

## Contents for Control Panel Help

▼ Expand

### Introduction

 [Control Panel Overview](#)

### How To...

-  [Change the Look of Windows NT](#)
-  [Work with Screen Savers](#)
-  [Switch Between Applications](#)
-  [Work with Fonts](#)
-  [Change Serial Port Settings](#)
-  [Change Pointing-Device Options](#)
-  [Change Keyboard Options](#)
-  [Customize Windows NT for International Use](#)
-  [Change System Options](#)
-  [Work with Date and Time](#)
-  [Work with Device Drivers](#)
-  [Work with Networks](#)
-  [Control Sound](#)
-  [Manage Server Properties](#)
-  [Manage Services](#)
-  [Manage Devices](#)
-  [Change UPS Settings](#)

### Commands

 [Settings Menu Commands](#)

## Settings Menu Commands

The commands on the Settings menu have corresponding icons which appear in the Control Panel window. The commands listed here are those for a computer with sound, a network, and MIDI capabilities installed.

Use the scroll bar to see more commands.

### Color

Changes the colors of screen elements.

### Fonts

Installs and removes fonts and sets TrueType options.

### Ports

Specifies communications settings for serial ports.

### Mouse

Specifies settings for pointing devices.

### Desktop

Changes desktop options, such as patterns and wallpaper, screen savers, icon spacing, cursor blink rate, grid size, and border width.

### Keyboard

Sets the keyboard delay and repeat rates.

### Printers

Opens Print Manager to work with local and network printers.

### International

Changes international settings, such as keyboard layout, measurement system, and date/time, currency, and number formats.

### System

Specifies the default operating system for startup, changes user environment variables, and defines paging file size.

### Date/Time

Changes the system date, time, and time zone.

### Cursors

Changes the appearance of the cursor.

### Drivers

Installs and configures drivers for optional devices, such as sound boards and synthesizers.

### MIDI Mapper

Changes MIDI settings for output channels, instrument patches, and key assignments.

You do not need to use this option unless you install a sound card or connect a MIDI synthesizer without a MIDI setup provided by Windows NT or the sound-card or synthesizer manufacturer. If you connect a MIDI synthesizer that does not include a MIDI setup, you must create a setup that includes the mapping assignments appropriate to your synthesizer.

### **Networks**

Installs and configures network adapter cards and other network software, and adds you to a workgroup or a domain.

### **Sound**

Assigns sounds to system and application events (such as when Windows NT starts or displays a message) and turns the warning beep on or off.

### **Server**

Manages the server properties of a computer. Displays summary information about user connections and resource use, allows the computer description to be edited, displays lists of connected users, shared resources, and open resources, manages directory replication, and manages a list of administrative alert recipients.

### **Services**

Manages service startup. Can stop, start, pause, continue, pass startup parameters to, and configure startup for a service.

### **Devices**

Manages device startup. Starts, stops, and configures startup for device drivers.

### **UPS**

Configures the uninterruptible power supply to ensure safe shutdown during a power failure.

### **Exit**

Quits Control Panel.

## Contents for Control Panel Help

▼ Expand

### Introduction

- [Control Panel Overview](#)
- [What is Control Panel?](#)

### How To...

- [Change the Look of Windows NT](#)
- [Work with Screen Savers](#)
- [Switch Between Applications](#)
- [Work with Fonts](#)
- [Change Serial Port Settings](#)
- [Change Pointing-Device Options](#)
- [Change Keyboard Options](#)
- [Customize Windows NT for International Use](#)
- [Change System Options](#)
- [Work with Date and Time](#)
- [Work with Device Drivers](#)
- [Work with Networks](#)
- [Control Sound](#)
- [Manage Server Properties](#)
- [Manage Services](#)
- [Manage Devices](#)
- [Change UPS Settings](#)

### Commands

- [Settings Menu Commands](#)

## What Is Control Panel?

Control Panel is a Windows NT application that provides you with a way of modifying your system while working with Windows NT. Each option that you can change is represented visually by an icon in the Control Panel window.



Some of the options in the Control Panel require special privileges. If you do not have the necessary permission, an access denied message will appear to remind you.

Options you can change include:

- Your screen colors.
- Other desktop options that determine the look of your screen.
- The fonts recognized by your Windows NT applications.
- Port and network settings.
- Keyboard and pointing-device settings and cursor appearance.
- International settings.
- Operating system variables.
- The system time zone, date, and time.
- The drivers and devices you use.
- MIDI settings for a synthesizer connected to your computer.
-  The sounds your system uses.
-  User resources.
-  The services available on the computer.
-  UPS settings.

To return to Contents for Control Panel Help, choose the Contents button.

## Using Existing Color Schemes

Windows NT provides several color schemes that you can use to change the colors of all screen elements.

### To use a color scheme

1. In the Control Panel window, choose the Color icon.
2. In the Color Schemes box, select the color scheme you want.

The sample screen changes to reflect your selection.

3. Choose the OK button.

For help with the Color dialog box, choose the Help button or press F1 while using the dialog box.

See Also

[Changing Existing Color Schemes](#)

[Removing Existing Color Schemes](#)

[Creating Your Own Colors](#)

## Changing Existing Color Schemes

If you want to change the colors in a color scheme, you can select colors from the Basic and Custom Colors palettes.

### To change the colors of a color scheme

1. In the Control Panel window, choose the Color icon.
2. In the Color Schemes box, select the color scheme you want to change.  
The sample screen changes to reflect your selection.
3. Choose the Color Palette button.
4. Open the Screen Element list, and then select the part of the screen where you want to change the color.  
Or click the part of the screen in the sample screen.
5. From the Basic Colors or Custom Colors palette, select a new color.  
The selected element in the sample screen changes color to reflect your choice.  
To create a new color, use the Define Custom Colors option.
6. Change the color of other parts of the screen, if you want.
7. Choose the Save Scheme button.
8. To assign a new name to the scheme, type the name in the text box.
9. Choose the OK button.
10. In the Color dialog box, choose the OK button.

For help with the Color dialog box, choose the Help button or press F1 while using the dialog box.

See Also

[Removing Existing Color Schemes](#)

[Creating Your Own Colors](#)

[Using Existing Color Schemes](#)

## Removing Existing Color Schemes

If you find that you use only one or two color schemes, you can shorten the list of selections by deleting schemes. The only color scheme that cannot be deleted is Windows Default, the scheme you see the first time you start Windows.

### Warning

Deleting a Color Scheme on a particular computer will remove that scheme for every user on that computer.

### To remove an existing color scheme

1. In the Control Panel window, choose the Color icon.
2. In the Color Schemes box, select the color scheme you want to delete.
3. Choose the Remove Scheme button.

A message appears, asking you to confirm the deletion.

4. Choose the Yes button.
5. Choose the OK button.

For help with the Color dialog box, choose the Help button or press F1 while using the dialog box.

See Also

[Changing Existing Color Schemes](#)

[Creating Your Own Colors](#)

[Using Existing Color Schemes](#)

## Creating Your Own Colors

You can create your own colors and apply them to [screen elements](#).

### To create your own colors

1. In the Control Panel window, choose the Color icon.
2. Choose the Color Palette button.
3. Choose the Define Custom Colors button.
4. Drag the cursor in the Color Refiner box and the arrow beside the luminosity bar to define your color.

Note that the color you create is shown in the left side of the Color/Solid box.

You can double-click the right side of the box or press ALT+O to use the solid color most closely resembling the one you have created.

5. In the Custom Colors palette, select a box for the color.

Select an empty box or one that contains a color you want to change to the new color.

6. Choose the Add Color button.
7. Create any other colors you want, and add them to the palette.
8. Choose the Close button.
9. Choose the OK button.

For help with the Color and Custom Color Selector dialog boxes, choose the Help button or press F1 while using the dialog boxes.

See Also

[Changing Existing Color Schemes](#)

[Removing Existing Color Schemes](#)

[Using Existing Color Schemes](#)

## Displaying a Pattern

When Windows NT is set up, the desktop pattern is a solid color. The background color for the pattern is the same as the desktop color. The foreground color (the lines that make up the pattern) is the same as the color of the Windows Text screen element.

Note: If you already have a wallpaper, the area it covers will overlay any pattern you choose. Certain non-solid colors may be changed to the closest solid color upon displaying a pattern.

### To choose a pattern

1. In the Control Panel window, choose the Desktop icon.
2. In the Name box, select a pattern.
3. Choose the OK button.

For help with the Desktop dialog box, choose the Help button or press F1 while using the dialog box.

See Also

[Changing a Pattern](#)

[Creating a Pattern](#)

[Removing a Pattern](#)

## Changing a Pattern

You can change a predefined pattern by choosing the Desktop icon and then choosing the Edit Pattern button.

### To change an existing pattern

1. In the Control Panel window, choose the Desktop icon.
2. Choose the Edit Pattern button.
3. In the Name list, select a pattern.

You'll see a sample of the current pattern in the Sample box and a cell in which you can make changes to the pattern. (The cell shows an enlarged version of the pattern.)

4. In the cell, click locations where you want to reverse the colors in the pattern.
5. When the Sample box shows the pattern you want, choose the Change button.
6. Choose the OK button, and then choose the OK button from the Desktop dialog box.

For help with the Desktop-Edit Pattern dialog box, choose the Help button or press F1 while using the dialog box.

See Also

[Displaying a Pattern](#)

[Creating a Pattern](#)

[Removing a Pattern](#)

## Creating a Pattern

You can create a new pattern by choosing the Desktop icon and then choosing <None> in the Name list under Pattern. The pattern you define is repeated as many times as necessary to completely fill the background. If you experiment with the patterns, you'll soon understand the effects you can create. Remember, the colors of the pattern are determined by the Desktop and Window Text colors you choose.

### To create a pattern

1. In the Control Panel window, choose the Desktop icon.
2. In the Name list under Pattern, choose <None>.
3. Choose the Edit Pattern button.
4. In the Name list, type a name for the new pattern.
5. Click locations in the cell where you want to reverse the colors in the pattern.
6. When the cell shows the pattern you want, choose the Add button.
7. Choose the OK button.

The new pattern appears in the Name box in the Desktop dialog box.

8. Choose the OK button.

For help with the Desktop-Edit Pattern dialog box, choose the Help button or press F1 while using the dialog box.

See Also

[Displaying a Pattern](#)

[Changing a Pattern](#)

[Removing a Pattern](#)

## Removing a Pattern

If you find that you use only one or two patterns, you can shorten the list of selections by removing patterns you no longer use.

### To remove a pattern

1. In the Control Panel window, choose the Desktop icon.
2. Choose the Edit Pattern button.
3. In the Name list, select the pattern you want to remove.
4. Choose the Remove button.

A message appears, asking you to confirm the removal.

5. Choose the Yes button.
6. Choose the OK button, and then choose the OK button from the Desktop dialog box.

For help with the Desktop-Edit Pattern dialog box, choose the Help button or press F1 while using the dialog box.

See Also

[Displaying a Pattern](#)

[Changing a Pattern](#)

[Creating a Pattern](#)

## Displaying Custom Wallpaper

You can display a .BMP bitmap graphic on your desktop instead of a solid color or a pattern. Paint programs that produce .BMP files, such as Windows Paintbrush, can be used to create a bitmap or modify a scanned image. After you create the bitmap, save the .BMP file into the WINNT directory. You can save it in a different directory, but you have to specify the full path when choosing the bitmap as wallpaper.

If you select both a pattern and custom wallpaper in the Desktop dialog box, the wallpaper overlays the pattern. If you select the Center option for the wallpaper and the bitmap doesn't cover the entire desktop, you'll see the pattern around the edges of the bitmap. If the original bitmap is too large to fit on the screen or takes up too much memory, Windows NT does not display it. If you want to remove a wallpaper from the list, delete the bitmap file from the Windows directory.

Note: Windows uses more memory when displaying wallpaper than when displaying a solid color or a pattern on the desktop. If you run out of memory when running an application, you can change to a color or pattern to free some memory.

### To choose a bitmap to display as wallpaper

1. In the Control Panel window, choose the Desktop icon.
2. Under Wallpaper, in the File box, select a bitmap from the list.

If you saved the bitmap in a directory other than the Windows NT directory, enter the full path and bitmap name.

3. Select the Center or Tile option button.

The Center option positions the bitmap in the center of the desktop. The Tile option repeats the bitmap as many times as necessary to cover the desktop.

4. Choose the OK button.

For help with the Desktop dialog box, choose the Help button or press F1 while using the dialog box.

## **Preventing Icon Titles from Overlapping**

Sometimes an icon's title is so wide that it overlaps an adjacent icon. You can prevent this by increasing the space between icons, by wrapping the title of an icon onto more than one line, or by doing both. Icon spacing is measured in pixels, the smallest unit of measurement on the screen. Increments of 10 pixels result in noticeable increases in spacing between icons.

### **To increase icon spacing and wrap an icon title**

1. In the Control Panel window, choose the Desktop icon.
2. Under Icons, click the up or down scroll arrow next to the Spacing box to increase or decrease the spacing between icons, or type a number.
3. Select the Wrap Title check box.
4. Choose the OK button.

For help with the Desktop dialog box, choose the Help button or press F1 while using the dialog box.

## **Changing Border Width**

Many windows can be resized by using the mouse to drag the window border to a new size. If a window can be resized, you can make it easier to "grab" the window border by increasing the border width.

### **To change the border width**

1. In the Control Panel window, choose the Desktop icon.
2. Under Sizing Grid, click the up or down scroll arrow next to the Border Width box to increase or decrease the border width.

- Or-

Type a number from 1 to 50, with 1 being the narrowest border.

3. Choose the OK button.

For help with the Desktop dialog box, choose the Help button or press F1 while using the dialog box.

## Changing the Sizing Grid of Windows

The position and alignment of application windows and icons on your desktop is determined by an invisible grid. When Windows NT is set up, the sizing grid is turned off so that icons and windows remain where you place them on the desktop. When the sizing grid is turned on, application windows and minimized icons align with the nearest invisible grid line. The grid changes in multiples of 8 pixels. A value of 1 creates a grid with 8 pixels between gridlines, a value of 2 creates a grid with 16 pixels between gridlines, and so forth. A value of 0 cancels the grid.

Note: The sizing grid has no effect on document windows and icons. This option only affects application windows and the application icons that appear at the bottom of your screen.

### To set the grid spacing

1. In the Control Panel window, choose the Desktop icon.
2. Under Sizing Grid, click the up or down scroll arrow next to the Granularity box to increase or decrease the size of the grid.

- Or -

Type a number from 0 to 49.

3. Choose the OK button.

For help with the Desktop dialog box, choose the Help button or press F1 while using the dialog box.

## **Changing the Country**

When you select a country, Windows NT automatically adjusts the settings for the date, time, number, and currency formats, as well as the Paper Size option in the Print Setup dialog box, to match the standard formats used by that country.

### **To change the country**

1. In the Control Panel window, choose the International icon.
2. In the Country box, select the country with the standard settings you want to use.
3. Choose the OK button.

For help with the International dialog box, choose the Help button or press F1 while using the dialog box.

## **Changing the Language**

The language you select affects the way applications sort information. For example, if the language you are working in includes accented characters, setting this option to that language ensures that your applications will correctly sort words or phrases which include these characters.

### **To change the language**

1. In the Control Panel window, choose the International icon.
2. In the Language box, select the language you want to work in.
3. Choose the OK button.

For help with the International dialog box, choose the Help button or press F1 while using the dialog box.

## **Changing Keyboard Layout**

Keyboard layouts vary to accommodate the special characters and symbols used in different languages. This option lists all the keyboard layouts supported by Windows NT.

### **To change the keyboard layout**

1. In the Control Panel window, choose the International icon.
2. In the Keyboard Layout box, specify the keyboard layout of your computer.
3. Choose the OK button.

For help with the International dialog box, choose the Help button or press F1 while using the dialog box.

## **Changing the Measurement System**

You can use this option to specify either the metric or English system of measurement.

### **To change the measurement system**

1. In the Control Panel window, choose the International icon
2. In the Measurement box, select the system of measurement you wish to use.
3. Choose the OK button.

For help with the International dialog box, choose the Help button or press F1 while using the dialog box.

## **Changing the Currency Display**

You can control the way currency is represented. For example, you can place the currency symbol in different locations relative to the amount, specify how negative currency values are represented, or change the currency symbol for your country.

### **To change the currency display**

1. In the Control Panel window, choose the International icon.
2. In the Currency Format area, choose the Change button.
3. Set the options you want.
4. Choose the OK button, and then choose the OK button from the International dialog box.

For help with the International-Currency Format dialog box, choose the Help button or press F1 while using the dialog box.

## Changing the Number Display

You can control the way numbers are displayed. For example, you can choose the punctuation separating thousands and the punctuation separating the fractional part of a decimal number, or change the decimal display of numbers.

### To change the number format

1. In the Control Panel window, choose the International icon.
2. In the Number Format area, choose the Change button.
3. Set the options you want.
4. Choose the OK button, and then choose the OK button from the International dialog box.

For help with the International-Number Format dialog box, choose the Help button or press F1 while using the dialog box.

## **Adding Fonts**

By using the Fonts option, you can add screen, plotter, or TrueType fonts to your Windows NT applications.

### **To add fonts**

1. In the Control Panel window, choose the Fonts icon.

The fonts already installed are listed in the Installed Fonts box.

