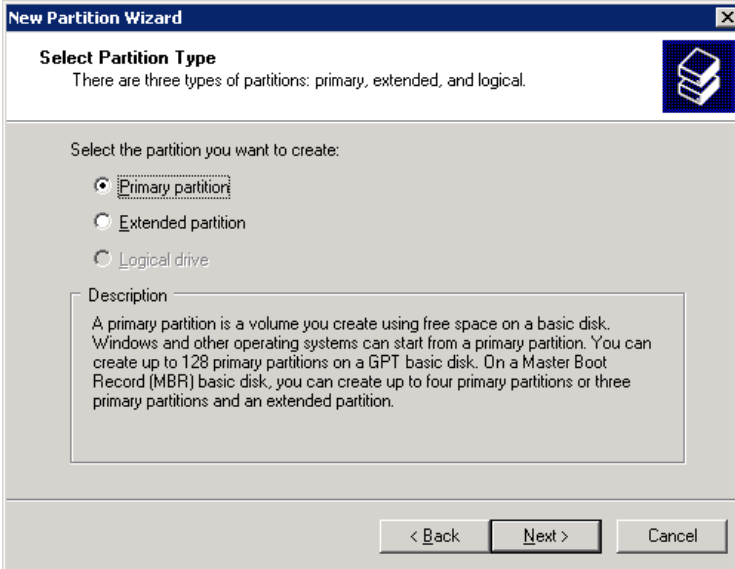
12.



13. Create a partition



14.



15.

16.

New Partition Wizard [X]

Specify Partition Size
Choose a partition size that is between the maximum and minimum sizes.

Maximum disk space in megabytes (MB): 4094

Minimum disk space in MB: 8

Partition size in MB:

< Back Next > Cancel

17.

New Partition Wizard [X]

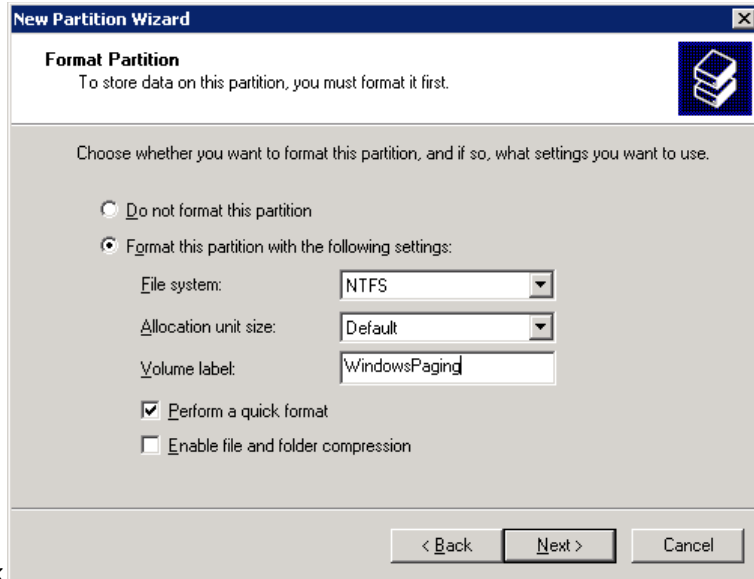
Assign Drive Letter or Path
For easier access, you can assign a drive letter or drive path to your partition.

Assign the following drive letter:

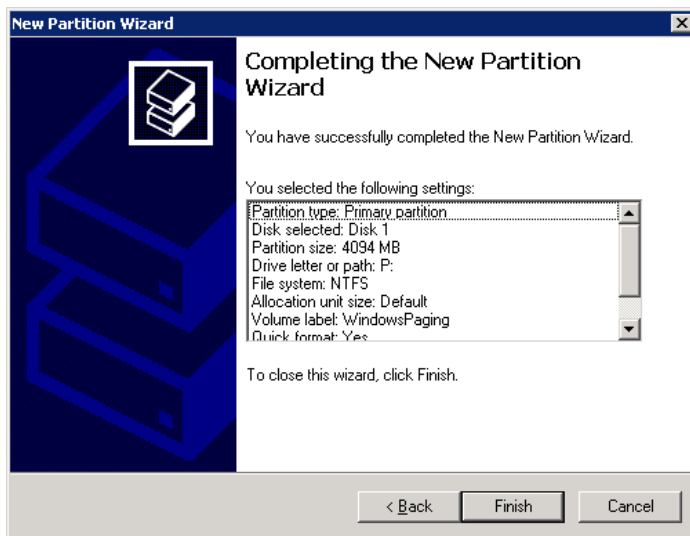
Mount in the following empty NTFS folder:

