

Using Check Disk Finding and Repairing Disk Errors

One of the most used components of your computer is the hard drive. This is where all your data is stored. Like anything that does a lot of work, it needs maintenance so that it can continue to function properly. As time goes by the hard drive can start storing data in places that it shouldn't, or certain areas can become corrupted so that data cannot be stored (therefore lowering your hard drive space). A worst case scenario would be a corruption in your Windows directory not allowing you to start your computer up anymore.



Check Disk, also known as Error Checking or as Scandisk (pre Windows 2000) can find and fix errors and 'bad sectors' on your hard drive. The Check Disk program sweeps through your hard drive detecting any physical problems or data problems on your hard drive and tries to repair them.

What can happen if you don't run Check Disk? Below is a simple diagram of a computer hard drive with 8 sectors storing different types of information. (Hard drives normally have hundreds of sectors).

1	2	3	4	5	6	7	8
<i>Word documents</i>		<i>Excel documents</i>		<i>Media images</i>		<i>Access database</i>	

In our example each sector is worth 100mb of hard drive space therefore making this hard drive 800mb in size (very small compared to most average hard drives of 40Gb or 40,000Mb!). The next diagram (below) shows the same hard drive setup but with sectors 4 and 8 having developed into bad sectors.

1	2	3	4	5	6	7	8
<i>Word documents</i>		<i>Excel documents</i>		<i>Media images</i>		<i>Access database</i>	

This creates a couple of problems for this user's hard drive. The information stored in sectors 4 and 8 are now un-reachable and could be corrupted. The hard drive is now no-longer able to write more data to these sectors.

NOTE

Check Disk can take at least 20 minutes to run on small hard drives but can go for over several hours on much larger hard drives that have never had the program run before. It is usually a good idea to have the computer run this program overnight because when Check Disk is running you are unable to use your computer for other things.

How to run Check Disk

These steps are written for Windows XP computers

- Click 'My Computer' either on your desktop (screen) or in your Start menu.
- Find the hard drive that you wish to run the Check Disk program on. Most computers have one hard drive called 'Local Disk (C)'. If you have more than one hard drive it is a good idea to run the check on them all. Once you have found the hard drive you wish to run the check on, **Right Click** the hard drive's icon and a little menu will appear.
- On the menu find the 'Properties' option and click on it.
- A new window called 'xxxxx Properties' (where xxxxx is the name of the hard drive) will now open. Across the top of this window you will see numerous tabs. Find the tab called 'Tools' and click on it.
- The Tools tab will now open giving you three options:
 - Error-Checking,
 - Defragmentation,
 - Backup
- Under the 'Error-Checking' section click on the 'Check Now' button.
- A new window called 'Check Disk xxxxx' (where xxxxx is the name of the hard drive) will now open. There are two tick boxes in this window called:
 - Automatically fix file system errors
 - Scan for and attempt recovery of bad sectors
- Click on each box to put a tick in the box.
- Press the 'Start' button to begin the check disk program on the chosen hard drive.
- A warning message will appear if you are running the Check Disk program on the hard drive that has your Windows XP installed called 'Checking Disk xxxxx' (where xxxxx is the name of the hard drive). It will state that this utility needs exclusive access to some Windows files. It will ask you if you want to schedule the program to be run after a restart.
- Click the 'Yes' button. *If the message does not appear it means that the selected hard drive does not have the Windows operating system installed and you can skip this step.*
- Restart your computer so that the Check Disk program can run.
- When Check Disk has finished it will notify you if it has repaired any errors and will give you information about the hard drive. The computer will now log in as usual.

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