2. Choose the Add button.
3. In the Add Fonts dialog box, select the font you want to add. If the font is not located in the current drive or directory, select the drive and directory where it is located.

You can add more than one font at a time. You can also select all the fonts listed by choosing the Select All button.

4. If you are low on disk space and want to use the fonts directly from the directory (network or local) where they are located, without copying the font files to the Windows NT directory, clear the Copy Fonts To Windows Directory check box.
5. Choose the OK button.
6. Choose the Close button.

For help with the Fonts and Add Fonts dialog boxes, choose the Help button or press F1 while using the dialog boxes.

See Also

[Removing Fonts](#)

[Setting TrueType Options](#)

## Removing Fonts

If you are not using a font, you can remove it to free some memory for your applications. Removing a font deletes the font from the Installed Fonts list, but does not delete the font file from your hard disk, unless you specify otherwise.

### Warning

The MS Sans Serif font is used for most Windows NT dialog boxes. Do not remove this font; if you do, the text in dialog boxes will be difficult to read.

Deleting a font on a particular computer will remove that font for every user on that computer.

### To remove a font

1. In the Control Panel window, choose the Fonts icon.
2. Select the font that you want to remove. You can select several fonts at a time.
3. Choose the Remove button. A message appears, asking you to confirm your decision to remove the font.
4. If you want to delete the font file from the disk in addition to removing it from memory, select the Delete Font File From Disk check box.

### Caution

It is recommended that you do not delete fonts from the disk if you chose not to copy the fonts to your Windows SYSTEM directory. If you delete the fonts from the disk, you may not be able to add them again if you decide to use them later.

5. Choose the Yes button or, if you want to remove several fonts at the same time, choose the Yes To All button.
6. Choose the Close button.

For help with the Fonts dialog box, choose the Help button or press F1 while using the dialog box.

See Also

[Adding Fonts](#)

[Setting TrueType Options](#)

## Setting TrueType Options

Windows NT supports TrueType fonts. TrueType fonts are scalable fonts that appear in your printed document exactly as they appear on your screen. If you are not using TrueType fonts in your documents, you can turn them off to free memory for your applications.

If you are using only TrueType fonts, you can specify that you want to use TrueType fonts exclusively so that other fonts do not appear listed in your Windows NT applications.

In either case, the font files will not be deleted from your hard disk.

### To set TrueType options

1. In the Control Panel window, choose the Fonts icon.
2. Choose the TrueType button.
3. Select the Show Only TrueType Fonts in Applications box.
4. Choose the OK button.

For help with the TrueType dialog box, choose the Help button or press F1 while using the dialog box.

See Also

[Adding Fonts](#)

[Removing Fonts](#)

## Changing the System Date, Time, and Time Zone

Using the Date/Time options, you can change your system's date, time, and time zone. You can also select whether or not you want the computer to automatically switch to Daylight Saving Time. Date and time changes are recognized by Windows NT applications that use the system clock, such as Clock, as well as in the information kept by File Manager for each file you save on your disk.

You must be sure to set the correct time zone before you set the date and time for your system.

### To change the date, time, and time zone

1. In the Control Panel window, choose the Date/Time icon.
2. In the Time Zone box, select the correct time zone for your area.  
  
If your area uses daylight saving time, select the check box to automatically adjust the time.
3. In the Date box, select the part of the date (day, month, or year) you want to change, and then type a new value, or click the up or down arrow.
4. In the Time box, select the part of the time (hour, minute, second, suffix) you want to change, and then type the new value, or click the up or down arrow.
5. Choose the OK button.

For help with the Date/Time dialog box, choose the Help button or press F1 while using the dialog box.

## **Changing the Format of Date and Time**

You can control the way the date and time are displayed in applications by using the Date and Time options in the International dialog box. For example, you can vary the order of the month, day, and year, or display the time in a 12-hour or 24-hour format.

### **To change the date and time format**

1. In the Control Panel window, choose the International icon.
2. Under Date Format, or under Time Format, choose the Change button.
3. Set the options you want for both the Short Date Format and Long Date Format.
4. Set the options you want for the Time Format.
5. Choose the OK button, and then choose the OK button from the International dialog box.

For help with the International-Date Format and International-Time Format dialog boxes, choose the Help button or press F1 while using the dialog box.

## **Adjusting the Keyboard Delay and Repeat Rate**

You can adjust how long your computer waits after you hold down a key before it repeats that key, and then how fast the key repeats.

### **To change the keyboard delay and repeat rate**

1. In the Control Panel window, choose the Keyboard icon.
2. Drag the Delay box toward Long or Short to increase or decrease the delay, or click the appropriate scroll arrow.
3. Drag the Repeat Rate box toward Fast or Slow to increase or decrease the repeat rate, or click the appropriate scroll arrow.
4. To test the speed, move to the Test box and type or hold down any key on the keyboard. Adjust the box positions until you reach a delay speed or repeat rate you are comfortable with.
5. Choose the OK button.

For help with the Keyboard dialog box, choose the Help button or press F1 while using the dialog box.

## **Adjusting the Cursor Blink Rate**

You can adjust how fast or slow the cursor blinks.

### **To change the cursor blink rate**

1. In the Control Panel window, choose the Desktop icon.
2. In the Cursor Blink Rate area, drag the scroll box or click the right or left scroll arrow to change the blink rate.
3. Choose the OK button.

For help with the Desktop dialog box, choose the Help button or press F1 while using the dialog box.

## **Changing the Cursor Appearance**

You can change the look of your cursor with animated or static cursors provided by Windows NT.

### **To change your cursor**

1. In the Control Panel window, choose the Cursors icon.
2. In the Cursors dialog box, select an action whose cursor you want to change.
3. Choose the Browse button.
4. In the Directories and Drives boxes of the Browse dialog box, select the drive and directory that contains the cursor files you want to view.
5. In the File Name box, select a file. An example of what the cursor looks like appears in the Preview Window.
6. Choose the OK button to return to the Cursors dialog box.
7. Change the cursors for any other actions and then choose the OK button.
8. To reset the selected action to the system default cursor, choose the Set Default button.

For help with the Cursors dialog box, choose the Help button or press F1 while using the dialog box.

## **Customizing Your Mouse or Other Pointing Device**

You can adjust the way Windows NT works with pointing devices, depending on the type of pointing device you are using. Before customizing your pointing device, you need to install it and its driver. For more information, see the documentation for your pointing device.

### **To customize your pointing device**

1. In the Control Panel window, choose the icon for your pointing device.

A dialog box appears for the device you are using.

2. Set the options you want, and then choose the OK button.

The options vary, depending on the pointing device you are using. For details about the options and their settings, see the documentation for your pointing device or use the Help feature if available.

## Specifying Basic Serial-Port Settings

Use the Settings dialog box to specify the baud rate, data bits, parity, stop bits, and flow-control settings for the selected serial port.

### To specify serial-port settings

1. In the Control Panel window, choose the Ports icon.
2. Double-click the port you want to use, or select the port and choose the Settings button.
3. Display the options for each setting by clicking the scroll arrow to the right of each box.
4. Set the options to match the device connected to the port.

For information about the correct settings, see the documentation supplied with the device.

5. Choose the OK button.
6. Choose the Close button.

For help with the Settings dialog box, choose the Help button or press F1 while using the dialog box.

See Also

[Specifying Advanced Serial-Port Settings](#)

## Specifying Advanced Serial-Port Settings

Use the Advanced Settings dialog box to specify an I/O address and an interrupt request line (IRQ) for your serial port, change the port number of a port, and specify to use buffering of incoming data to increase performance.

### To set advanced port options

1. In the Control Panel window, choose the Ports icon.
2. Double-click the port you want to use, or select the port and choose the Settings button.
3. Choose the Advanced button.
4. Change the base I/O address if your serial-port hardware uses address values other than the values that Windows NT detects.
5. If you are using a computer that cannot access COM1 and COM3 or COM2 and COM4 simultaneously, and you want to use these ports, specify a unique IRQ number for each port.
6. Change the port number of a port, for example change COM3 to COM253.
7. Select the FIFO Enabled checkbox to use buffering of incoming data and enable some additional functionality on newer COM ports.
8. Choose the OK button.

Any changes you make will not take effect until you restart Windows NT.

9. To make your changes take effect now, choose the Restart Now button.

For help with the Settings and Advanced Settings dialog boxes, choose the Help button or press F1 while using the dialog boxes.

See Also

[Specifying Basic Serial-Port Settings](#)

## Assigning Sounds to Events

You can assign sounds to different system and application events. For example, you can select a sound to play whenever you start Windows NT. You can also turn sounds and the warning beep on or off. The sounds you can assign are stored in files that have the .WAV extension.

Note: If you do not have a sound board installed or the sound driver is not configured properly, you will hear a warning beep when an error is encountered or you attempt to do something your computer does not recognize. Windows NT does not support playing waveform sounds through the PC speaker; therefore, if you do not have sound hardware, the Test button will appear gray. It is possible to select sounds before you have installed a Sound card, but they won't play until the card is actually installed.

### To assign sounds to events

1. In the Control Panel window, choose the Sound icon.
2. In the Events box, select the event that you want to assign a sound.
3. In the Files box, select the sound file you want to use.

If the file you want is not listed, select the drive and directory where the file is located by scrolling in the Files dialog box, and then select the file. If you do not want to assign a sound to the event, select None.

4. To hear the sound, choose the Test button or double-click the event or filename.
5. To turn the warning beep and all sounds on or off, except for those assigned to Windows NT Exit and Windows NT Start, select or clear the Enable System Sounds check box.
6. Choose the OK button.

For help with the Sound dialog box, choose the Help button or press F1 while using the dialog box.

## Selecting a MIDI Setup

If you are using an application, such as Media Player, that uses [MIDI setups](#) to play MIDI files, you need to select the MIDI setup for the synthesizer you are using.

### To select a MIDI setup

1. In the Control Panel window, choose the MIDI Mapper icon.
2. In the MIDI Mapper dialog box, open the Name list, and then select the setup you want to use.
3. Choose the Close button.

Note: For a MIDI setup to take effect, the application you are using to play MIDI files or send MIDI information must use the MIDI Mapper. Also, the application must send patch-select messages or a MIDI file must include them. MIDI files authored for Windows NT meet these requirements. Check your application's documentation or contact the vendor of your MIDI files if you are not sure.

For help with the MIDI Mapper dialog box, choose the Help button or press F1 while using the dialog box.

See Also

[Creating a MIDI Setup](#)

[Editing Setups, Patch Maps, and Key Maps](#)

[Deleting Setups, Patch Maps, and Key Maps](#)

## Creating a MIDI Setup

If you are using a MIDI synthesizer for which Windows NT does not provide a MIDI setup, you need to create one.

Before creating a MIDI setup, set up the synthesizer to receive MIDI messages on multiple MIDI channels and determine whether your synthesizer is a base-level synthesizer or an extended-level synthesizer, or is capable of playing general MIDI files. For more information about the capabilities of your synthesizer, see your synthesizer manual.

Note: To use the MIDI Mapper option, you should have a basic understanding of MIDI concepts and terminology. It is recommended that you not use the MIDI Mapper to create MIDI setups unless you are experienced with MIDI and understand the results of the changes you make.

There are several steps involved in creating a new MIDI setup. You need to perform these steps in the following order:

-  Create a key map.
-  Create patch maps.
-  Specify channel mappings.

## Creating Key Maps

If you are creating a MIDI setup for a synthesizer that does not use the General MIDI key definitions, you need to create a new key map for percussion instruments. If the synthesizer plays certain sounds at registrations that differ from General MIDI definitions (for example, playing a patch a fifth higher than General MIDI specifies), you may also need to create a melodic key map for registration changes.

### To create a key map

1. In the Control Panel window, choose the MIDI Mapper icon.
2. In the Show area of the MIDI Mapper dialog box, select the Key Maps option.
3. Choose the New button.
4. In the New MIDI Key Map dialog box, type a name and description for the new key map in the text boxes.
5. Choose the OK button.
6. In the MIDI Key Map dialog box, specify the destination keys required by your synthesizer.
7. Choose the OK button.
8. Choose the Yes button to confirm the changes.

For help with the MIDI Mapper, New MIDI Key Map, and MIDI Key Map dialog boxes, choose the Help button or press F1 while using the dialog boxes.

Next Step

Create Patch Maps.

## Creating Patch Maps

If your synthesizer's patch list differs from the General MIDI patch definitions, you need to create two patch maps: One for melodic instruments and one for percussion instruments.

### To create a patch map

1. If you are not already in the MIDI Mapper dialog box, choose the MIDI Mapper icon in the Control Panel window.
2. In the Show area of the MIDI Mapper dialog box, select the Patch Maps option.
3. Choose the New button.
4. In the New MIDI Patch Map dialog box, type a name and description for the new patch map in the text boxes.
5. Choose the OK button.
6. If the patch numbers for your synthesizer start at 1 rather than at 0, choose the 1 Based Patches button in the MIDI Patch Map dialog box.
7. Assign a destination patch, volume level, and key map to the source patches.
8. When you are finished, choose the OK button.
9. Choose the Yes button to confirm the changes.
10. To create the second patch map, repeat steps 3 through 9.

For help with the MIDI Mapper, New Patch Map, and MIDI Patch Map dialog boxes, choose the Help button or press F1 while using the dialog boxes.

Next Step

Specify Channel Mappings.

## Specifying Channel Mappings

Once you have created the patch maps and key maps required by your synthesizer, you can specify the channel mappings for the new MIDI setup.

The MIDI Mapper lists 16 channels. However, not all synthesizers can use all channels. Base-level synthesizers use source channels 13 through 16. Channels 13 through 15 are the melodic channels and 16 is the percussive channel. Extended-level synthesizers use source channels 1 through 10. Channels 1 through 9 are the melodic channels and 10 is the percussive channel.

### To specify the channel mapping

1. If you are not already in the MIDI Mapper dialog box, choose the MIDI Mapper icon in the Control Panel window.
2. In the Show area of the MIDI Mapper dialog box, select the Setups option.
3. Choose the New button.
4. In the New MIDI Setup dialog box, type a name and description for the new setup in the text boxes.
5. Choose the OK button.
6. In the MIDI Setup dialog box, specify a destination channel, a port name, and a patch map for a each source channel used by your synthesizer.
7. Choose the Yes button to confirm the changes.
8. In the MIDI Mapper dialog box, choose the OK button.

For help with the MIDI Mapper, New MIDI Setup, and MIDI Setup dialog boxes, choose the Help button or press F1 while using the dialog boxes.

## Editing Setups, Patch Maps, and Key Maps

You can edit the [patch maps](#), [key maps](#), and channel mapping for an existing [MIDI setup](#). Generally, you should not need to do this, unless you are not getting the sounds you expect, or you want to use a setup provided by Windows NT and the setup specifies different port assignments than those used by your synthesizer.

### To edit patch maps, key maps, or channel mapping

1. In the Control Panel window, choose the MIDI Mapper icon.
2. In the Show area of the MIDI Mapper dialog box, select the Setups, Patch Maps, or Key Maps option, depending on the type of map you want to edit.
3. Open the Name list, and then select the name of the channel mapping, patch map, or key map you want to edit.
4. Choose the Edit button.
5. In the dialog box, make any changes you want.
6. Choose the OK button.
7. Choose the Yes button to confirm your changes.
8. In the MIDI Mapper dialog box, choose the Close button.

For help with the MIDI Mapper or editing dialog boxes, choose the Help button or press F1 while using the dialog boxes.

See Also

[Creating a MIDI Setup](#)

[Deleting Setups, Patch Maps, and Key Maps](#)

## Deleting Setups, Patch Maps, and Key Maps

If you are not using a particular [patch map](#), [key map](#), or [MIDI setup](#), you can delete it.

You cannot delete (1) the current setup (the setup that is listed in the Name box when the MIDI Mapper dialog box first appears), (2) a key map that is used in a patch map, or (3) a patch map that is used in a MIDI setup. Before deleting key maps and patch maps, make sure that an existing patch map or setup does not reference the key map or patch map you want to delete.

### To delete a setup, patch map, or key map

1. In the Control Panel window, choose the MIDI Mapper icon.
2. In the Show area of the MIDI Mapper dialog box, select the Setups, Patch Maps, or Key Maps option, depending on the type of map you want to delete.
3. Open the Name list, and then select the name of the setup, patch map, or key map you want to delete.
4. Choose the Delete button.
5. Choose the Yes button to confirm the deletion.
6. In the MIDI Mapper dialog box, choose the Close button.

For help with the MIDI Mapper dialog box, choose the Help button or press F1 while using the dialog box.

See Also

[Selecting a MIDI Setup](#)

[Creating a MIDI Setup](#)

[Editing Setups, Patch Maps, and Key Maps](#)

## Color

By using the Color option, you can change the colors of Windows NT screen elements.

Choose one of the following buttons for information about the Color dialog box:

- [Color Schemes](#)
- [Save Scheme](#)
- [Remove Scheme](#)
- [Sample Screen](#)
- [Color Palette Button](#)

When you choose the Color Palette button, the Color dialog box expands, displaying these additional options:

- [Screen Element](#)
- [Basic Colors](#)
- [Custom Colors](#)
- [Define Custom Colors Button](#)

See Also

[Using Existing Color Schemes](#)

[Changing Existing Color Schemes](#)

## Save Scheme

Use this dialog box to save the changes you have made to the selected color scheme, or to save a new color scheme you have created.

