

Unit -V

Troubleshooting Device Manager Issues in Win XP

By completing this module you will be able to understand and learn the troubleshooting the device manager.

Device Manager is an OS feature that lets you view and change the properties of all devices attached to your computer.

When you use Device Manager, you can:

- ⌚ Determine if the hardware on your computer is working properly
- ⌚ Change hardware configuration settings
- ⌚ Identify the device drivers that are loaded for each device and obtain information about each device driver
- ⌚ Change advanced settings and properties for devices
- ⌚ Install updated device drivers
- ⌚ Disable, enable, and uninstall devices
- ⌚ Reinstall the previous version of a driver
- ⌚ Identify device conflicts and manually configure resource settings
- ⌚ Print a summary of the devices that are installed on your computer

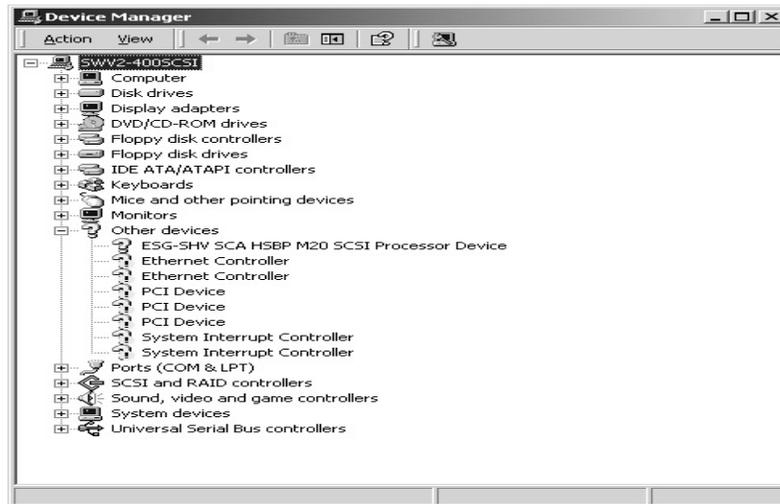
Typically, Device Manager is used to check the status of computer hardware and update device drivers on the computer.

If you are an advanced user, and you have a thorough understanding of computer hardware, you can use Device Manager's diagnostic features to resolve device conflicts, and change resource settings.

To access Device Manager, use any of the following methods:

- ⌚ Click Start, and then click Control Panel
- ⌚ Click Performance and Maintenance, and then click System
- ⌚ Click the Hardware tab, and then click Device Manager
- Or
- ⌚ Click Start; click Run, and then type "devmgmt.msc" (without the quotation marks).
- Or
- ⌚ Right-click My Computer, click Manage, and then click Device Manager.
- Or
- ⌚ Right-click My Computer, click Properties, click the Hardware tab, and then click Device Manager

You can view the Details tab to see the following device information:



NOTE: Not all of these properties will be populated for a given device. In other words, although all of these properties are listed, some may not contain information when viewing a particular device.

➤ Troubleshooting Device Conflicts in the Device Manager

Troubleshooting Information

- ⌚ If there is a problem with a device, it is listed in the hardware tree. Also, the problem device has a symbol that indicates the type of problem
- ⌚ A black exclamation point (!) on a yellow field indicates the device is in a problem state. Note that a device that is in a problem state can be functioning
- ⌚ A problem code explaining the problem is displayed for the device
- ⌚ A red "X" indicates a disabled device. A disabled device is a device that is physically present in the computer and is consuming resources, but does not have a protected-mode driver loaded
- ⌚ A blue "i" on a white field on a device resource in Computer properties indicates that the **Use automatic settings** feature is not selected for the device and that the resource was manually selected. Note that this does not indicate a problem or disabled state.

A green question mark "?" in Device Manager Means that a compatible driver for this device is installed, indicating the possibility that all of the functionality may not be available. Note that this applies only to Windows Millennium Edition (Me).

NOTE: Some sound cards and video adapters do not report all of the resources that they use to Windows. This can cause Device Manager to show only one device in conflict, or no conflicts at all. This can be verified by disabling the sound card, or by using the standard VGA video driver to see if the conflict is resolved.

Note that this is a known problem with S3 video adapters and 16-bit Sound Blaster sound cards, or those sound cards that are using Sound Blaster emulation for Sound Blaster compatibility.

When you double click a specific device in Device Manager, you see a property sheet. The property sheet has a **General** tab.

NOTE: Some devices may have other tabs besides the **General** tab. Not all property sheets have the same tabs; some devices may have a **Resources** tab, **Driver** tab, and **Settings** tab, or some combination of these.

At the top of the property sheet, there is a description of the device. When you click the **Resources** tab, the window in the middle of the tab indicates which resource types are available for the selected device.

The list box at the bottom contains a **Conflicting device list**. This list indicates a conflict with an error code.

Note the **Use automatic settings** check box. If Windows successfully detects a device, this check box is selected, and the device should function correctly. However, if the resource settings are based on Basic Configuration <n> (where <n> is any number from 0 to 9), it may be necessary to change the configuration by selecting a different basic configuration from the list. If the particular configuration you want for the device is not listed as a basic configuration, it may be possible to click the **Change Setting** button to manually adjust the resource values.

For example, to edit the Input/Output Range setting:

- ⌚ Click the **Use automatic settings** check box to clear it.
- ⌚ Click **Change Setting**.
- ⌚ Click the appropriate I/O range for the device

NOTE: To disable a device in **Device Manager**, right-click the device, and then click **Disable**. If the issue continues to occur, you may need to contact the manufacturer of your computer or motherboard to inquire about how to obtain and install a BIOS update for your computer.