Do not assign a drive letter or drive path

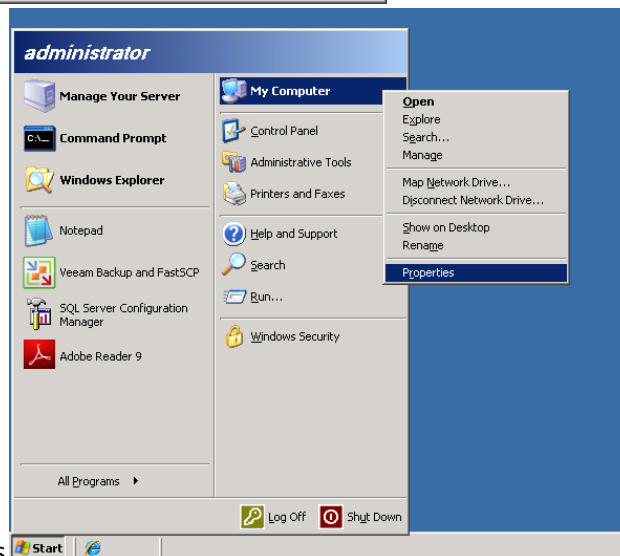
< Back Next > Cancel



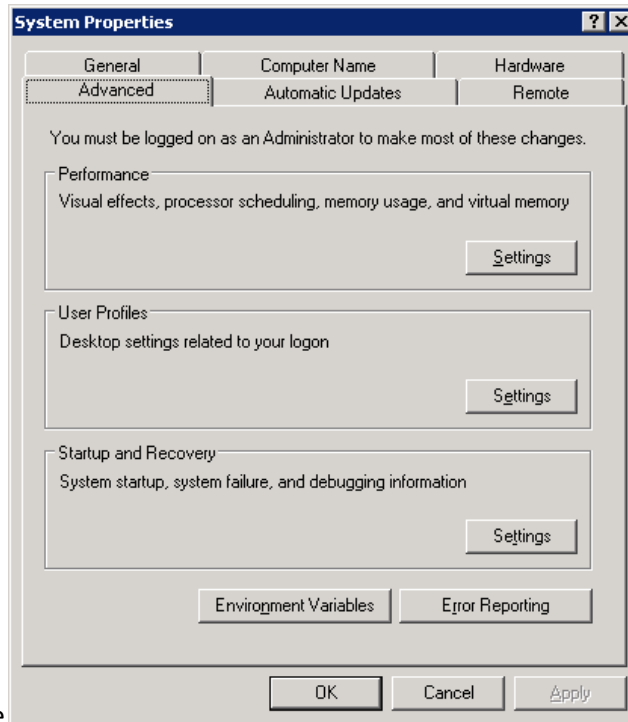
18. Format the disk



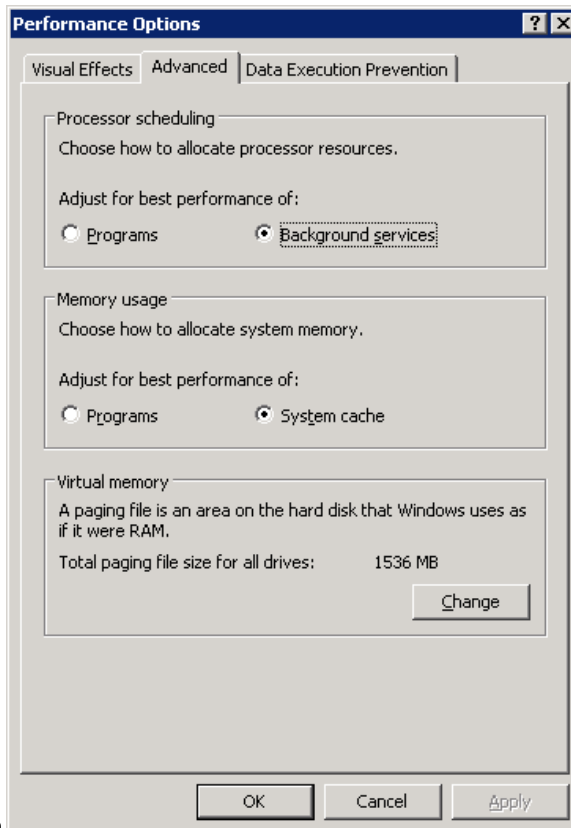
19.