- ▶ To change the selected color scheme, leave the text box as it is, and then choose the OK button.  
To create a new color scheme, type a name for your scheme in the text box, and then choose the OK button.

See Also

[Changing Existing Color Schemes](#)

## Custom Color Selector

Use this dialog box to create a color and add it to the Custom Colors palette. You create a color by adjusting its hue, saturation, and luminosity or by specifying its red, green, and blue values.

Choose one of the following buttons for information about the dialog box:

-  [Color Refiner Box](#)
-  [Luminosity Bar](#)
-  [Color/Solid Box](#)
-  [Hue, Sat, Lum](#)
-  [Red, Green, Blue](#)
-  [Add Color Button](#)

See Also

[Creating Your Own Colors](#)

## Date/Time

By using the Date/Time option, you can change the date, time, and time zone of your system's clock. You can also select whether or not you want the computer to automatically switch to Daylight Saving Time. The format of the date and time is set with the Date and Time Format options in the International dialog box.

It is important that your system date and time are always accurate. Many applications, including File Manager and Clock, use your system date and time to record important information. Before setting the date and time on your system, you must set the correct time zone

Choose one of the following buttons for information about the Date/Time dialog box:

- [Time Zone](#)
- [Date](#)
- [Time](#)
- [Automatically Adjust for Daylight Saving Time](#)

See Also

[Changing the System Date, Time, and Time Zone](#)

[Changing the Format of Date and Time](#)

## Cursors

Use this dialog box to change the look of your cursor with static or animated cursors provided by Windows NT.

Choose one of the following buttons for information about the Cursors dialog box:

- [System Cursors](#)
- [Information Area](#)
- [Preview Window](#)
- [Browse Button](#)
- [Set Default Button](#)

See Also

[Changing the Cursor Appearance](#)

## Browse

Use the Browse dialog box to specify the path to a cursor file you would like to open.

Choose one of the following buttons for information about the dialog box:

- File Name
- List Files of Type
- Directories
- Drives
- Network Button

## Printers

Use Print Manager to:

-  Install and configure printers
-  Connect to printers on the network
-  Control printing of documents
-  Remotely administer printers

In Print Manager, each printer you have installed or to which you are connected appears in its own window. Printer windows show you the current activity of the printer, including a list of the documents waiting to be printed. You can use Print Manager to pause and resume printing, arrange the order in which waiting documents are printed, and remove documents that are waiting to print.

If you have several printers available to you on the network, you can use Print Manager to find one that is ready to print and then connect to it.

Use Print Manager to share printers on the network, control access to printers, and set other printer properties such as the hours the printer is available to print.

Print Manager also allows you to remotely install and administer printers by viewing print servers. Like printers, each server appears in its own window. Server windows show the printers connected to the server.

## Desktop

By using the Desktop option, you can change the look of your desktop. For example, you can specify a background pattern or wallpaper, a screen saver, the cursor blink rate, icon spacing, grid size, and border width.

Choose one of the following buttons for information about the Desktop dialog box:

- Pattern
- Applications
- Screen Savers
- Wallpaper
- Icons
- Sizing Grid
- Cursor Blink Rate

## Screen Savers

Use these options to select and customize a screen saver to display while you are not actively using Windows NT. You can use the screen savers provided with Windows NT, or you can use the IdleWild screen savers included in the Microsoft Entertainment Pack.

To use the IdleWild screen savers, the IWLIB.DLL file and the screen-saver files (those with the extension .IW) must be in the same directory. Place these files in your WINNT directory. If you wish, these files may be placed in another directory, but the directory must be included in your path.

Choose one of the following buttons for information about the screen-saver options:

- [Name](#)
- [Delay](#)
- [Test Button](#)
- [Setup Button](#)
- [Password Protected Box](#)

## Pattern

Use this option to select a pattern as the desktop background. Windows NT provides several patterns for you to choose from.

 In the Name box, select the pattern you want to use and choose the OK button.

If you are using a mouse, you can change an existing pattern or create your own.

 To edit or create a pattern, choose the Edit Pattern button, and then complete the Edit Pattern dialog box.

## Applications

Use this option to turn fast application-switching on or off.

- Select the Fast "Alt+Tab" Switching check box to turn on fast task-switching.

When fast application-switching is active, you can use the ALT+TAB keys to view and switch among applications quickly.

- Press and hold down ALT and press TAB repeatedly to display the name of the next application Windows NT will switch to.

When you reach the name of the application you want to use, release ALT+TAB to switch to that application. If the application is running as an icon, it is restored.

If, while pressing ALT+TAB, you want to return to your original application, do the following:

- Keep holding down ALT, and then press ESC.

## Wallpaper

Use this option to change the desktop background to a wallpaper bitmap. For wallpapers, you can use bitmaps created by Paintbrush or any other painting application that produces .BMP files.

 Open the File list, and then select the wallpaper file you want to use.

Use the Center or Tile option to position the wallpaper on your screen.

 Select Center to position the wallpaper in the center of your screen.

 If you selected a small wallpaper bitmap that is easily hidden by application windows, select Tile. This option repeats the bitmap as many times as is necessary to cover the entire screen.

If you select both a pattern and custom wallpaper in the Desktop dialog box, the wallpaper overlays the pattern.

## Icons

Use this option to specify spacing between icons and whether the icon title wraps onto another line.

In the Spacing box, click the up or down arrow to increase or decrease the number by one. Or type a number.

Icon spacing is measured in pixels, or pels. The maximum value you can specify is 512 pixels.

Select the Wrap Title check box to wrap the icon descriptions onto another line.

## Sizing Grid

Use the options in the Sizing Grid area to specify the width of window borders and to set the spacing of the invisible grid that Windows NT uses to line up windows and icons on the desktop.

Choose one of the following buttons for information about the options in this area:

 [Granularity](#)

 [Border Width](#)

## Cursor Blink Rate

Use this option to specify how fast the text cursor blinks.



Drag the scroll box toward Fast or Slow to increase or decrease the cursor blink rate. Or use the RIGHT and LEFT ARROW keys.

## Edit Pattern

Use the Edit Pattern dialog box to create a new pattern, change, or remove existing patterns.

Choose one of the following buttons for information about the Edit Pattern dialog box:

- [Name](#)
- [Editing Cell](#)
- [Add Button](#)
- [Change Button](#)
- [Remove Button](#)

Note: You must use a mouse to change or create patterns. You cannot do this with the keyboard.

## Marquee Setup

Use this dialog box to change the settings for the Marquee screen saver. The Marquee screen saver displays a line of moving text across the screen. You specify the text you want displayed. As you change settings, your changes appear in the Text Example box.

Choose one of the following buttons for information about the dialog box:

- Position
- Background Color
- Speed
- Text
- Format Text Button

## Format Text

Use the Format Text dialog box to change the font used in the Marquee screen-saver text.

Choose one of the following buttons for information about the dialog box:

- Font
- Font Style
- Size
- Effects
- Color
- Sample

## Mystify Setup

Use this dialog box to change the settings for the Mystify screen saver. The Mystify screen saver displays shapes on the screen in colors that you specify.

Choose one of the following buttons for information about the dialog box:

- Shape
- Active
- Lines
- Colors to Use
- Clear Screen

## Starfield Simulation Setup

Use this dialog box to change the settings for the Starfield Simulation screen saver. The Starfield Simulation screen saver displays stars that move at a speed you specify.

Choose one of the following buttons for information about the dialog box:

Warp Speed

Starfield Density

## Flying Windows Setup

Use this dialog box to change the settings for the Flying Windows screen saver. The Flying Windows screen saver displays the Windows NT logo moving at a speed you specify.

Choose one of the following buttons for information about the dialog box:

Warp Speed

Density

## Beziers Setup

Use this dialog box to change the settings for the Beziers screen saver. The Beziers screen saver displays a three dimensional moving object at a speed you specify. Choose one of the following buttons for information about the dialog box:

Length

Width

Speed

## Fonts

Use the Fonts option to add fonts to and remove fonts from your Windows NT applications, and to set TrueType options.

Choose one of the following buttons for information about the Fonts dialog box:

-  [Installed Fonts](#)
-  [Sample](#)
-  [Add Button](#)
-  [Remove Button](#)
-  [TrueType Button](#)

See Also

[Adding Fonts](#)

[Removing Fonts](#)

[Setting TrueType Options](#)

## TrueType

Use this dialog box to specify whether to use TrueType fonts exclusively.

If you are not using certain fonts in your documents, turning them off frees memory for your applications. Turning off fonts does not remove them from your system.

Choose the following button for information about the dialog box:

Show Only TrueType Fonts in Applications

See Also

[Setting TrueType Options](#)

## Add Fonts

Use this dialog box to add additional [screen](#) or [TrueType](#) fonts that you might purchase or receive with another application.

Choose one of the following buttons for information about the dialog box:

- [List of Fonts](#)
- [Directories](#)
- [Drives](#)
- [Copy Fonts to Windows Directory](#)
- [Select All Button](#)

See Also

[Adding Fonts](#)

## International

By using the International option, you can specify international settings for applications that use these settings.

Choose one of the following buttons for information about the dialog box:

- [Country](#)
- [Language](#)
- [Keyboard Layout](#)
- [Measurement](#)
- [List Separator](#)
- [Date Format](#)
- [Currency Format](#)
- [Time Format](#)
- [Number Format](#)

## Date Format

Use the Date Format dialog box to specify the date format used in Windows NT applications.

### Short Date Format

The short date format displays the date as three numbers, representing month, day, and year; for example, 10/07/92.

The Short Date Format includes the following areas:

- Order
- Separator
- Day Leading Zero
- Month Leading Zero
- Century

### Long Date Format

The long date format displays the date as a combination of words and numbers; for example, Monday, October 14, 1992.

The Long Date Format includes the following areas:

- Order
- Day of the Week
- Month
- Day of the Month
- Year
- Separators (3)

## Time Format

Use the Time Format dialog box to specify the time format for Windows NT applications.

Choose one of the following buttons for information about the dialog box:

- 12 Hour or 24 Hour
- Separator
- Leading Zero

## Number Format

Use this dialog box to specify the format for displaying numbers in Windows NT applications.

Choose one of the following buttons for information about the dialog box:

- 1000 Separator
- Decimal Separator
- Decimal Digits
- Leading Zero

## Currency Format

Use this dialog box to specify the format for displaying currency in Windows NT applications.

Choose one of the following buttons for information about the dialog box:

- Symbol Placement
- Negative
- Symbol
- Decimal Digits

## Keyboard

By using the Keyboard option, you can specify how long your computer waits after you press and hold down a key to repeat that key, and how fast the key repeats.

Choose one of the following buttons for information about the dialog box:

 [Delay Before First Repeat](#)

 [Repeat Rate](#)

 [Test](#)

See Also

[Adjusting the Keyboard Delay and Repeat Rate](#)

## Mouse

By using the Mouse option, you can change the options for your mouse.

Choose one of the following buttons for information about the dialog box:

-  [Mouse Tracking Speed](#)
-  [Double Click Speed](#)
-  [Swap Left/Right Buttons](#)

See Also

[Customizing Your Mouse or Other Pointing Device](#)

## Ports

By using the Ports option, you can specify the communications settings for the serial (COM) port you select.

 Select the name of the port for which you want to specify communications settings and choose the Settings button.

 To add a new serial port to your system, choose the Add button.

See Also

[Specifying Basic Serial-Port Settings](#)

## Port Settings

Use this dialog box to specify the communications settings for the selected serial (COM) ports.

Choose one of the following buttons for information about the dialog box:

- [Baud Rate](#)
- [Data Bits](#)
- [Parity](#)
- [Stop Bits](#)
- [Flow Control](#)
- [Advanced Button](#)

See Also

[Specifying Basic Serial-Port Settings](#)

## Advanced Port Settings

Use this dialog box to specify the I/O addresses and the interrupt request line (IRQ) for the selected port, change the port number of a port, and specify to use buffering of incoming data to increase performance.

If you are adding a new port, the settings for Base I/O Port Address and IRQ that appear are the recommended choices, not default settings. In the Base I/O Port Address box, the first two addresses, 3F8 and 2F8, are usually reserved for COM1 and COM2. If you use these addresses for a port you have created, your COM1 or COM2 ports may not function.

Choose one of the following buttons for information about the dialog box:

- COM Port Number
- Base I/O Port Address
- Interrupt Request Line (IRQ)
- FIFO Enabled

The changes you make in this dialog box do not take effect until you restart Windows NT. When you choose the OK button, a dialog box appears, asking whether you want to restart Windows NT.

- To restart Windows NT, choose the Restart Now button.
- To stay in your current Windows NT session, choose the Don't Restart Now button.

See Also

[Specifying Advanced Serial-Port Settings](#)

### **COM Port Number**

You can change the port number of a port. Windows NT supports a maximum of 256 COM ports. Any new ports that are added must be between 3 and 256, since COM1 and COM2 are the only two reliably directed COM ports recognized by most BIOS.

**FIFO Enabled**

A checkbox to enable the serial chip (UART) to use on-chip buffering of incoming data and to allow some additional functionality for newer COM ports. This helps to avoid overrun errors that could force data to be resent, and hence slow down overall throughput on the port.

## Browse

Use this dialog box to find and select the drive and directory where the driver file is located.

-  Open the Drives list, and then select the drive that contains the driver file. The Directories list displays the directories on the selected drive.
-  Open the Directories list, and then select the directory that contains the driver file.

## Sound

Use the Sound option to assign sounds to system and application events and to turn the Windows NT warning beep and system sounds on or off. Windows NT does not support playing waveform sounds through the PC speaker; therefore, if you do not have sound hardware, the Test button will appear gray. It is possible to select sounds before you have installed a Sound card, but they won't play until the card is actually installed.

Choose one of the following buttons for information about the dialog box:

- [Event](#)
- [Files](#)
- [Enable System Sounds](#)
- [Test Button](#)

See Also

[Assigning Sounds to Events](#)

## MIDI Mapper

You can use the MIDI Mapper option to select a MIDI setup for a sound device, create a new setup, or edit existing [key maps](#), [patch maps](#), and channel mappings. Windows NT supplies MIDI setups for the sound devices it supports.

Choose one of the following buttons for information about the dialog box:

- [Show](#)
- [Name](#)
- [Delete Button](#)
- [Edit Button](#)
- [New Button](#)

### Warning

Do not use the MIDI Mapper option to create or edit MIDI setups unless you have a basic understanding of MIDI concepts and terminology and understand the results of the changes you make.

See Also

[Selecting a MIDI Setup](#)

[Creating a MIDI Setup](#)

[Editing Setups, Key Maps, and Patch Maps](#)

[Deleting Setups, Key Maps, and Patch Maps](#)

## MIDI Setup

Use this dialog box to specify channel mappings for a new or existing MIDI setup.

Choose one of the following buttons for information about the dialog box:

- [Src Chan](#)
- [Dest Chan](#)
- [Port Name](#)
- [Patch Map Name](#)
- [Active](#)

See Also

[Editing Setups, Key Maps, and Patch Maps](#)

[Specifying Channel Mappings](#)

## MIDI Patch Map

Use this dialog box to edit or create a [patch map](#). If you are creating a new MIDI setup for a synthesizer whose patch list differs from the [General MIDI](#) patch definitions, you need to create two patch maps: One for melodic instruments and one for percussion instruments.

Choose one of the following buttons for information about the dialog box:

- [1 Or 0 Based Patches Button](#)
- [Src Patch](#)
- [Src Patch Name](#)
- [Dest Patch](#)
- [Volume %](#)
- [Key Map Name](#)

See Also

[Creating Patch Maps](#)

[Editing Setups, Patch Maps, and Key Maps](#)

## MIDI Key Map

Use this dialog box to edit or create a [key map](#). If you are creating a new MIDI setup for a synthesizer whose percussion key definitions differ from [General MIDI](#), you need to create a key map for percussion instruments.

If your synthesizer plays certain sounds at registrations that differ from General MIDI definitions (for example, if your synthesizer plays a patch a fifth higher than General MIDI specifies), you may also need to create a key map for registration changes.

Choose one of the following buttons for information about the dialog box:

- [Src Key](#)
- [Src Key Name](#)
- [Dest Key](#)

See Also

[Creating Key Maps](#)

[Editing Setups, Patch Maps, and Key Maps](#)

## New MIDI Setup

Use this dialog box to specify a name and a description for the MIDI setup you want to create.



Type a name for the setup in the Name box. The name can be up to 15 characters long.



Type a description of the setup in the Description box. The description can be up to 31 characters long.

When you choose the OK button, a dialog box appears in which you can specify the channel mapping for the new setup.

## New MIDI Patch Map

Use this dialog box to specify a name and a description for the patch map you want to create.

 Type a name for the patch map in the Name box. The name can be up to 15 characters long.

 Type a description of the patch map in the Description box. The description can be up to 31 characters long.

When you choose the OK button, a dialog box appears in which you can specify the settings for the new patch map.

## New MIDI Key Map

Use this dialog box to specify a name and a description for the key map you want to create.



Type a name for the key map in the Name box. The name can be up to 15 characters long.



Type a description of the key map in the Description box. The description can be up to 31 characters long.

When you choose the OK button, a dialog box appears in which you can specify the settings for the new key map.

## Drivers

Use the Drivers option to install, remove, and configure drivers that control additional devices, such as sound cards and video players, that you add to your system.

