In Windows 98 SE, scandisk runs every time the system boots, even after a normal shutdown

When Windows shuts down it performs many functions, including the following:

- Completes all disk write functions
- Flushes the disk cache
- Runs the Close Window code to close all currently running programs
- Transitions all protected-mode drivers to real mode.

Shutdown problems in Windows 98 SE can be caused by any of the following:

- A video card that is not assigned an IRQ in real mode
- A program that does not close correctly
- An incompatible, damaged or conflicting device driver is loaded
- A damaged Exit Windows sound file
- Incorrectly configured or damaged hardware
- An incompatible (BIOS) configuration setting
- As a result of an Advanced Power Management or Advanced Configuration and Power Interface setting
- The Fast Shutdown registry key is enabled.

Windows 98 SE includes the latest updates for Advanced Configuration and Power Interface (ACPI), OnNow and Advanced Power Management (APM). In addition, the Fast Shutdown code which was implemented with the initial release of Windows 98 has been removed to support these new features.

Although Windows 98 SE includes many new drivers, not all third-party manufacturers have had a chance to update their hardware drivers. Some existing computers or devices may require an updated BIOS or device driver to fully support Windows 98 SE.

Check the programs that are running. This includes any TSRs loading in real-mode and programs that start from your Startup group. To check the programs that are running, run Msconfig.exe and disable all options under Selective startup to clean-boot Windows. If this resolves the issue, you can then disable the startup items one at a time to determine the program that is the cause of the shutdown problem.

Check the hardware configuration. Disable or remove any hardware that may be responsible. To check the hardware configuration on the computer, use Control Panel > System. On the Device Manager tab, disable all devices under Display adapters, Floppy disk controllers, Hard disk controllers, Keyboard, Network adapters, PCMCIA socket, Ports, SCSI controllers, Sound, video, and game controllers and Mouse. You can disable the items by selecting each item and clicking on Properties. On the General tab, enable the 'Disable In This Hardware Profile' check box, and then click OK. Note that your mouse will not work when you restart the computer.

Now enable the devices one by one, in the following order: COM ports, Hard disk controllers and Floppy disk controllers. You can then enable the rest of the devices in any order, though the last device to be enabled should be the display adapter. If the problem is not solved, run the Automatic Skip Driver Agent (Asd.exe) tool to enable any device that has been disabled.

The IRQ Steering option allows several PCI devices to share the same interrupt request (IRQ). If the BIOS is not fully compliant, this option may lead to machines not shutting down properly, even if devices are not sharing an IRQ. To disable PCI bus IRQ Steering, open Device Manager > System Devices > PCI Bus > Properties and disable Use IRQ Steering on the IRQ Steering tab.

In some cases, the BIOS and Windows may not be communicating properly with the computer hardware during the shutdown process. It is possible to configure Windows 98 SE to ignore the presence of a PnP BIOS and communicate directly with the hardware. This should be done only for testing purposes, as leaving the PnP BIOS disabled may cause some hardware to stop working. To do this, reboot to DOS and rename the \Windows\System\Bios.vxd file to Bios.old. Restart your computer. If shutdown is now successful, it is most likely an indication that the system BIOS is contributing to the

shutdown problems. Contact the motherboard manufacturer or BIOS vendor for a possible update.
If you have an anti-virus program that is configured to scan your floppy disk drive when you shut down, your computer may stop responding.
Microsoft has released the Windows 98 SE Shutdown Supplement that addresses shutdown issues on computers with specific hardware and software configurations. This can be downloaded from
www.microsoft.com/windows98/downloads/contents/WURecommended/S_WUFeatured/Win98SE/Default.asp

Windows starts in Safe mode, even if it started normally the previous time
This happens if Windows is unable to delete the Wnbootng.sts file in the Windows folder. This file is created each time you start Windows and is deleted after Windows starts successfully. Delete the Wnbootng.sts file in the Windows folder and restart your computer.
If this does not work, rename the io.sys file in the root of the boot drive. Note that you will have to first strip its attributes to be able to rename it from DOS. Boot the system from a Windows Startup disk and type sys c: to transfer system files to the hard disk. Remove the startup disk and restart Windows.

You get 'Fatal Exception 0E' error message when you start Windows 95
This can occur if the Advapi32.dll file is missing or damaged. To solve the problem, replace the file with a fresh one from the original Windows installation disc.
To extract the file, switch to the Windows installation folder on the CD at the command prompt and type the following command for Windows 95:
extract /e /l c:\windows\system /a win95_02.cab advapi32.dll
or the following command for Windows 98:
extract /e /l c:\windows\system /a win98_22.cab advapi32.dll
Restart Windows and the problem should be solved.

Restoring damaged registry
You get the error message:
"Windows has encountered an error accessing the system registry. You should restore the registry now and restart the computer. If you ignore this error and shut down your system, you may lose data. Restoring the registry replaces the faulty registry with a known good backup copy. However, this backup copy may not contain all the information recently added to your system."
Even after you click the 'Restore From Backup And Restart' button, you get the same error message and the problem occurs even when you boot to Safe Mode.