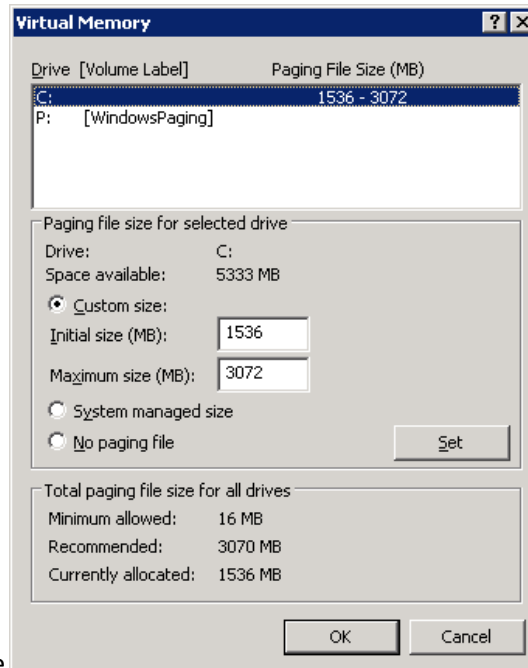
20. My Computer > Properties



21. Advanced > Performance

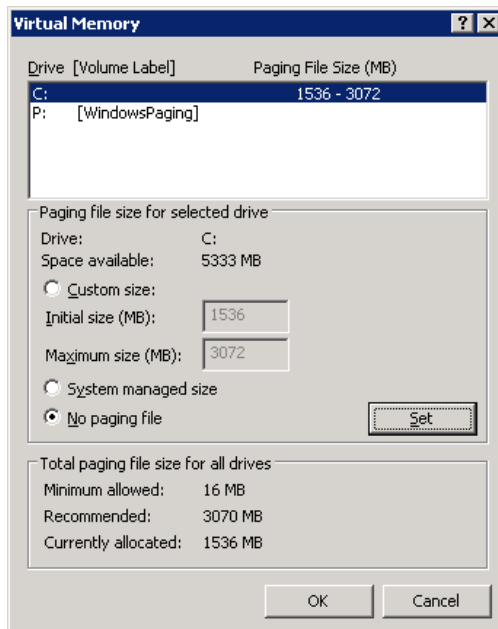


22. Virtual Memory > Change

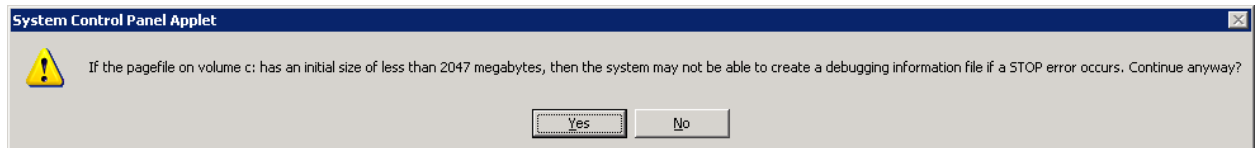


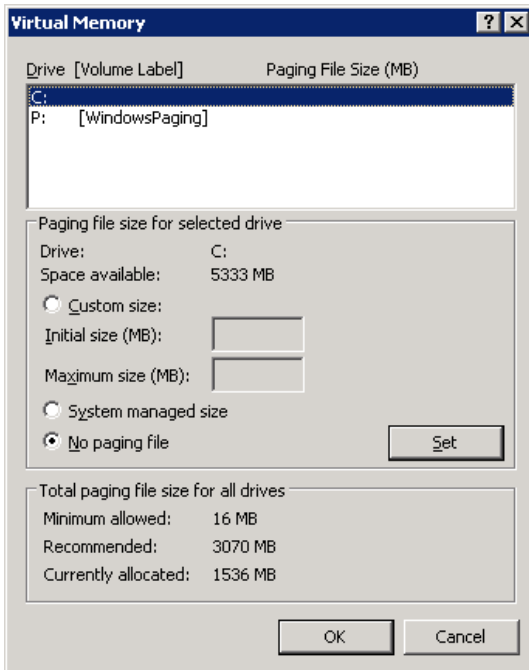
23. Take note of the Paging File Size

24. Set drive C: paging file to "No Paging File" then select Set



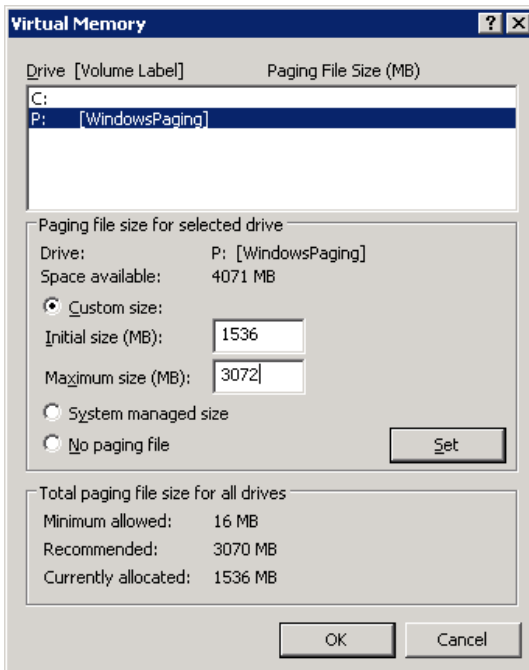