Choose one of the following buttons for information about the dialog box:

-  [Installed Drivers](#)
-  [Add Button](#)
-  [Remove Button](#)
-  [Setup Button](#)

See Also

[Installing Device Drivers](#)

[Removing Device Drivers](#)

[Setting Driver Options](#)

## **Exit**

Quits Control Panel.

## **Contents**

Starts Help and displays the topics in Control Panel Help.

## **Search for Help on**

Opens the Search dialog box for Control Panel Help. You can look up Help information by using keywords in this dialog box.

## **How to Use Help**

Describes how to use Help.

## **About Control Panel**

Displays version, mode, and copyright information about Windows NT.

## **Control Menu**

The Control menu contains the following commands:

### **Restore**

Restores the window to its former size after it has been maximized or minimized.

### **Move**

Enables you to use the keyboard to move the window to another position.

### **Size**

Enables you to use the keyboard to change the size of the window.

### **Minimize**

Reduces the window to an icon.

### **Maximize**

Enlarges the window to its maximum size.

### **Close**

Quits Control Panel, or closes a window or dialog box.

### **Switch To**

Opens Task List, which you can use to switch between running applications and to rearrange their windows and icons on your desktop.

## **The WIN.INI File**

The WIN.INI file is an initialization file that provides Windows NT with information about your system configuration, such as the type of printer and pointing device you are using, and about software options, such as network options and how your screen should look while Windows NT is running. Windows NT searches the WIN.INI file for your system's configuration and software options so that Windows NT will run the way you want it to.

## Color Schemes

Windows NT provides several predefined color schemes that you can use to change the colors of several screen elements at once. You can also change the color of one element at a time, modify the existing color scheme, or create a new one by saving your changes.



1. Open the list, and then select the color scheme you want to use.  
The colors in the sample screen change to show you how the new color scheme will look.

## Save Scheme Button

You can modify an existing color scheme by changing the color of particular screen elements and then saving your changes. You can also create a new color scheme by saving your changes under a new name.



Choose the Save Scheme button to save your changes.

## Remove Scheme Button

If you are not planning to use a color scheme, you can remove it from the Color Schemes list.



Choose the Remove Scheme button to remove the selected color scheme.

## Sample Screen

The sample screen displays the currently selected screen element colors. The colors of each screen element change to match the color scheme you select.



If you have a mouse, click the screen element you want to select. If you are using the keyboard, use the Screen Element list to select an element.

### **Color Palette Button**

The Color dialog box includes an expanded dialog box from which you can choose colors for individual screen elements.



Choose the Color Palette button to display the rest of the Color dialog box.

## Screen Element

The Screen Element box displays a list of the screen elements whose colors you can change.



Open the list, and then select the screen element you want to change. Or click the element in the sample screen.

## Basic Colors

Basic Colors is a palette of the preset colors available for your screen.



Click the color you want to use.

Or press `TAB` to move to the palette, use the arrow keys to move to the color you want, and then press the `SPACEBAR` to select the color.

For some screen elements, Windows NT uses only solid colors. If you select a nonsolid color (a color produced by a pattern of dots that simulate the desired color) for the following screen elements, Windows NT will use the solid color that most closely matches the selected nonsolid color:



Window Frame



Window Text



Window Background



Menu Bar



Menu Text



Button Text



Button Face



Button Shadow



Button Highlight



Highlight



Highlighted Text



Title Bar Text

## Custom Colors

Custom Colors is a palette of any colors you have created in the Custom Color Selector dialog box. A new color is added to the selected square after you have defined the custom color.



Click the color or empty square you want to use.

Or press `TAB` to move to the palette, use the arrow keys to move to the color or square you want, and then press the `SPACEBAR` to select the color or square.

### **Define Custom Colors Button**



Choose this button to display the Custom Color Selector dialog box for creating your own custom colors.

### **Color Refiner Box**

The Color Refiner box shows all the nonsolid colors (colors that are produced by a pattern of dots that simulate the desired colors) available for your system.



Drag the color refiner cursor to the area of the box that shows the color you want. If you are using the keyboard, adjust the values for Hue and Sat.

The color is shown on the left side of the Color/Solid box. The closest solid color appears on the right.

### **Luminosity Bar**

 Drag the arrow up or down to adjust the luminosity of the color. If you are using the keyboard, type a value in the Lum box.

The luminosity change is shown to the left of the Color/Solid box.

### **Color/Solid Box**

This box shows the changes you make to the hue, saturation, and luminosity of a color. As you make changes, the new nonsolid color is displayed on the left side of the box. The right side of the box shows the solid color closest to the selected color.



Double-click the right side of the box to select the solid color.

## Hue, Sat, and Lum

These options show the number values for the hue, saturation, and luminosity of the selected color.

 Type values in these boxes or click the arrows to the right of each box to increase or decrease the value.

The color refiner cursor and the arrow for the luminosity bar move to reflect the new values.

## Red, Green, and Blue

These options show the numbers for the red, green, and blue values of the selected color.



Type values in these boxes. Or click the arrows to the right of each box to increase or decrease the values.

The color refiner cursor and the arrow for the luminosity bar move to reflect the new values.

### **Add Color Button**



Choose the Add Color button to add the new color to the selected square in the Custom Colors palette.

## Date



To change the date, select the month, day, or year, and then type a new value.  
Or click the up or down arrow to increase or decrease the selected number by one.

## Time



To change the time, select the hours, minutes, or seconds, and then type a new value. Or click the up or down arrow to increase or decrease the selected number by one.

**Automatically Adjust for Daylight Saving Time**

Select the check box if your area uses daylight saving time.

### **Time Zone**



Use the scroll box to view the available choices and then select the appropriate zone for your area.

## System Cursors

The System Cursors box shows each cursor and the action it is associated with.



Select an action whose cursor you want to change, and then choose the Browse button.

## **Information Area**

The information area appears at the bottom of the Cursors dialog box. If you choose a static cursor, the file where the cursor came from is shown. If you choose an animated cursor, additional information about the title and creator appear. For default cursors, no information is available.

## **Preview Window**

The preview window box shows an example of the selected cursor.

## **Browse Button**

Use the Browse Button to view and select cursors.



Select an action and then choose the Browse button.

### **Set Default Button**

Use the Set Default button to change the selected cursor back to the system default cursor. Only the cursor for the selected action changes; all other cursors stay the same.



Select an action and then choose the Set Default button.

**Screen Saver Name**



Open the list, and then select the screen saver you want to use.

### Screen Saver Delay



Click the up or down arrow to increase or decrease the number of minutes of inactivity before the screen saver appears. Or type a number larger than zero in the text box.

### Screen Saver Test Button



Choose the Test button to test the screen saver.

To return to Windows NT, press any key or move your mouse.

### **Screen Saver Setup Button**

 To change the settings for the screen saver, choose the Setup button, and then complete the Setup dialog box.

### **Screen Saver Password Protected Box**

You can ensure that unauthorized users do not have access to your work by password protecting a screen saver.



Check the Password Protected box to turn the password option on.

If someone tries to use your computer once the password protected screen saver is displayed, a Lock Workstation dialog box appears. To unlock the computer, the same password used to log on to the computer must be entered.

## Granularity

Use this option to specify the spacing of the sizing grid. The grid is measured in increments of 8 pixels, or pels.



Click the up or down arrow to increase or decrease the granularity of the grid by one. Or type a number.

You can specify a value between 0 and 49. The smaller the grid setting, the more flexible the placement of windows and icons can be. When this option is set to 0, the grid is turned off.

Note: The sizing grid you specify only affects application windows and icons, not secondary (document) windows and icons. Setting the sizing grid too high may make it difficult to position your windows and icons on the screen.

## Border Width

Use this option to specify the width of the borders around application and document windows.



Click the up or down arrow to increase or decrease the border width by one pixel (pel). Or type a number.

You can specify a value between 1 and 50, with 1 as the narrowest border.

Note: Setting the value for the border width too low may make it difficult to size windows by using the mouse.

## **Name**

This option displays a list of patterns to choose from.



In the Name list, select a pattern for editing, or type a name for the new pattern you want to create.

The pattern you selected appears in the Sample box and an enlarged view appears in the editing cell.

## Editing Cell

This area shows an enlarged view of the selected pattern.



Click each cell in the pattern that you want to change.

The Sample box displays how the pattern will look on your screen.

Note: You must use a mouse to change or create patterns. You cannot do this with the keyboard.

### **Change Button**



Choose this button to save the changes you have made to the selected pattern.

### **Remove Button**



Choose this button to delete the selected pattern.

### Add Button



Choose this button to add a new pattern.

This button is unavailable until you type a new name for the pattern in the Name box.

## **Background Color**



Open the list, and then select the color you want to use for the text background.

To select a color for the text itself, choose the Format Text button, and then select a color from the Color list in the Format Text dialog box.

## Position

Use these options to position the text on your screen.



If you want the text to move across the center of your screen, select the Centered option.  
If you want the text to move across the screen in different places, select the Random option.

## Speed

Use this option to specify how fast you want the text to move across the screen.



Drag the scroll box toward Fast or Slow to increase or decrease the speed. Or use the LEFT and RIGHT ARROW keys.

## **Text**

Use this option to specify the text that you want to display.



Type the text in the box.

### **Format Text Button**

 To select a font and size for the displayed text, choose the Format Text button, and then complete the Format Text dialog box.

## Font



Select a font from the list.

You can see what the font looks like in the Sample box. You can use the other areas in the Format Text dialog box to change the size and the style of the font.

## Font Style



Select any style options you want to apply to the new font.

You can see what the style looks like in the Sample box. You can use the other areas in the Format Text dialog box to change the font and the font size.

## Size



Choose a font size from the list. The larger the size you choose, the larger the characters appear on your screen.

You can see what the size looks like in the Sample box. You can use the other areas of the Format Text dialog box to change the font and the style.

## Effects

 If you want the text to appear with a line through it, select the Strikeout check box. If you want the text to appear underlined, select the Underline check box. You can use both options at the same time.

## Color



Open the list, and then select a color for the text.  
To select a color for the background, use the Background Color option in the Marquee Setup dialog box.

**Sample**

This box shows what the selected font, styles, size, effects, and color would look like in the screen saver.

## Shape

 Open the list, and then select the shape--Polygon 1 or Polygon 2--that you want to specify settings for.

**Active**

Select the Active check box to make the selected shape active.

If the selected shape is not active, it does not appear on your screen when the screen saver is in use. Also, you cannot specify line and color options for it (the Lines and Colors To Use options are unavailable).

## Lines

Use this option to specify the number of lines the selected shape will have.



Click the up or down arrow to increase or decrease the number by one. Or type a number in the box.

## Colors to Use

Use this option to specify the colors of the selected shape.



Select Two Colors to display the selected shape in two alternating colors. Select one color from each list. The color of the shape will alternate between these colors.

Select Multiple Random Colors to display the selected shape in several alternating colors, determined by the screen saver.

### **Clear Screen**

Use this option to specify whether to clear the screen before displaying the shapes. Clearing the screen does not affect your work.

Select this check box to display the shapes on a black background. Clear this check box to display the shapes over your work.

## Warp Speed

Use this option to specify the rate at which the stars move on your screen.



Drag the scroll box toward Fast or Slow to speed up or slow down the rate. Or use the RIGHT and LEFT ARROW keys.

### **Starfield Density**

Use this option to specify the number of stars that are used.



Click the up or down arrow to increase or decrease the number of stars. Or type a number in the box.

## Warp Speed

Use this option to specify the rate at which the windows move on your screen.



Drag the scroll box toward Fast or Slow to speed up or slow down the rate. Or use the RIGHT and LEFT ARROW keys.

## Density

Use this option to specify the number of windows that are used.



Click the up or down arrow to increase or decrease the number of windows. Or type a number in the box between 10 and 200.

### Beziers Length

Use this option to specify the number of Beziers in each loop.



Click the up or down arrow to increase or decrease the number of Beziers, from 1 to 10. Or type a number in the box.

## Beziers Width

Use this option to specify the number of lines in a Bezier.



Click the up or down arrow to increase or decrease the number of lines, from 1 to 100. Or type a number in the box.

## Beziers Speed

Use this option to specify how fast the Beziers revolve around the screen.



Drag the scroll box toward Fast or Slow to speed up or slow down the Beziers. Or use the RIGHT and LEFT ARROW keys.

## Installed Fonts

This area displays a list of fonts that are already installed. You can use fonts supplied by printer and font manufacturers in addition to the screen and printer fonts supplied with Windows NT.



To select a font, click it. Or use the arrow keys.

**Sample**

This area shows a sample of the selected font in all the available sizes, unless it is a plotter font or a TrueType font. Plotter fonts are shown in the point size in which they were created. TrueType fonts are shown in a size of about 14 to 16 points.

### **Remove Button**



Choose the Remove button to remove the selected font from memory and the Installed Fonts list.

Note: The MS Sans Serif font is used for most Windows NT dialog boxes. Do not remove this set, or the text in the dialog boxes will be difficult to read.

## **Add Button**



To add a font, choose the Add button, and then complete the Add Fonts dialog box.

### **TrueType Button**

 To use TrueType fonts exclusively, choose the TrueType button, and then complete the TrueType dialog box.

### **Show Only TrueType Fonts in Applications**

This option lets you list only TrueType fonts for use in your applications, but you are still able to view every font in the Fonts dialog box.

Select this check box to list TrueType fonts exclusively in your Windows NT applications. Turning off all other fonts will free up memory.

Note: Some applications do not support listing TrueType fonts exclusively. If you select this check box and no TrueType fonts appear in your application, do not use this option.

## List of Fonts

This option lists the fonts you can add. You can select and install more than one font at a time.



Select the font you want to add. To select all the fonts at once, choose the Select All button.

If the font you want is not listed, you may have to change drives or directories first.

## Directories

This option lists the directories on the current drive.



Select the directory that contains the fonts you want to add.

When you select a directory that contains fonts, the fonts appear in the List Of Fonts box. If the directory you want does not appear in the list, you may have to change drives first.

## Drives

This option lists the disk and network drives on your computer.



Open the list, and then select the drive that contains the fonts you want to add to your system. When you select a drive, a list of the directories on the drive appears in the Directories list.

### **Copy Fonts to Windows Directory**

This option is useful if you are low on disk space.



Clear this check box if you want to use fonts directly from the drive and directory in which they are located, without copying them into your Windows NT directory.

Select this check box if you want to copy the fonts into your Windows NT directory. This is the default setting and is recommended if you are using fonts that are located on a network or on an external disk drive.

If you select this check box and are running Windows NT from a network, the fonts will be copied to your Windows NT SYSTEM directory.

### Select All Button



Choose the Select All button to add all the fonts in the List Of Fonts box at once.

## Country

This option lists the countries supported by Windows NT.



Open the list, and then select the country with the standard settings you want to use.

When you select a country, the other Format options in the dialog box change to show the formats for that country. In addition, the Page Size option for any printer that you have installed changes to the default page size for that country.

## Language



Open the list, and then select the language you want to work in.

Windows NT applications that provide language-specific tasks, such as sorting or case conversion, use this setting.

## Keyboard Layout

This option lists the keyboard layouts supported by Windows NT. The keyboard layout for a language accommodates the special characters and symbols that are part of the language for that country.



Open the list, and then select the keyboard layout you want to use.

## Measurement



Open the list, and then select the measurement system, English or Metric, that you want to use.

### List Separator



In the box, type the character that you want to use to separate elements in a list.

## **Date Format**

This option shows the way short and long date formats are displayed in Windows NT applications.



To change the format, choose the Change button, and then complete the Date Format dialog box.

## **Time Format**

This option shows the way time is displayed in Windows NT applications.



To change the format, choose the Change button, and then complete the Time Format dialog box.

## Currency Format

This option shows the way currency is displayed in Windows NT applications.



To change the format, choose the Change button, and then complete the Currency Format dialog box.

## Number Format

This option shows the way numbers are displayed in Windows NT applications.



To change the format, choose the Change button, and then complete the Number Format dialog box.

**Short Date Format: Order**

Select the option for the order in which you want the month (M), day (D), and year (Y) to appear in the date.

### Short Date Format: Separator

 In the box, type the character you want to use to separate the month, day, and year. You can specify any character as the separator. The most common separator characters are the slash (/) and the hyphen (-)

**Short Date Format: Day Leading Zero**

Select this check box to specify a two-digit day display.

**Short Date Format: Month Leading Zero**



Select this check box to specify a two-digit month display.

**Short Date Format: Century**



Select this check box to specify a four-digit year display.

### Long Date Format: Order



Select the option for the order in which you want the month (M), day (D), and year (Y) to appear in the date.

**Long Date Format: Day of the Week**



Open the list, and then select a full or abbreviated day-name format.

### **Long Date Format: Month**



Open the list, and then select a full or abbreviated month-name or month-number format.

### Long Date Format: Day of the Month



Open the list, and then select a day format with or without leading zeros.

**Long Date Format: Year**



Open the list, and then select a two- or four-digit year format.

### Long Date Format: Separators (3)

 In the box, type the character you want to use to separate the month, day, and year. You can specify any character as the separator. The most common separator characters are the slash (/) and the hyphen (-)

### **12 Hour or 24 Hour**

 Select the format, 12- or 24-hour clock, that you want to use to display the time. You can select only one format.