The error messages may occur if the registry is damaged. Try any of the following steps to restore a damaged registry. Use the Registry Editor in DOS mode to export, and then import, the registry file. Restart the computer in DOS and type the following command to export the registry:
regedit /l:c:\windows\system.dat /e c:\system.txt
Next, rename the current registry file to another name with the following command:
attrib -s -h -r system.dat
ren system.dat system.old
Type the following line to import the System portion of the registry
regedit /l:c:\windows\system.dat /c c:\system.txt

Restart Windows and see if the problem is solved. If the error continues to occur, restart the computer in DOS and carry out the above steps for the User portion of the registry, replacing all references to the System.dat with User.dat. These are the commands you would use:

```
regedit /r:c:\windows\user.dat /e c:\user.txt
cd\windows
attrib -s -h -r user.dat
ren user.dat user.old
regedit /r:c:\windows\user.dat /c c:\user.txt
```

Restart Windows normally and check again. If the error continues to occur, try restoring the registry to its state when you last successfully started Windows. Restart the computer in DOS and type the following commands:

```
cd \windows
attrib -s -h -r system.dat
ren system.dat system.bad
```

Restart your computer. Windows 95 uses the System.da0 file when it cannot find the System.dat file. If this file works, Windows 95 renames it to System.dat. If the error continues to occur, repeat the above steps for the User.da0 file.

If this too fails, restore the registry to its state when you first started Windows 95 successfully. Again boot to DOS and type the following commands:

```
cd \windows
attrib -s -h -r system.dat
ren system.dat system.xxx
cd \
attrib -s -h -r system.1st
copy system.1st c:\windows\system.dat
attrib +s +h +r system.1st
attrib +s +h +r c:\windows\system.dat
```

Restart your computer.

If the error continues, you will have to reinstall Windows. First, remove all user profiles using the following command in DOS:

```
ren c:\windows\profiles c:\windows\oldprofs
```

Next, rename the existing registry files:

```
cd \windows
attrib -s -h -r system.dat
ren system.dat system.xxx
attrib -s -h -r user.dat
ren user.dat user.xxx
attrib -s -h -r system.da0
ren system.da0 system.yyy
attrib -s -h -r user.da0
ren user.da0 user.yyy
cd \
attrib -s -h -r system.1st
ren system.1st system.zzz
```

Run Windows Setup again

Some .vxd files show as missing on restarting your computer

When you restart your computer, you may receive an error saying the following files are missing: Vnetsup.vxd, Nwlink.vxd, Nwredir.vxd, Nscl.vxd, Vredir.vxd, Ndis.vxd, Ndis2sup.vxd, Vnetbios.vxd, Ndiswan.vxd. Additional dialog boxes may appear saying the following two files cannot be found: Nwnp32.dll, Msnp32.dll.

This problem can occur if you install a Network Adapter, Dial-Up Networking, Dial-Up Adapter, or Virtual Private Networking and cancel Setup while the Copying Files dialog box is displayed. The Dial-Up Networking files are not copied to the hard disk but the file names are added to the Windows registry. When the computer is restarted, the files are requested and cannot be found. To solve the problem, simply reinstall all network components and uninstall the unnecessary components.

The message 'AudioPCI interrupt has been routed incorrectly by the system' appears on startup

Start your computer in Safe mode. Open Start > Settings > Control Panel > System > Device Manager. Expand the Sound Video and Game controllers list and remove your soundcard. Restart your PC. Windows should now detect your soundcard as a new hardware and will ask for the drivers. Provide it with drivers from the manufacturer's disk or the Windows drivers.

The dual-boot option of Windows NT 4.0 and Windows 95 is no longer available after you reinstall Windows 95

If you dual boot between Windows NT 4.0 and Windows 95, you should create an Emergency Repair Disk before you install Windows 95. You can do this using Rdisk.exe in the \Winnt\System32 folder. Once you create this, you can install Windows 95 after booting to DOS.

To solve your problem, boot from the Windows NT setup boot disk and insert Setup Disk 2 when prompted. When the setup options appear, press R for Repair. On the next screen, four options appear and all are selected by default. Clear all selections except Inspect Boot Sector. Ensure that Inspect Boot Sector is the only option that has an X in front of it. Select Continue and press Enter. You can skip the mass storage device detection from the next screen, unless you have changed or added hard disks to the computer.

Insert Setup Disk 3 when prompted. If you have the Emergency Repair Disk, press Enter, insert the disk, and press Enter again. If you do not have the Emergency Repair Disk, press Esc to allow setup to locate Windows NT and the repair information. Remove the diskette from the floppy disk drive and press Enter to restart your computer.

Now the Windows NT Flex Boot Loader should appear and the dual boot ability would have been restored.

Deleting the Linux partition does not remove LiLo

To remove LiLo, boot from a Windows Startup disk. At the command prompt, type fdisk /mbr and press enter. Remove the disk and restart the computer.

After startup a 'Driver Memory Error' dialog box is displayed

The system has been infected by the KAK worm. To remove it, use any current anti-virus package. Also, search the entire hard disk for files with 'kak' anywhere in the name (ensure that you can view hidden and system files) and delete them. Locate the registry key HKEY_LOCAL_MACHINE/Software/Microsoft Windows/Current Version/Run/cAgou and delete it. You can prevent further infections by upgrading to Internet Explorer 5.5 or installing the security patch provided by Microsoft. This patch can be downloaded from http://www.microsoft.com/technet/security/bulletin/ms99-032.asp.

You still get the password dialog box on starting Windows even though you have deleted multiple users

If you have already deleted all the users, open Control Panel > Network. Delete the Microsoft Family Logon item if it exists. Also, change the Primary Network Logon to Windows Logon.

Restart Windows for the changes to take effect. If you are still asked for a password at startup, delete all .PWL files from the \Windows folder. Upon restarting, when asked for a Windows password, leave the password field blank. The next time you restart, Windows will not ask for a password.