



# Pre-Requisites Checklist

**Version: all**

**Date Reviewed: 30-10-2008**



# The Checklist

Please  
Check:

1. **Page files** – for best performance of the server and to ensure that the snapshot process does not take too long, ensure that your page files are a fixed size (the minimum and maximum size is the same). This will also help to prevent your page files from fragmenting and causing poor server performance.

2. **Boot.ini** – check what extensions need to be added to this file for correct memory allocation to the system and applications.

3. **Exchange** – if you have separated the exchange logs to one drive and the databases to another drive (or both to a separate drive), then ensure that the system path location is shifted to either one of these locations and that both these drives are backed up in the same ShadowProtect job. This is to ensure that logs get truncated correctly and that on restore it will be successful.

4. **Defragmentation** – it is recommended that you do a full defrag of your server before taking the first image, and then at least once a week schedule a defrag of all volumes to keep the disk sequential in relation to files. This helps to keep snapshots and backups to as short a time as possible.

5. **SQL** –

a. SQL 2000 needs to be Service Pack 3 at a minimum

b. SQL 2005 has to be Service Packed to ensure the SQL-VDI errors do not cause issues with backups and then restores

c. All non VSS databases need to be shut down when backing up (take particular notice of all DOS style databases as corruption will occur).

## 6. Windows Service Packs –

a. Windows 2000 does not have any special requirements for Service Packs

b. Windows 2003 X32 and X64 both need to have the hot fixes for VSS at a minimum but preferably Service Pack 2.

7. **Driver versions** – Ensure that all motherboard drivers are the current OEM drivers, along with the current BIOS. Update all RAID cards with the current Firmware and then the driver that suits this firmware. These drivers are critical to ensure that when the server comes under load to create a new base that the Disk I/O will be coped with by the correct drivers.

8. **IRP stack size** – if after installation you find that some shares are no longer available across the network or you get errors in the event logs that refer to “not enough server resources are available to service this request” then please increase the IRP stack size to at least 20 – refer to KB article number [00000008].

9. **VSS applications** – ensure that no other VSS writer communicates with VSS at the same time that you run a ShadowProtect backup. This includes Microsoft’s Shadow Copies.

10. Anti Virus – Check that all AV software is up to date in terms of patches and that the “System Volume Information” folder is excluded from all scans. Also check that the AV software does not do a full scan during the day in the same period of operation as ShadowProtect as this will cause unnecessary Disk I/O and in some cases may cause the server to lock up.

11. **Shadow Copies** – StorageCraft’s recommendation is to disable Shadow Copies so that it cannot interfere with the backup up process. To do this, go to the property of a volume in explorer and click on the tab called “Shadow Copies” and disable it per volume. DO NOT turn of the “Volume Shadow Copy” service.



12. **Disk performance** – log disk queue lengths for a 6 hour period (during business operating hours). This is to provide you with the correct information to determine the average disk queue length – Microsoft’s current recommendation on this value is to take the average number, then subtract the number of disks and the number remaining should be less than two. The reason for this is to determine the current state of the disk sub-system and therefore if it is slow (Disk Queue Length is not within standards) then you know that when you create a job to use the advanced disk throttling feature.



13. **Other Disk Imaging Solutions** – make sure that no other Disk Imaging Solution like Acronis True Image or Symantec Backup Exec System Recovery are installed on the Server or PC. Note that simple deinstall does not remove all files and registry entries. You could experience specially with the Acronis snapman.sys driver a BSOD. Search for the file snapman.sys on your computer. Please follow the Acronis removal instruction if you find the snapman.sys file on your computer.



**Notes:** \_\_\_\_\_

## Approval

Company Name: \_\_\_\_\_

System Administrator Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_