If you are using the 12-hour format, type the words or symbols (for example, A.M. or P.M.) that you want to denote before or after noon in the text box.

If you are using the 24-hour format, you can type a suffix (for example, PST for Pacific Standard Time).

### Separator

In the box, type the character you want to use to separate hours, minutes, and seconds. You can use any character. The colon (:) is the most common one used.

### Leading Zero

Select the format for the hours before 10 that you want to use. For example, you can display 9 o'clock as 9:00 or as 09:00. You can select only one format.

### 1000 Separator



In the box, type the character you want to use to separate thousands.

### Decimal Separator



In the box, type the character you want to use to separate decimal digits from whole numbers.

### Decimal Digits



In the box, type the number of digits you want to display to the right of the decimal separator.

### Leading Zero

Select the option (a zero in front of the decimal or no zero in front of the decimal) that you want to use for displaying a number less than 1. You can select only one option.

## Symbol Placement

 Open the list, and then select the placement and spacing of the currency symbol, relative to the currency value.

To specify the currency symbol you want to use, use the Symbol option.

## Negative



Open the list, and then select the format you want to use for negative currency values.

## Symbol



In the box, type the currency symbol that you want to use for the selected country.

To specify the placement of the symbol, use the Symbol Placement option.

### Decimal Digits



In the box, type the number of digits that you want to display after the decimal point.

### **Delay Before First Repeat**

Use this option to adjust how long it takes your computer to repeat a key after you press and hold the key down.



Drag the Delay box toward Long or Short to increase or decrease the delay, or click the appropriate scroll arrow.

## Repeat Rate

Use this option to adjust how fast a key repeats when you press and hold it down.

 Drag the Repeat Rate box toward Fast or Slow to increase or decrease the repeat rate, or click the appropriate scroll arrow.

Note: Some keyboards do not support changes to the repeat rate.

## Test

Use this option to test the new settings for the keyboard delay time and repeat rate.



To test the settings, type any characters you want in the Test box.

## Mouse Tracking Speed

Use this option to adjust the rate at which the pointer travels across the screen.



Drag the scroll box toward Slow or Fast to decrease or increase the rate. Or use the RIGHT and LEFT ARROW keys.

## Double Click Speed

Use this option to adjust the speed at which Windows NT registers a double-click.



Drag the scroll box toward Slow or Fast to decrease or increase the speed. Or use the RIGHT and LEFT ARROW keys.



Double-click the Test button to see whether Windows NT recognizes your double-clicks. If the button changes color, Windows NT recognizes your double-clicks. If it does not change color, decrease the double-click speed.

## Swap Left/Right Buttons

Many applications use the left button as the primary tool for selecting text and choosing items. If you are left-handed, you might find it more convenient to switch the two buttons.



Select the check box to swap left and right mouse buttons. The mouse diagram above the check box changes to reflect your choice.

Note: Swapping the left and right mouse buttons takes effect immediately, before you close the dialog box. If you swap buttons, press the right button to choose OK or Cancel, or to swap the buttons again.

### **Baud Rate**



Open the list, and then select a rate for how fast you want information transferred through the port.

### Data Bits

 Open the list, and then select the number of data bits you want to use for each character. Most characters are transmitted in 7 or 8 data bits.

## Parity



Open the list, and then select a method for error checking.

### Stop Bits

 Open the list, and then select a number for the time between transmitted characters. Stop bits are not actually bits; they are the timing units between bits.

### **Flow Control**

 Open the list, and then select a method for controlling the flow of data. Xon/Xoff is the standard for the software method. Select Hardware if your device controls data flow.

### **Advanced Button**

 To specify advanced options for the selected port, choose the Advanced button, and then complete the Advanced Settings dialog box.

### **Base I/O Port Address**

Use this option to change the base port address for the COM port you want to use. Use this option only if the device connected to your serial port uses an address value that differs from the detected value displayed in the text box. See the manual for your device for information on the base port address that it uses.



Open the list, and then select an I/O address. Or type a value in the text box.

### **Interrupt Request Line (IRQ)**

Assigning unique interrupt request lines (IRQ) for each serial port enables you to use COM ports 1 and 3 and/or 2 and 4 simultaneously on a computer that normally does not support this capability.

Before assigning IRQ numbers to serial ports, determine which interrupts are used by the devices connected to the serial ports and which ones are not being used by other cards or boards installed in your computer. You may need to adjust your serial card to use available interrupts. For information, see your serial-card documentation.



Open the list, and then select an IRQ. Or type a value in the text box.  
You can specify a value between 2 and 15.

## Event

You can assign sounds to system and application events (for example, when Windows NT starts or displays a message).

When you assign sounds to events, the sounds play as specified by the application you are using. For example, some applications play the sound assigned to the Default Beep whenever you click the mouse button outside an open dialog box. Other applications may play the sound assigned to Exclamation or Asterisk whenever you encounter a warning message.



Select the event you want to assign a sound to.

The name of the sound file assigned to the selected event is selected in the File list.

## Files

The sounds you can assign are stored in sound files. Sound files have the extension .WAV.



Select the sound file that you want to assign to the selected event. If you do not want to assign a sound, select None.

If the sound file you want is on a different drive or in a different directory, select the drive or directory that contains the sound file.

## Enable System Sounds

If you do not have a sound card installed in your computer, Windows NT uses a warning beep when it encounters an error or you attempt to do something your computer does not recognize.

You can turn the warning beep and other sounds on or off, except the sounds assigned to Windows NT Exit and Windows NT Start.



Select or clear the Enable System Sounds check box.

If you do not want a sound to play when you start or quit Windows NT, assign None to the Windows NT Start or Windows NT Exit events.

### Test Button



Choose the Test button to find out what the selected sound file sounds like.  
Or double-click the event or filename.

### **Show: Setups, Patch Maps, Key Maps**

Use these options to select the type of map you want to create, edit, or delete.



Select the Setups option to create or edit channel mapping for a MIDI setup, or to delete a MIDI setup.



Select the Patch Maps option to create or edit the patch maps used in a MIDI setup, or to delete a patch map.



Select the Key Maps option to create or edit the key maps used in a patch map or to delete a key map.

## Name

This option lists the names of existing MIDI setups, patch maps, and key maps, depending on which option you select in the Show area.



Open the list, and then select the setup, patch map, or key map that you want to edit or delete. A description of the selected setup, patch map, or key map appears in the Description line below the Name box.

### **Delete Button**



Choose this button to delete the selected setup, patch map, or key map.

The name of the selected setup, patch map, or key map appears in the Name box.

Note: You cannot delete key maps that are used in patch maps or patch maps that are used in setups. You must first edit the patch map or setup and remove all references to the key map or patch map you want to delete.

### **Edit Button**



Choose this button to display the Edit dialog box for the selected setup, patch map, or key map. Use the Edit dialog box to change setup, patch map, or key map settings.

The name of the selected setup, patch map, or key map appears in the Name box.

### **New Button**



Choose this button to display the New dialog box for creating a new setup, patch map, or key map.

You select the type of map you want to create by selecting an option in the Show area.

**Src Chan**

This column lists the MIDI channels that can be included within a MIDI message sent by an application or stored in a MIDI file. You cannot change these values.

With the MIDI Mapper, not all synthesizers can use all channels. Base-level synthesizers use source channels 13 through 16. Channels 13 through 15 are the melodic channels and 16 is the percussive channel. Extended-level synthesizers use source channels 1 through 10. Channels 1 through 9 are the melodic channels and 10 is the percussive channel.

## Dest Chan

Use this column to specify the channel that you want your synthesizer to use to play the sounds on the source channel. The default value is the same as the value for the source channel. If your synthesizer supports General MIDI channel definitions, you do not need to change the default value.



To change the value, select the Dest Chan box, and then click the up or down arrow until the destination channel number you want is displayed.

Or select the number, and then type a new number.

## Port Name

Use this column to specify the name of the MIDI output port that the sounds on the source channel are sent to.



To specify the port name, open the Port Name list, and then select the port you want.

You do not need to use the same port for each channel. For example, if you are using two synthesizers, such as an Ad Lib and a synthesizer connected to the MIDI output port of your computer, you could send some sounds on certain channels to the Ad Lib port, and other sounds on other channels to the MIDI output port.

## Patch Map Name

Use this column to specify the patch map used with a particular channel.



Open the Patch Map Name list, and then select the patch map you want.

The patch map you select depends on whether the source channel is melodic or percussive. For melodic source channels, select the patch map you created for melodic instruments. For percussive source channels, select the patch map you created for percussion instruments. On base-level synthesizers, melodic channels are 13 through 15 and the percussive channel is 16. On extended-level synthesizers, melodic channels are 1 through 9 and the percussive channel is 10.

## Active

Use this column to specify whether MIDI information for a particular channel is sent to the selected port. When you select a port name, this box is selected automatically, indicating that MIDI information will be sent to the port.



To change the setting, click the Active box.

Or press `TAB` until the box is selected, and then press the `SPACEBAR`.

### **1 Or 0 Based Patches Button**

 Choose this button if your synthesizer defines patch numbers (either starting with 0 or with 1) differently from how they are displayed in the MIDI Patch Map dialog box.

**Src Patch**

This column lists the MIDI patch numbers that can occur within MIDI messages that are in a MIDI file or that are sent by an application. Some synthesizers define patch numbers from 0 through 127; others define patch numbers from 1 through 128. You cannot change these values.

**Src Patch Name**

This column displays the names of the standard sounds or instruments associated with the source patch numbers for melodic channels, as defined by the General MIDI specification. Use these names as a reference when creating a patchmap for melodic instruments. If you are creating a patchmap for percussion instruments, you can ignore these names.

## Dest Patch

Use this column to specify the patch numbers on your synthesizer that match the sounds or instruments displayed in the Src Patch Name box. For synthesizers that support General MIDI, this number is the same as the Src Patch number.

-  To change the destination patch, select the Dest Patch box, and then click the up or down arrow until the destination patch number you want is displayed.  
Or select the number, and then type a new number.

## Volume

Use this column to specify the volume of the destination patch. This value is measured as a percentage of the volume specified by a MIDI volume message in the MIDI file. The default value is 100, which specifies that the patch will play at the volume indicated in the MIDI file.

 To change the volume setting, select the Volume % box, and then click the up or down arrow until the volume percentage you want is displayed.

Or select the number, and then type a new number.

To increase the volume, use a number greater than 100. To decrease the volume, use a number less than 100.

## Key Map Name

Use this column to specify the key map used with each patch.



To specify a key map, open the Key Map Name list, and then select the key map you want.

If you are creating the patchmap for percussion instruments, specify the key map name you created for percussion for all the source patches.

If you are creating the patchmap for melodic instruments and your synthesizer produces certain sounds using a registration that differs from General MIDI definitions, select a key map for the patch corresponding to that sound, so that the keys play at the appropriate registration. For example, if your synthesizer plays Chorused Piano one octave higher than defined by General MIDI, select the -1 octave key map for the patch that corresponds to Chorused Piano.

**Src Key**

This column lists the MIDI keys that can occur within MIDI messages that are in a MIDI file or that are sent by an application. You cannot change these values.

**Src Key Name**

This column displays the names of the percussion instruments associated with the source keys, as defined by the General MIDI specification.

Use these names as a reference when creating a key map for percussion instruments. If you are creating a key map to correct registration changes for melodic instruments, you can ignore these names.

## Dest Key

Use this column to specify the key that is played on your synthesizer when the source key number is sent by an application or encountered in a MIDI file.

 To change the destination key, select the Dest Key box, and then click the up or down arrow until the destination key number you want is displayed.

Or select the key number, and then type a new number.

## Installed Drivers

This list shows the drivers that are already installed. You can select a driver to either remove it or to change its settings.



Select the driver that you want to remove or configure.

## Add Button



Choose the Add button to display the Add dialog box. Use the Add dialog box to install a new driver.

## **Remove Button**

If you are no longer using a device, you can remove its driver from the Installed Drivers list.



Choose the Remove button to remove the selected driver from the list.

### **Caution**

The drivers that are automatically installed during Setup are required by your system. If you remove one of these drivers, your system may not work properly.

## Setup Button

Some drivers require special settings to work properly with Windows NT.



Choose the Setup button to display the Setup dialog box for specifying driver settings.

If you select a driver that does not require special settings, the Setup button appears dimmed.

### **Device Contention: Ports List**

 To specify device contention for a device, select the port that the device you want to use is connected to.

### **Device Contention: Always Warn**

Select this option to display a message each time an application tries to use a device that is already in use. The message asks you to choose the application that should get control of the port.

**Device Contention: Never Warn**

Select this option to allow any application to use the device at any time, without displaying a message.

Use this option only if you are sure that no more than one application will be using the device at a time. If two applications try to use the device at the same time, it may result in incorrect information.

**Device Contention: Idle**

Select this option to specify the number of seconds to elapse after an application stops using a device and before another application can use the same device, without displaying a warning message. You can specify a number between 1 and 999.

## File Name

Displays the default file specification and a list of the files in the current directory.



Type the name of the file you want to open, or select it from the list.

## List Files of Type

Lists the available file formats.



Open the list box to select different formats.

## Directories

Lists the current directory and any subdirectories.



Double-click different directories to change your path.

## Drives

Lists the available drives.



Open the list box to select a different drive.

**Read Only**



Select this check box if you want to view the file, but don't want to save changes to it.

**Network Button**

Connects to shared directories on the network and displays additional options.

## Contents for Control Panel Help

 Collapse

### Introduction

-  [Control Panel Overview](#)
-  [What is Control Panel?](#)

### How To...

-  [Change the Look of Windows NT](#)
-  [Using Existing Color Schemes](#)
-  [Changing Existing Color Schemes](#)
-  [Removing Existing Color Schemes](#)
-  [Creating Your Own Colors](#)
-  [Displaying a Pattern](#)
-  [Changing a Pattern](#)
-  [Creating a Pattern](#)
-  [Removing a Pattern](#)
-  [Displaying Custom Wallpaper](#)
-  [Preventing Icon Titles from Overlapping](#)
-  [Changing Border Width](#)
-  [Changing the Sizing Grid of Windows](#)
-  [Work with Screen Savers](#)
-  [Selecting and Testing a Screen Saver](#)
-  [Customizing a Screen Saver](#)
-  [Specifying a Password for a Screen Saver](#)
-  [Switch Between Applications](#)
-  [Switching Between Applications](#)
-  [Work with Fonts](#)
-  [Adding Fonts](#)
-  [Removing Fonts](#)
-  [Setting TrueType Options](#)
-  [Change Serial Port Settings](#)
-  [Specifying Basic Serial-Port Settings](#)
-  [Specifying Advanced Serial-Port Settings](#)
-  [Change Pointing-Device Options](#)
-  [Adjusting the Cursor Blink Rate](#)
-  [Changing the Cursor Appearance](#)
-  [Customizing Your Mouse or Other Pointing Device](#)
-  [Change Keyboard Options](#)
-  [Adjusting the Keyboard Delay and Repeat Rate](#)
-  [Customize Windows NT for International Use](#)
-  [Changing the Country](#)
-  [Changing the Language](#)
-  [Changing Keyboard Layout](#)
-  [Changing the Measurement System](#)
-  [Changing the Currency Display](#)
-  [Changing the Number Display](#)