25. This message appears because there is now NO paging file.

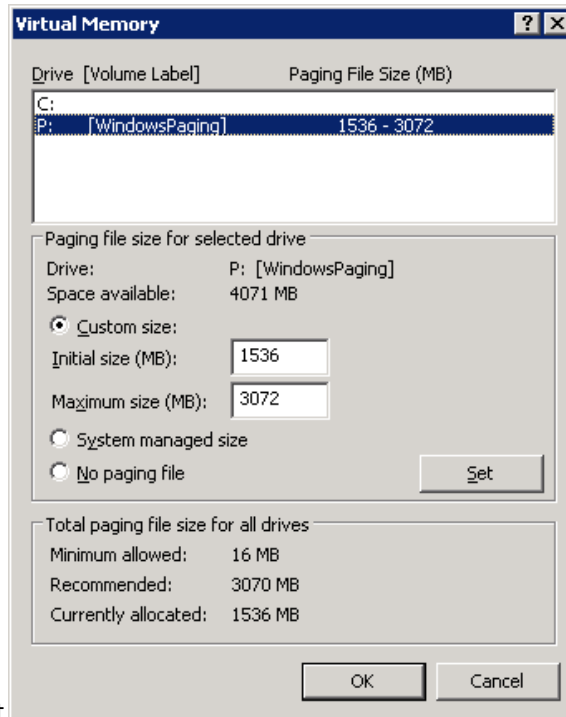




26.

27. Now choose the drive designated for Windows Paging and set the same values noted in step 23

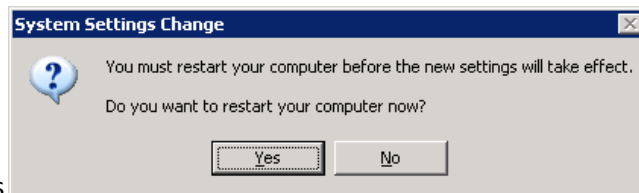




28. Choose Set



29. Choose OK > Restart



30. Yes

31. The success of the changes you just made may be validated by viewing the contents of the disk for Windows Paging Files