

System Recovery and Troubleshooting Options in Windows XP

Software and hardware issues can affect the way that your system functions. Severe problems might prevent you from starting Windows XP Professional normally.

Software problems: *Installing incompatible software, incorrectly changing system configuration settings, or installing faulty device drivers can cause system instability or a Stop error.*

Hardware problems: *Hardware that is defective, malfunctioning, incorrectly installed, or incorrectly configured can also cause instability or a Stop error.*

Other problems: *Deleted or corrupted system files caused by problems such as user error or virus activity can cause data loss or prevent you from starting the operating system.*

Windows XP Professional provides several tools that enable you to troubleshoot startup and stability problems, and restore system to normal use.

Last Known Good Configuration

When the system cannot start in normal or safe mode following a driver or application installation that causes a problem, using the Last Known Good Configuration, you can recover by reversing the most recent driver and registry changes made since you last started Windows XP Professional.

Device Driver Roll Back

A Device Manager feature that allows you to replace an individual device driver with the previously installed version if the driver was updated after you installed Windows XP Professional. Device Driver Roll Back is available in normal or safe mode.

System Restore

A service for x86-based computers that actively monitors your system and records changes to the registry, to system files, and to certain application files. System Restore allows you to undo recent registry and file changes by using information previously saved in restore points. Use to restore the system to a previous state. System Restore is available in normal or safe mode.

Add or Remove Programs in Control Panel

A Control Panel feature you can use to uninstall programs. Use to temporarily uninstall software that you suspect is causing a problem. You can uninstall an application in normal or safe mode.

Safe Mode

If you are unable to start your system by using Last Known Good Configuration, Windows XP Professional provides safe mode, a startup option that disables startup programs and nonessential services to create an environment useful for troubleshooting and diagnosing problems. In safe mode, Windows XP Professional starts a minimal set of drivers that the operating system needs to function.

Support for devices such as audio devices, most USB devices, and IEEE 1394 devices is disabled to reduce the variables that you need to account for when diagnosing the cause of startup problems, Stop messages, or system instability.

Recovery Console

A command-line environment that you can use to perform advanced troubleshooting operations. In addition to Last Known Good Configuration and safe mode, advanced users can use Recovery Console to attempt manual recovery operations.

Backup

A tool for saving data, such as the system state, before you troubleshoot problems, attempt workarounds, or apply updates. Backup (Ntbackup.exe) enables you to restore system settings and data if you're troubleshooting attempts worsen the problem. Use in conjunction with a parallel installation to restore a system that cannot start in normal or safe modes. Backup is available in safe or normal mode.