- [!\[\]\(4672be0b7b48f9c105ae2d727f5e40b5\_img.jpg\) Change System Options](#)
- [!\[\]\(2b6aaf3dd8ee971b154444584b9eb166\_img.jpg\) Using the System Tool](#)
- [!\[\]\(9b749e9524b998639632a83d2ce546fe\_img.jpg\) Changing the Environment Variables](#)
- [!\[\]\(ba5378d0f6352692b089bcac654b14d9\_img.jpg\) Changing the Virtual-Memory Paging File](#)
- [!\[\]\(61a0762e643948f04c87a8fb19494697\_img.jpg\) Defining Options for the Operating System](#)
- [!\[\]\(d28e3686479ed4472285a3ba46d4060a\_img.jpg\) Defining the Alternate Startup Operating Systems](#)
- [!\[\]\(398c5b895944de4f2d4b401ad26b70ea\_img.jpg\) Editing the BOOT.INI File for x86-Based Computers](#)
- [!\[\]\(8965795754edd7c1cb0b28f12c592946\_img.jpg\) Work with Date and Time](#)
- [!\[\]\(bb4fb67ae80f2ba2afa121ef7ae7a221\_img.jpg\) Changing the System Date, Time, and Time Zone](#)
- [!\[\]\(b4f05d32d6b997093e0ab59eae002b91\_img.jpg\) Changing the Format of Date and Time](#)
- [!\[\]\(626dcfb960dc7eb9e929dd470be3345b\_img.jpg\) Work with Device Drivers](#)
- [!\[\]\(d1d9e7519253f91870bd728f4da565db\_img.jpg\) Installing Device Drivers](#)
- [!\[\]\(91e4bd52d8595baf6442557b0903666a\_img.jpg\) Removing Device Drivers](#)
- [!\[\]\(613247ccdeff7bf2e48b95de0f6e2141\_img.jpg\) Setting Driver Options](#)
- [!\[\]\(02e8cf4be9dec9de3f29dbf7ebd96aef\_img.jpg\) Work with Networks](#)
- [!\[\]\(381be37109cdb58c1a997cb49c299872\_img.jpg\) Using the Networks Tool](#)
- [!\[\]\(57c4e541caf899ee7ccbae0a4cfb73f4\_img.jpg\) Configuring Network Bindings](#)
- [!\[\]\(213f9f0e099cac7b5d87aed365cd65e8\_img.jpg\) Configuring Network Software and Adapter Cards](#)
- [!\[\]\(57886663798b0240bfcac53b29a9d223\_img.jpg\) Configuring TCP/IP and SNMP](#)
- [!\[\]\(7c311715a032c353306c17684b78aba3\_img.jpg\) Installing Network Adapter Cards and Software](#)
- [!\[\]\(9aab1ea01b55ef0c6d5b8166ff977026\_img.jpg\) Installing TCP/IP and SNMP](#)
- [!\[\]\(7ccfadab8153987b0fdc4a4de53efc73\_img.jpg\) Installing Remote Access Service](#)
- [!\[\]\(09b761de4f65fcdfd303b56c2c2df5ce\_img.jpg\) Joining a Domain](#)
- [!\[\]\(d1c8dbe8c952a5ba9f4a50a79369ed19\_img.jpg\) Joining a Workgroup](#)
- [!\[\]\(a5fe423d58644bd6dafb57f909ae5450\_img.jpg\) Updating or Removing Network Components](#)
- [!\[\]\(eb9b27283060c08737fe27eccd1478c2\_img.jpg\) Control Sound](#)
- [!\[\]\(602677e767e238d82f73f3dc09fcea41\_img.jpg\) Assigning Sounds to Events](#)
- [!\[\]\(e12ee88c2be487aa91790e33bc3df324\_img.jpg\) Selecting a MIDI Setup](#)
- [!\[\]\(5c72128ab87a394a5d06346e5a3385ef\_img.jpg\) Creating a MIDI Setup](#)
- [!\[\]\(83db3b7baf3572fea0dd0d6a85edd497\_img.jpg\) Editing Setups, PatchMaps, and Key Maps](#)
- [!\[\]\(7d59c67de2a39a22514450efa5a40d56\_img.jpg\) Deleting Setups, Patch Maps, and Key Maps](#)
- [!\[\]\(9c18c050aa6bf1fc3c34d2220532679e\_img.jpg\) Manage Server Properties](#)
- [!\[\]\(a0d118bcc579c9a5172d3dbae0207774\_img.jpg\) Managing Server Properties](#)
- [!\[\]\(1c77fc3055fd4b086a4e8561a616cb08\_img.jpg\) Viewing User Sessions](#)
- [!\[\]\(0bd1f9d0e13e72f70614e4a3c2753f4b\_img.jpg\) Viewing Shared Resources](#)
- [!\[\]\(a18933a168b2c9f2009a3d27193432ca\_img.jpg\) Viewing Resources In Use](#)
- [!\[\]\(b3bb610d3d39ac7c1c85f0ca82a339cc\_img.jpg\) Managing Export Replication](#)
- [!\[\]\(d58688bff9dbc5f5220064b76852fe37\_img.jpg\) Managing Import Replication](#)
- [!\[\]\(6b991b260b254d6588764431f992ae27\_img.jpg\) Setting the Logon Script Path](#)
- [!\[\]\(6cbc7ad7b105ff17ab469e1c09d6e83e\_img.jpg\) Managing Administrative Alerts](#)
- [!\[\]\(e553c51fd0c91ad880f48cdbcf2bb093\_img.jpg\) Manage Services](#)
- [!\[\]\(2144f67d32ba295ddc7296765254a842\_img.jpg\) Starting and Stopping Services](#)
- [!\[\]\(fb36c2d10b0be4189cabd34943b49ff8\_img.jpg\) Configuring Service Startup](#)
- [!\[\]\(e4fdb607573d323b534c0a108e5af7ed\_img.jpg\) Manage Devices](#)
- [!\[\]\(c606717418c922f19d6e82a639c20148\_img.jpg\) Starting and Stopping Devices](#)
- [!\[\]\(a8437f4b61298e173cfc81cc8566e243\_img.jpg\) Configuring Device Startup](#)
- [!\[\]\(a1e5f676baee99a6147c5e2223dd3475\_img.jpg\) Change UPS Settings](#)
- [!\[\]\(13bf7835c7697d2429e7d9ebdc82dd50\_img.jpg\) Using the UPS Tool](#)

 Installing UPS Services

 Configuring the Uninterruptible Power Supply (UPS)

### **Commands**

 Settings Menu Commands

## Contents For Control Panel Help



### Introduction

-  [Control Panel Overview](#)

### How To...

-  [Change the Look of Windows NT](#)
-  [Using Existing Color Schemes](#)
-  [Changing Existing Color Schemes](#)
-  [Removing Existing Color Schemes](#)
-  [Creating Your Own Colors](#)
-  [Displaying a Pattern](#)
-  [Changing a Pattern](#)
-  [Creating a Pattern](#)
-  [Removing a Pattern](#)
-  [Displaying Custom Wallpaper](#)
-  [Preventing Icon Titles from Overlapping](#)
-  [Changing Border Width](#)
-  [Changing the Sizing Grid of Windows](#)
-  [Work with Screen Savers](#)
-  [Switch Between Applications](#)
-  [Work with Fonts](#)
-  [Change Serial Port Settings](#)
-  [Change Pointing-Device Options](#)
-  [Change Keyboard Options](#)
-  [Customize Windows NT for International Use](#)
-  [Change System Options](#)
-  [Work with Date and Time](#)
-  [Work with Device Drivers](#)
-  [Work with Networks](#)
-  [Control Sound](#)
-  [Manage Server Properties](#)
-  [Manage Services](#)
-  [Manage Devices](#)
-  [Change UPS Settings](#)

### Commands

-  [Settings Menu Commands](#)

## Contents For Control Panel Help



### Introduction

 [Control Panel Overview](#)

### How To...

 [Change the Look of Windows NT](#)

 [Work with Screen Savers](#)

 [Switch Between Applications](#)

 [Work with Fonts](#)

 [Change Serial Port Settings](#)

 [Change Pointing-Device Options](#)

 [Change Keyboard Options](#)

 [Customize Windows NT for International Use](#)

 [Change System Options](#)

 [Work with Date and Time](#)

 [Changing the System Date, Time, and Time Zone](#)

 [Changing the Format of Date and Time](#)

 [Work with Device Drivers](#)

 [Work with Networks](#)

 [Control Sound](#)

 [Manage Server Properties](#)

 [Manage Services](#)

 [Manage Devices](#)

 [Change UPS Settings](#)

### Commands

 [Settings Menu Commands](#)

## Contents For Control Panel Help



### Introduction

-  [Control Panel Overview](#)

### How To...

-  [Change the Look of Windows NT](#)
-  [Work with Screen Savers](#)
-  [Switch Between Applications](#)
-  [Work with Fonts](#)
-  [Change Serial Port Settings](#)
-  [Change Pointing-Device Options](#)
-  [Adjusting the Cursor Blink Rate](#)
-  [Changing the Cursor Appearance](#)
-  [Customizing Your Mouse or Other Pointing Device](#)
-  [Change Keyboard Options](#)
-  [Customize Windows NT for International Use](#)
-  [Change System Options](#)
-  [Work with Date and Time](#)
-  [Work with Device Drivers](#)
-  [Work with Networks](#)
-  [Control Sound](#)
-  [Manage Server Properties](#)
-  [Manage Services](#)
-  [Manage Devices](#)
-  [Change UPS Settings](#)

### Commands

-  [Settings Menu Commands](#)

## Contents For Control Panel Help



### Introduction

-  [Control Panel Overview](#)

### How To...

-  [Change the Look of Windows NT](#)
-  [Work with Screen Savers](#)
-  [Switch Between Applications](#)
-  [Work with Fonts](#)
-  [Change Serial Port Settings](#)
-  [Change Pointing-Device Options](#)
-  [Change Keyboard Options](#)
-  [Adjusting the Keyboard Delay and Repeat Rate](#)
-  [Customize Windows NT for International Use](#)
-  [Change System Options](#)
-  [Work with Date and Time](#)
-  [Work with Device Drivers](#)
-  [Work with Networks](#)
-  [Control Sound](#)
-  [Manage Server Properties](#)
-  [Manage Services](#)
-  [Manage Devices](#)
-  [Change UPS Settings](#)

### Commands

-  [Settings Menu Commands](#)

## Contents For Control Panel Help



### Introduction

-  [Control Panel Overview](#)

### How To...

-  [Change the Look of Windows NT](#)
-  [Work with Screen Savers](#)
-  [Switch Between Applications](#)
-  [Work with Fonts](#)
-  [Change Serial Port Settings](#)
-  [Specifying Basic Serial-Port Settings](#)
-  [Specifying Advanced Serial-Port Settings](#)
-  [Change Pointing-Device Options](#)
-  [Change Keyboard Options](#)
-  [Customize Windows NT for International Use](#)
-  [Change System Options](#)
-  [Work with Date and Time](#)
-  [Work with Device Drivers](#)
-  [Work with Networks](#)
-  [Control Sound](#)
-  [Manage Server Properties](#)
-  [Manage Services](#)
-  [Manage Devices](#)
-  [Change UPS Settings](#)

### Commands

-  [Settings Menu Commands](#)

## Contents For Control Panel Help



### Introduction

-  [Control Panel Overview](#)

### How To...

-  [Change the Look of Windows NT](#)
-  [Work with Screen Savers](#)
-  [Switch Between Applications](#)
-  [Work with Fonts](#)
-  [Change Serial Port Settings](#)
-  [Change Pointing-Device Options](#)
-  [Change Keyboard Options](#)
-  [Customize Windows NT for International Use](#)
-  [Change System Options](#)
-  [Work with Date and Time](#)
-  [Work with Device Drivers](#)
-  [Work with Networks](#)
-  [Control Sound](#)
-  [Assigning Sounds to Events](#)
-  [Selecting a MIDI Setup](#)
-  [Creating a MIDI Setup](#)
-  [Editing Setups, PatchMaps, and Key Maps](#)
-  [Deleting Setups, Patch Maps, and Key Maps](#)
-  [Manage Server Properties](#)
-  [Manage Services](#)
-  [Manage Devices](#)
-  [Change UPS Settings](#)

### Commands

-  [Settings Menu Commands](#)

## Contents For Control Panel Help



### Introduction

 [Control Panel Overview](#)

### How To...

-  [Change the Look of Windows NT](#)
-  [Work with Screen Savers](#)
-  [Switch Between Applications](#)
-  [Work with Fonts](#)
-  [Change Serial Port Settings](#)
-  [Change Pointing-Device Options](#)
-  [Change Keyboard Options](#)
-  [Customize Windows NT for International Use](#)
-  [Changing the Country](#)
-  [Changing the Language](#)
-  [Changing Keyboard Layout](#)
-  [Changing the Measurement System](#)
-  [Changing the Currency Display](#)
-  [Changing the Number Display](#)
-  [Change System Options](#)
-  [Work with Date and Time](#)
-  [Work with Device Drivers](#)
-  [Work with Networks](#)
-  [Control Sound](#)
-  [Manage Server Properties](#)
-  [Manage Services](#)
-  [Manage Devices](#)
-  [Change UPS Settings](#)

### Commands

 [Settings Menu Commands](#)

## Contents For Control Panel Help



### Introduction

-  [Control Panel Overview](#)

### How To...

-  [Change the Look of Windows NT](#)
-  [Work with Screen Savers](#)
-  [Switch Between Applications](#)
-  [Work with Fonts](#)
-  [Adding Fonts](#)
-  [Removing Fonts](#)
-  [Setting TrueType Options](#)
-  [Change Serial Port Settings](#)
-  [Change Pointing-Device Options](#)
-  [Change Keyboard Options](#)
-  [Customize Windows NT for International Use](#)
-  [Change System Options](#)
-  [Work with Date and Time](#)
-  [Work with Device Drivers](#)
-  [Work with Networks](#)
-  [Control Sound](#)
-  [Manage Server Properties](#)
-  [Manage Services](#)
-  [Manage Devices](#)
-  [Change UPS Settings](#)

### Commands

-  [Settings Menu Commands](#)

## Switching Between Applications

Windows NT allows you to run multiple applications at one time. However, when doing this, it is sometimes difficult to locate a specific application window. You can use fast application switching to easily switch between applications you have running. If the Fast Task Switch check box is selected in the Desktop dialog box, you can quickly cycle through the names of the applications running at that time. If the Fast Task Switch check box is not selected, pressing ALT+TAB still works, but only the title bar of each window is highlighted. This format makes it more difficult to see which application is selected.

### To use fast application switching

1. In the Control Panel window, choose the Desktop icon.
2. In the Desktop dialog box, select the Fast "Alt+Tab" Switching check box.
3. Choose the OK button.
4. Press ALT+TAB to cycle through the running applications. When you see the name of the application you want, release the keys.

If, while moving through the applications by pressing ALT+TAB, you want to return to your original application, press ALT+TAB+ESC.

## Contents for Control Panel Help



### Introduction

-  [Control Panel Overview](#)

### How To...

-  [Change the Look of Windows NT](#)
-  [Work with Screen Savers](#)
-  [Switch Between Applications](#)
-  [Switching Between Applications](#)
-  [Work with Fonts](#)
-  [Change Serial Port Settings](#)
-  [Change Pointing-Device Options](#)
-  [Change Keyboard Options](#)
-  [Customize Windows NT for International Use](#)
-  [Change System Options](#)
-  [Work with Date and Time](#)
-  [Work with Device Drivers](#)
-  [Work with Networks](#)
-  [Control Sound](#)
-  [Manage Server Properties](#)
-  [Manage Services](#)
-  [Manage Devices](#)
-  [Change UPS Settings](#)

### Commands

-  [Settings Menu Commands](#)

## Selecting and Testing a Screen Saver

When Windows NT is set up, a default screen saver is selected. However, several other screen savers are available. Once you have selected a screen saver, you can see how it looks on your screen by choosing the Test button. Move the mouse or press any key to turn off the screen saver.

### To select a screen saver

1. In the Control Panel window, choose the Desktop icon.
2. Under Screen Saver, select a screen saver in the Name box.

-Or-

Press TAB to reach the box, and then press ALT+DOWN ARROW to select a screen saver.

3. In the Delay box, click the up scroll arrow to increase, or click the down scroll arrow to decrease, the number of minutes of inactivity you want to elapse before the screen saver appears.
4. To test the screen saver, choose the Test button.
5. To return to Windows, move the mouse or press any key.
6. When you find the screen saver you want, choose the OK button.

For help with the Desktop dialog box, choose the Help button or press F1 while using the dialog box.

See Also

[Customizing a Screen Saver](#)

[Specifying a Password for a Screen Saver](#)

## Customizing a Screen Saver

Some screen savers can be customized. For example, you may be able to change the colors of the object displayed, the number of lines the object contains, or any text that is displayed. The settings you can change depend on the screen saver.

### To customize a screen saver

1. In the Control Panel window, choose the Desktop icon.
2. Under Screen Saver, select a screen saver in the Name box.
3. Choose the Setup button (if the screen saver cannot be customized, a message appears, notifying you that the screen saver has no options that you can set.)

The Setup dialog box appears, with options specific to the screen saver you selected.

4. Change any settings you want.
5. Choose the OK button and then choose the OK button from the Desktop dialog box.

For help with the Desktop dialog box, choose the Help button or press F1 while using the dialog box.

See Also

[Selecting and Testing a Screen Saver](#)

[Specifying a Password for a Screen Saver](#)

## **Specifying Password for a Screen Saver**

When you use a screen saver provided by Windows NT, you can ensure that unauthorized users do not have access to your work by password protecting a screen saver. The Password Protect check box in the Desktop dialog box turns the password option on or off. If someone tries to use your computer once the password protected screen saver is displayed, a Lock Workstation dialog box appears. To unlock the computer, the password used to log on to the computer must be entered.

### **To turn password protection on or off**

1. In the Control Panel window, choose the Desktop icon.
2. Under Screen Saver, select a screen saver in the Names box.
3. Select the Password Protect check box.
4. Choose the OK button.

For help with the Desktop dialog box, choose the Help button or press F1 while using the dialog box.

See Also

[Selecting and Testing a Screen Saver](#)

[Customizing a Screen Saver](#)

## Contents for Control Panel Help



### Introduction

-  [Control Panel Overview](#)

### How To...

-  [Change the Look of Windows NT](#)
-  [Work with Screen Savers](#)
-  [Selecting and Testing a Screen Saver](#)
-  [Customizing a Screen Saver](#)
-  [Specifying a Password for a Screen Saver](#)
-  [Switch Between Applications](#)
-  [Work with Fonts](#)
-  [Change Serial Port Settings](#)
-  [Change Pointing-Device Options](#)
-  [Change Keyboard Options](#)
-  [Customize Windows NT for International Use](#)
-  [Change System Options](#)
-  [Work with Date and Time](#)
-  [Work with Device Drivers](#)
-  [Work with Networks](#)
-  [Control Sound](#)
-  [Manage Server Properties](#)
-  [Manage Services](#)
-  [Manage Devices](#)
-  [Change UPS Settings](#)

### Commands

-  [Settings Menu Commands](#)

## Installing Device Drivers

When you add new devices to your system, such as a new sound board or video player, you need to install the driver that controls the device. Although the device may be installed in or connected to your computer, Windows NT will not recognize the device until after you install and configure the appropriate driver.

Most devices come with the appropriate driver. Windows NT also supplies sound drivers for common sound devices, such as sound boards and synthesizers. If you do not have a driver for your device, contact your device dealer or manufacturer about providing one.

Note: To install kernel drivers (drivers which access hardware), you must have Administrator privileges. These drivers will then be available to all users when installed.

You cannot install an updated version of a driver that is already installed on your system until you remove the old driver. If you do not remove the old driver, you will receive an error message while attempting to install the new driver.

### To install a new driver

1. In the Control Panel window, choose the Drivers icon.
2. In the Drivers dialog box, choose the Add button. The drivers listed in the Add dialog box are those supplied by Windows NT.
3. In the List Of Drivers box, select the device you want to install.

If the device is not listed, select Add Unlisted Or Updated Driver.

4. Choose the OK button.
5. Insert the disk with the driver in drive A, or type a drive letter and directory path in the text box.

You can also use the Browse button to find and select the drive and directory where the driver file is located. When you finish using the Browse dialog box, choose the OK button.

6. In the Install Drivers dialog box, choose the OK button.

If you are installing a driver not included with Windows NT, the Unlisted Or Updated Drivers dialog box appears, listing your drivers. Select the driver you want, and then choose the OK button.

If the driver requires specific settings to work properly with Windows NT, a setup dialog box appears.

7. Select the settings required by the driver.

It is important that the settings you specify do not conflict with the settings used by other devices installed on your system, such as a mouse or network card. For example, the interrupts used by each device must be unique. See the manuals for your devices to determine the settings they are using. Then see the manual that came with the device you are configuring for information about its settings.

8. Choose the OK button.

When you install a driver, Windows NT installs any additional related drivers automatically. These drivers may also require settings. In this case, other setup dialog boxes may appear.

9. Repeat steps 7 and 8 until all related drivers have been configured.

The new driver and any changed driver settings may not take effect until you restart Windows NT. A

dialog box may appear, asking whether you want to restart Windows NT.

10. Choose the Restart Now button if you want the new driver to take effect immediately.

For help with the Drivers, Add, Install, Browse, and Add Unlisted Or Updated Drivers dialog boxes, choose the Help button or press F1 while using the dialog boxes.

See Also

[Removing Device Drivers](#)

[Setting Driver Options](#)

## Removing Device Drivers

If you are no longer using a device, you can remove its driver from the Installed Drivers list in the Drivers dialog box. Removing a driver from the list does not remove the driver file from your hard disk. If you find that you want to use the same device later, you can install the driver again.

### Warning

The drivers that are automatically installed during Setup are required by your system (these are the drivers that are displayed when you first opened the Drivers dialog box). If you remove one of these drivers, your system may not work properly.

### To remove a driver

1. In the Control Panel window, choose the Drivers icon.
2. In the Drivers dialog box, select the driver you want to remove.
3. Choose the Remove button.

A dialog box appears, asking you to confirm your decision to remove the driver.

4. Choose the Yes button.

The driver is removed from the list.

5. In the Drivers dialog box, choose the Close button.

A dialog box appears, asking whether you want to restart Windows NT.

6. Choose the Restart Now button if you want the removal to take effect immediately.

See Also

[Installing Device Drivers](#)

[Setting Driver Options](#)

## Setting Driver Options

After you have installed a driver, you can change any of its settings. If you want to use more than one set of settings for the same driver, you need to install that driver twice.

### To adjust driver settings

1. In the Control Panel window, choose the Drivers icon.
2. In the Installed Drivers list, select the driver you want to configure.
3. Choose the Setup button.

The Setup dialog box appears only if the driver you select requires specific settings. The options in this dialog box vary according to the driver you are configuring.

4. Set the options as described in your device's manual.
5. Choose the OK button.

The changes you make do not take effect until you restart Windows NT. A dialog box appears, asking you if you want to restart Windows NT.

6. To have the new settings take effect immediately, choose the Restart Now button.

For help with the Desktop dialog box, choose the Help button or press F1 while using the dialog box.

See Also

[Installing Device Drivers](#)

## Contents for Control Panel Help



### Introduction

-  [Control Panel Overview](#)

### How To...

-  [Change the Look of Windows NT](#)
-  [Work with Screen Savers](#)
-  [Switch Between Applications](#)
-  [Work with Fonts](#)
-  [Change Serial Port Settings](#)
-  [Change Pointing-Device Options](#)
-  [Change Keyboard Options](#)
-  [Customize Windows NT for International Use](#)
-  [Change System Options](#)
-  [Work with Date and Time](#)
-  [Work with Device Drivers](#)
-  [Installing Device Drivers](#)
-  [Removing Device Drivers](#)
-  [Setting Driver Options](#)
-  [Work with Networks](#)
-  [Control Sound](#)
-  [Manage Server Properties](#)
-  [Manage Services](#)
-  [Manage Devices](#)
-  [Change UPS Settings](#)

### Commands

-  [Settings Menu Commands](#)

## Change Password

Use this dialog box to set a password for the screen saver.

The Change Password dialog box includes the following options:

### Old Password

Use this option to specify the old password. This box is unavailable if you are specifying a password for the first time.

Type your old password in the box.

### New Password

Type your new password in the box.

Passwords can contain up to 20 characters, including punctuation, and are not case sensitive. An asterisk (\*) appears in the box for each character you type.

### Retype New Password

Use this option to confirm your password.

Type your new password again in the box.

## Add Drivers

Use this dialog box to install a new driver.

The drivers supplied by Windows NT are shown in the List Of Drivers. When you purchase a new device, the appropriate drivers should be included with your device. Contact your sound-device manufacturer if you do not have a driver for your device.

 Select the driver you want to install. If the driver is not listed, select Add Unlisted Or Updated Driver.

A dialog box will appear, prompting you to insert the disk that contains the driver file.

See Also

[Installing Device Drivers](#)

## Install Driver

This dialog box prompts you for the disk or the drive and directory where driver information or a driver file is located.

 Type the appropriate drive letter and directory path in the text box. If the driver file or information is located on a floppy disk, insert the disk in drive A, and then choose the OK button.

If you are not sure where the driver file or information is located, (for example, if you want to use a driver that is located on a network drive and you are not sure which directory it is in), choose the Browse button to locate and select the drive and directory.

If the driver requires additional settings to work properly with Windows NT, a setup dialog box appears. In the setup dialog box, specify the settings as described in the manual for your device.

## **Add Unlisted or Updated Driver**

This dialog box lists additional drivers that are found on the disk you inserted or on the drive and in the directory you specified in the Install Driver dialog box.



Select the driver you want to install, and then choose the OK button.

If the driver requires additional settings to work properly with Windows NT, a setup dialog box appears. In the setup dialog box, specify the settings as described in the manual for your device.

## Contents for Control Panel Help



### Introduction

-  [Control Panel Overview](#)

### How To...

-  [Change the Look of Windows NT](#)
-  [Work with Screen Savers](#)
-  [Switch Between Applications](#)
-  [Work with Fonts](#)
-  [Change Serial Port Settings](#)
-  [Change Pointing-Device Options](#)
-  [Change Keyboard Options](#)
-  [Customize Windows NT for International Use](#)
-  [Change System Options](#)
-  [Using the System Tool](#)
-  [Changing the Environment Variables](#)
-  [Changing the Virtual-Memory Paging File](#)
-  [Defining Options for the Operating System](#)
-  [Defining the Alternate Startup Operating Systems](#)
-  [Editing the BOOT.INI File for x86-Based Computers](#)
-  [Work with Date and Time](#)
-  [Work with Device Drivers](#)
-  [Work with Networks](#)
-  [Control Sound](#)
-  [Manage Server Properties](#)
-  [Manage Services](#)
-  [Manage Devices](#)
-  [Change UPS Settings](#)

### Commands

-  [Settings Menu Commands](#)

## Contents for Control Panel Help



### Introduction

-  [Control Panel Overview](#)

### How To...

-  [Change the Look of Windows NT](#)
-  [Work with Screen Savers](#)
-  [Switch Between Applications](#)
-  [Work with Fonts](#)
-  [Change Serial Port Settings](#)
-  [Change Pointing-Device Options](#)
-  [Change Keyboard Options](#)
-  [Customize Windows NT for International Use](#)
-  [Change System Options](#)
-  [Work with Date and Time](#)
-  [Work with Device Drivers](#)
-  [Work with Networks](#)
-  [Using the Networks Tool](#)
-  [Configuring Network Bindings](#)
-  [Configuring Network Software and Adapter Cards](#)
-  [Configuring TCP/IP and SNMP](#)
-  [Installing Network Adapter Cards and Software](#)
-  [Installing TCP/IP and SNMP](#)
-  [Installing Remote Access Service](#)
-  [Joining a Domain](#)
-  [Joining a Workgroup](#)
-  [Updating or Removing Network Components](#)
-  [Control Sound](#)
-  [Manage Server Properties](#)
-  [Manage Services](#)
-  [Manage Devices](#)
-  [Change UPS Settings](#)

### Commands

-  [Settings Menu Commands](#)

## Contents for Control Panel Help



### Introduction

-  [Control Panel Overview](#)

### How To...

-  [Change the Look of Windows NT](#)
-  [Work with Screen Savers](#)
-  [Switch Between Applications](#)
-  [Work with Fonts](#)
-  [Change Serial Port Settings](#)
-  [Change Pointing-Device Options](#)
-  [Change Keyboard Options](#)
-  [Customize Windows NT for International Use](#)
-  [Change System Options](#)
-  [Work with Date and Time](#)
-  [Work with Device Drivers](#)
-  [Work with Networks](#)
-  [Control Sound](#)
-  [Manage Server Properties](#)
-  [Manage Services](#)
-  [Manage Devices](#)
-  [Change UPS Settings](#)
-  [Using the UPS Tool](#)
-  [Installing UPS Services](#)
-  [Configuring the Uninterruptible Power Supply \(UPS\)](#)

### Commands

-  [Settings Menu Commands](#)

## Contents for Control Panel Help



### Introduction

-  [Control Panel Overview](#)

### How To...

-  [Change the Look of Windows NT](#)
-  [Work with Screen Savers](#)
-  [Switch Between Applications](#)
-  [Work with Fonts](#)
-  [Change Serial Port Settings](#)
-  [Change Pointing-Device Options](#)
-  [Change Keyboard Options](#)
-  [Customize Windows NT for International Use](#)
-  [Change System Options](#)
-  [Work with Date and Time](#)
-  [Work with Device Drivers](#)
-  [Work with Networks](#)
-  [Control Sound](#)
-  [Manage Server Properties](#)
-  [Managing Server Properties](#)
-  [Viewing User Sessions](#)
-  [Viewing Shared Resources](#)
-  [Viewing Resources In Use](#)
-  [Managing Export Replication](#)
-  [Managing Import Replication](#)
-  [Setting the Logon Script Path](#)
-  [Managing Administrative Alerts](#)
-  [Manage Services](#)
-  [Manage Devices](#)
-  [Change UPS Settings](#)

### Commands

-  [Settings Menu Commands](#)

## Contents for Control Panel Help



### Introduction

-  [Control Panel Overview](#)

### How To...

-  [Change the Look of Windows NT](#)
-  [Work with Screen Savers](#)
-  [Switch Between Applications](#)
-  [Work with Fonts](#)
-  [Change Serial Port Settings](#)
-  [Change Pointing-Device Options](#)
-  [Change Keyboard Options](#)
-  [Customize Windows NT for International Use](#)
-  [Change System Options](#)
-  [Work with Date and Time](#)
-  [Work with Device Drivers](#)
-  [Work with Networks](#)
-  [Control Sound](#)
-  [Manage Server Properties](#)
-  [Manage Services](#)
-  [Starting and Stopping Services](#)
-  [Configuring Service Startup](#)
-  [Manage Devices](#)
-  [Change UPS Settings](#)

### Commands

-  [Settings Menu Commands](#)

## Contents for Control Panel Help



### Introduction

-  [Control Panel Overview](#)

### How To...

-  [Change the Look of Windows NT](#)
-  [Work with Screen Savers](#)
-  [Switch Between Applications](#)
-  [Work with Fonts](#)
-  [Change Serial Port Settings](#)
-  [Change Pointing-Device Options](#)
-  [Change Keyboard Options](#)
-  [Customize Windows NT for International Use](#)
-  [Change System Options](#)
-  [Work with Date and Time](#)
-  [Work with Device Drivers](#)
-  [Work with Networks](#)
-  [Control Sound](#)
-  [Manage Server Properties](#)
-  [Manage Services](#)
-  [Manage Devices](#)
-  [Starting and Stopping Devices](#)
-  [Configuring Device Startup](#)
-  [Change UPS Settings](#)

### Commands

-  [Settings Menu Commands](#)

## Using the System Tool

### To use the System tool

 Choose the System icon in Control Panel.

The System dialog box shows the settings for the user whose profile is currently active on this computer. To get help with the System dialog box, choose the Help button or press F1.

You can use the System tools to define several options related to the operating system. Choose one of the following buttons for more information about using the System tool.

-  [Changing the Environment Variables](#)
-  [Changing the Virtual-Memory Paging File](#)
-  [Defining Options for the Operating System](#)
-  [Defining the Alternate Startup Operating Systems](#)
-  [Editing the BOOT.INI File for x86-Based Computers](#)

## Defining Options for the Operating System

If you have more than one operating system installed on your computer, you can use the System tool to specify the operating system that flex boot will use the next time you start your computer.

### To specify the default operating system for startup

1. In the Control Panel window, choose the System icon.
2. In the Startup box of the System dialog box, select the new default operating system from the list of systems installed on your computer. This is the operating system that flex boot will propose to boot automatically the next time you start your computer.
3. In the Show List For box, specify the number of seconds the list of choices should be displayed before flex boot automatically starts the default operating system.
4. Choose the OK button.

See Also

[Defining the Alternate Startup Operating Systems](#)

## Defining the Alternate Startup Operating Systems

The method for adding a startup operating system (other than Windows NT) depends on the kind of processor in your computer. Choose one of the following buttons for more information:

 [x86-Based Computer](#)

 [RISC-Based Computer](#)

For systems with either kind of processor, Windows NT Setup detects any operating systems present during the initial installation of Windows NT.

You cannot necessarily take advantage of the alternate startup option for all operating systems that might be installed on an x86-based computer. Some operating systems such as MS-DOS or OS/2 require certain files to be present in the computer's root directory, and Windows NT can provide the alternate startup option for only one such root-based operating system on a computer. However, you can specify alternate startup options for any number of Windows NT versions or other nonroot-based operating systems.

See Also

[Editing the BOOT.INI File for x86-Based Computers](#)

## Editing the BOOT.INI File for x86-Based Computers

To define an alternate startup operating system for an x86-based computer, you must edit the BOOT.INI file in the root directory of your C drive.

To edit BOOT.INI, use a nonformatting text editor such as Notepad to add the name and location of the alternate system in the **[operating systems]** section. The descriptive text you specify will appear in the Startup box of the System dialog box.

There are no rules for how you refer to each kind of operating system listed in BOOT.INI, except that you must include the path for the drive and directory where the source files for the operating system are stored. For example:

```
[operating systems]
    c:\winnt="Windows NT 3.1"
    c:\dos="MS-DOS"
```

See Also

[Defining the Alternate Startup Operating Systems](#)

## Changing the Environment Variables

Windows NT requires environment variables to find programs, to allocate memory space for some programs to run, and to control the behavior of various programs. These environment variables are similar to those that can be set in the MSDOS operating system, such as PATH and TEMP.

You can change user environment variables in the System dialog box. You cannot change system environment variables. Changes you make to variables are stored in the configuration registry immediately. But the changes won't affect programs that are already running until you restart your computer.

### To remove a user environment variable

 Select the variable in the User Environment Variables box, and then choose the Delete button.

### To change user environment variables for your computer

1. In the Control Panel window, choose the System icon. The System dialog box shows the current system environment variables and the environment variables for the user whose profile is currently active on this computer.
2. In the User Environment Variables box, select the variable you want to change. The name of the selected variable appears in the Variable box, and its current value appears in the Value box.

Or click the Variable box, and then type a variable name that does not appear in the list. Variables that you add in this way are appended to the list of environment variables for the current user profile.

3. In the Value box, type a new value for the variable.
4. When the Variable and Value boxes contain the new information you want to specify, choose the Set button.
5. When you have completed all changes you want to make to environment variables, choose the OK button.

Or you can choose the Cancel button at any time to remove all changes made in the System dialog box and restore the previous values.

## Changing the Virtual-Memory Paging File

Windows NT uses a special file on your hard disk called a virtual-memory paging file (or swap file). A virtual-memory paging file is created automatically on your computer when you install Windows NT.

If you are logged on as a member of the Administrators group for a computer, you can change the size of the virtual-memory paging file or create additional paging files on other local hard drives. Usually, you should leave the paging file at its recommended size for each drive. However, you might want to change the file size if, for example, you frequently work with applications that require a large amount of memory.

Note: The virtual-memory paging file is named PAGEFILE.SYS. You cannot delete this file while running Windows NT. If you delete this file while running under another operating system, a new paging file is created automatically the next time you start Windows NT.

### To change the size of your system's virtual-memory paging file

1. In the System dialog box, choose the Virtual Memory button.
2. In the Drive box of the Virtual Memory dialog box, select the drive for which you want to change the paging file size.
3. In each of the Paging File Size boxes, type a number in megabytes to specify the new initial size or maximum size for the paging file, and then choose the Set button.

For example, type **20** in the Initial Size box to create a 20 MB paging file.

Note: If you are not an Administrator for a computer, the Set button is not available, so you cannot change the size of your computer's paging file.

4. Choose the OK button to return to the System dialog box.

## Using the UPS Tool

You can choose the UPS icon in Control Panel to set various options in the UPS dialog box for controlling how UPS services work on a computer. The actual options for configuring the UPS service depend on the specific UPS hardware installed on your system. The options you can set with the UPS tool include:

- The serial port where the battery is connected.
- Whether the UPS service sends a signal if the regular power supply fails, if battery power is low, or if UPS allows remote shutdown.
- The time intervals for maintaining battery power, recharging the battery, or sending warning messages after power failure.

See Also

[Installing UPS Services](#)

[Configuring the Uninterruptible Power Supply \(UPS\)](#)

## Installing UPS Services

You can use the UPS tool to turn UPS services on or off for a computer.

### To install UPS for a computer

1. In the Control Panel, choose the UPS icon.
2. In the UPS dialog box, select the Uninterruptible Power Supply Installed On check box, and then specify the serial port where the UPS battery is connected.

The other options in this dialog box are not available until you select this check box.

### To turn UPS off for a computer



In the UPS dialog box, clear the Uninterruptible Power Supply Installed On check box.

### To start the UPS services



In Control Panel, choose the Services icon, and then select UPS Services in the dialog box. You start or stop the service, and also configure whether the service starts automatically or manually when you start Windows NT.

## Configuring the Uninterruptible Power Supply (UPS)

You can use the UPS tool in Control Panel to configure various options for the [UPS services](#).

### To configure UPS options

1. In the UPS dialog box, select the Uninterruptible Power Supply Installed On check box, and then specify the serial port where the UPS battery is connected. The other options in this dialog box are not available until you select this option.
2. If the UPS device on your system can send a message if the power supply fails, select the Power Failure Signal check box. This setting corresponds to the CTS (clear-to-send) cable signal for the UPS serial port connection.
3. If the UPS device on your system can send a warning when battery power is low, select the Low Battery Signal check box. This setting corresponds to the DCD (data-carrier-detect) cable signal for the UPS serial port connection.
4. If the battery can accept a signal from the UPS service telling it to shut down, you must specify the correct interface voltage, even if you do not enable remote shutdown. If the voltage is set incorrectly, some UPS devices may shut down your computer immediately upon loss of power. Beside the Remote UPS Shutdown check box, select Positive or Negative to specify the UPS interface voltage. To enable remote shutdown, select the Remote UPS Shutdown check box. This setting corresponds to the DTR (data-terminal-ready) cable signal for the UPS serial port connection.
5. For each item that is checked in the UPS Configuration group, specify Positive or Negative for the UPS Interface Voltage. This setting defines how your UPS device communicates with the UPS service based on pin settings for the COM port. For information about making this choice, see the documentation for your UPS device.
6. In the Expected Battery Life box, specify the time in minutes that the system can run on battery power. The range is 2 to 720 minutes; the default is 2 minutes.
7. In the Battery Recharge Time box, specify the time in minutes that battery must be recharged for every minute of run time. The range is 1 to 250 minutes; the default is 100 minutes for each minute of battery run time.
8. In the Time Between Power Failure box, specify the time, in seconds, between when a power failure occurs and when the first message is sent to notify users. The range is 0 to 120 seconds; the default is 5 seconds.
9. In the Delay Between Warning Messages box, specify the interval, in seconds, between messages sent to notify users of a power failure and to advise them to stop using the computer. The range is 5 to 300 seconds; the default is 120 seconds.
10. Choose the OK button.

## UPS

Use the UPS dialog box to configure options for the uninterruptible power supply. This dialog box appears when you choose the UPS icon in Control Panel.

Choose one of the following buttons for information about this dialog box:

- [UPS Installed On](#)
- [Power Failure Signal](#)
- [Low Battery Signal](#)
- [Remote UPS Shutdown](#)
- [UPS Interface Voltages](#)
- [Expected Battery Life](#)
- [Battery Recharge Time](#)
- [Time Between Power Failure and Warning](#)
- [Delay Between Warning Messages](#)

See Also

[Configuring the Uninterruptible Power Supply \(UPS\)](#)

## Virtual Memory

Use the Virtual Memory dialog box to create and define [virtual-memory paging files](#) for your hard disk(s). This dialog box appears when you choose the Virtual Memory button in the System dialog box in Control Panel.

Choose one of the following buttons for information about this dialog box:

- [Drive\[Volume Label\]](#)
- [Initial Size](#)
- [Maximum Size](#)

See Also

[Changing the Virtual-Memory Paging File](#)

## System Dialog Box

Use the System dialog box to specify the default operating system proposed at startup, to define user environment variables, and to define the size of [virtual-memory paging files](#). This dialog box appears when you choose the System icon in Control Panel.

Choose one of the following buttons for information about this dialog box:

- [Operating System Startup](#)
- [Show List For](#)
- [System Environment Variables](#)
- [User Environment Variables](#)
- [Variable](#)
- [Value](#)
- [Set and Delete Buttons](#)
- [Virtual Memory Button](#)

See Also

[Changing the Environment Variables](#)

[Changing the Virtual-Memory Paging File](#)

[Defining Options for the Operating System](#)

[Defining the Alternate Startup Operating Systems](#)

[Editing the BOOT.INI File for x86-Based Computers](#)

## System

Use the System dialog box to specify the default operating system proposed at startup, to define user environment variables, and to define the size of [virtual-memory paging files](#). This dialog box appears when you choose the System icon in Control Panel.

Choose one of the following buttons for information about this dialog box:

- [Operating System Startup](#)
- [Show List For](#)
- [System Environment Variables](#)
- [User Environment Variables](#)
- [Variable](#)
- [Value](#)
- [Set and Delete Buttons](#)
- [Virtual Memory Button](#)

See Also

[Changing the Environment Variables](#)

[Changing the Virtual-Memory Paging File](#)

[Defining Options for the Operating System](#)

[Defining the Alternate Startup Operating Systems](#)

[Editing the BOOT.INI File for x86-Based Computers](#)

### **Power Failure Signal**

If the UPS device on your system can send a message when power fails, select this option. Then select Positive or Negative to specify the UPS Interface Voltage.

This setting corresponds to the CTS (clear-to-send) cable signal for the UPS serial port connection.

### **Low Battery Signal**

 If the UPS device on your system can send a warning when battery power is low, select this option. Then select Positive or Negative to specify the UPS Interface Voltage.  
This setting corresponds to the DCD (data-carrier-detect) cable signal for the UPS serial port connection.

### Remote UPS Shutdown



To enable remote UPS shutdown, select the Remote UPS Shutdown check box.



If the battery can accept a signal from the UPS service telling it to shut down, you must specify the correct interface voltage, even if you do not enable remote shutdown. If the voltage is set incorrectly, some UPS devices may shut down your computer immediately upon loss of power. Select Positive or Negative to specify the UPS interface voltage.

This setting corresponds to the DTR (data-terminal-ready) cable signal for the UPS serial port connection.

### **Uninterruptible Power Supply Installed on Port**

To specify that UPS is installed, select this option. Then select the serial port where the UPS battery is connected.

### **Time Between Power Failure and Warning Message**

 To specify the time between when a power failure occurs and when the first message is sent to notify users, select a time in seconds.

The default is 5 seconds. The range is 0 to 120 seconds.

### **Delay Between Warning Messages**

 To specify the interval between messages sent to users after a power failure until the system is shut down, select a time in seconds.

The default is 120 seconds. The range is 5 to 300 seconds.

### Drive [Volume Label]

 To specify the hard drive or volume where you want to create a virtual-memory paging file, select a drive in the list.

The list also shows the current size of that drive in megabytes (MB).

### Initial Size of Paging File for Selected Drive

 To specify the new initial size for the virtual-memory paging file, type a number in this box in megabytes. Then choose the Set button.

For example, type **20** to create a 20 MB paging file.

### Maximum Size of Paging File for Selected Drive

 To specify the new maximum size for the virtual-memory paging file, type a number in this box in megabytes. Then choose the Set button.

For example, type **70** to specify a maximum size of 70 MB.

### **Operating System at Startup**

 To specify the default operating system among the operating systems installed on your computer, select a name in this list.

The selected operating system is the one that flex boot will propose to start automatically each time you turn on your computer.

### Show List For



To specify how long flex boot should display the list of alternate operating systems before starting your system with the selected default, enter a number in seconds in this box.

## **System Environment Variables**

These environment variables are defined by Windows NT. You cannot add or change variables in the list that appears in the System dialog box.

Environment variables describe information that the operating system uses to find programs, allocate memory, and control application behavior.

### **User Environment Variables**

 To change an environment variable used by applications, select the variable you want to change in this list. Then click in the Value box, enter a new value, and then choose the Set button.

Or, click in the Variable box and enter a new variable name. Then enter a value in the Value box, and choose the Set button.

### **Variable**

 To add a new user environment variable, type a variable name in this box. Then enter a value in the Value box and choose the Set button.

## Value

 To add or change a user environment variable, select a variable in the list or type a name in the Variable box. Then enter a value in the Value box and choose the Set button.

### **Set and Delete Buttons**

 To specify a value for a user environment variable, select the variable in the list or type a name in the Variable box. Then enter a value in the Value box and choose the Set button.

 To delete a user environment variable, select the variable in the list, and then choose the Delete button.

### **Virtual Memory Button**

 To display the Virtual Memory dialog box for specifying the size of paging files, choose this button.

### **Defining the Installed Operating Systems for RISC-Based Computers**

 For a RISC-based computer, run the appropriate ARC setup program to install the alternate operating system. Windows NT detects the new alternate operating system automatically. All system startup information is stored in nonvolatile RAM.

### **Defining the Installed Operating Systems for x86-Based Computers**

 For an x86-based computer, install the operating system in the usual way, and then edit the BOOT.INI file, which Windows NT automatically creates in the root directory of the computer's main hard disk. All system startup information is stored in the BOOT.INI file.

**Page File**

With virtual memory under Windows NT, some of the program code and other information are kept in RAM, while other information is temporarily swapped to a virtual-memory paging file. When that information is required again, Windows NT pulls it back into RAM and, if necessary, swaps other information to virtual memory. This activity is invisible, although you might notice that your hard disk is working. The resulting benefit is that you can run more programs at one time than your system's RAM would usually allow.

### **Recommended Paging File Size**

The recommended size for the virtual-memory paging file, which Windows NT identifies as the size that ensures the best performance, is equivalent to the amount of RAM available on your system plus 12 MB. However, the size of the file also depends on the amount of free space available on your hard disk when the paging file is created. The minimum required size is 2 MB.

## **Uninterruptible Power Supply (UPS)**

UPS is a battery-operated power supply connected to a computer to keep the system running during a power failure. The UPS service for Windows NT manages a safe system shutdown if the power fails, or keeps the system running until power is restored or until the system is shut down by an administrator.

### **Expected Battery Life**



Select the time in minutes for Expected Battery Life for the fully charged battery. The range for Expected Battery Life is 2 to 720 minutes; the default is 2 minutes.

### **Battery Recharge Time**

 If you select Power Failure Signal and do not select Low Battery Signal, select the time in minutes for Battery Recharge Time.

The range for Battery Recharge Time is 1 to 250 minutes; the default is 100 minutes for each minute of battery run time.

### **UPS Interface Voltages**

 If you select any UPS Configuration check box, select Positive or Negative to specify the UPS interface voltage.

## Tasking

Use this dialog box to change the relative responsiveness of applications that are running at the same time. When more than one application is running in Windows NT, by default the foreground application receives more processor time, and so responds better, than applications running in the background.

For information about the options available in the Tasking dialog box, choose one of the following topics:

- [Best Foreground Application Response Time](#)
- [Foreground Application more Responsive Than Background](#)
- [Foreground and Background Applications Equally Responsive](#)

**Foreground Application**

The application that runs in the active window, the topmost window whose title bar is highlighted.

### **Best Foreground Application Response Time**

Choose this option to give the foreground application as much processor time as possible. This option is the default.

### **Foreground Application More Responsive than Background**

Choose this option to give the background a better responsive time than it would have by default, but to still give more processor time to the foreground application.

**Foreground and Background Applications Equally Responsive**

Choose this option to give all applications equal amounts of processor time.

## FTP User Sessions

Use this dialog box to view and manage connections to the Microsoft File Transfer Protocol (FTP) Server service. For more information, choose one of the following topics:

- [Connected Users](#)
- [From](#)
- [Time](#)
- [Disconnect button](#)
- [Disconnect All button](#)
- [Security button](#)
- [Refresh button](#)

## **Connected Users**

Lists the user names of all connected users. If a user connects to FTP as Anonymous, the password used is shown. The icon beside anonymous users includes a question mark.

**From**

For each connected user, shows the corresponding Internet Protocol address.

**Time**

Shows the time each user has been connected.

## Security



Choose the Security button to set read and write permissions for each partition on the FTP Server.

## Refresh

The FTP Manager displays users as they connect, but does not update the display when users disconnect or their connect time elapses.



Choose the Refresh button to update the information shown in the FTP User Sessions dialog box.

## **Disconnect**



Choose the Disconnect button to disconnect the selected user or users from the FTP server.  
Users are not warned when you disconnect them.

### **Disconnect All**



Choose the Disconnect All button to disconnect all users from the FTP server.

Users are not warned when you disconnect them.

## FTP Server Security

Use this dialog box to configure security for the Microsoft File Transfer Protocol (FTP) Server service.  
For information on the dialog box, choose one of the following topics:

-  [Partition](#)
-  [File System Type](#)
-  [Allow Read](#)
-  [Allow Write](#)

**Partition**



Select the letter of the drive or partition you want to set security on.

**File System Type**

Shows the file system used to format the partition specified.

**Allow Read**



Select this check box to allow users to read files from the partition specified.

**Allow Write**



Select this check box to allow users to write files to the partition specified.

## Using the Network Option

You can choose the Network icon in Control Panel to make changes in the computer's network configuration if you are logged on as a member of the Administrators group for this computer.

To use a network with Windows NT, you must specify at least one network adapter card and network software for at least one protocol (or transport) driver.

### To use the Network option

1. Choose the Network icon in Control Panel.
2. After you set the options you want in the dialog box, choose the Close button.

See Also

[Adding Network Adapter Cards and Software](#)

[Configuring Network Bindings](#)

[Configuring Network Software and Adapter Cards](#)

[Configuring TCP/IP and SNMP](#)

[Installing TCP/IP and SNMP](#)

[Installing Remote Access Service](#)

[Joining a Domain](#)

[Joining a Domain from a Remote Workstation](#)

[Joining a Workgroup](#)

[Updating or Removing Network Components](#)

## **Adding Network Adapter Cards and Software**

To communicate over the network, a computer must have a network adapter card installed. Windows NT uses a network device driver, which is software that coordinates between the adapter card and the computer's hardware and other software, controlling the function of the network adapter cards.

Windows NT also uses network software (or protocol) drivers that bind to the adapter card driver. You can add supporting software for network components in the Network Settings dialog box.

### **To install one or more network adapter cards or network software**

1. In the Network Settings dialog box, choose the Add Adapter button to install a driver for a network adapter card.  
Or choose the Add Software button to install any supporting network software that is not a driver for an adapter card.
2. In the Network Adapter Setup or the Network Software Installation dialog box, select the name of the network component you want to install.  
If you have a disk with software from a vendor, select <Other>.
3. Choose the Continue button.  
If Setup asks for a disk, insert the disk in the drive, and then choose the OK button. You might also be asked for specific Windows NT disks. Setup copies the appropriate files to a Windows NT subdirectory.

When you complete all your changes and close the Network Settings dialog box, a message reminds you to restart your computer for the changes to take effect.

See Also

[Network Settings Dialog Box](#)

[Network Adapter Setup Dialog Box](#)

[Network Software Installation Dialog Box](#)

## Configuring Network Software and Adapter Cards

Most Windows NT networking software is self-configuring. However, you can configure many adapter cards and their supporting software for your system. You set the appropriate configuration for network components by choosing the Network option in Control Panel.

### To configure network software or adapter cards

1. In Control Panel, choose Network.
2. In the Network Settings dialog box, select the name of the item you want to configure in either the Installed Network Software or Installed Adapter Cards list.
3. Choose the Configure button.

Windows NT displays a dialog box specifically for the selected component, as provided by the component manufacturer. Choose the Help button or press F1 for information about the dialog box. For additional information, refer to the documentation for your network adapter card or software.

4. Specify your choices in the dialog box, and then choose the OK button.

When you complete all your changes and close the Network Settings dialog box, a message reminds you to restart your computer for the changes to take effect.

See Also

[Network Settings Dialog Box](#)

## Joining a Workgroup

You can choose the Network option in Control Panel to assign the workgroup for the current computer. Or, if the computer will participate in a domain, you can use the Network option to add the current computer to the domain.

Note: If you are unsure about the correct domain name or other items in this dialog box, be sure to choose the Workgroup Name option.

### To join a workgroup

1. In the Network Settings dialog box, choose the Change button beside the Domain or Workgroup name.
2. In the Domain Settings dialog box, select Workgroup, and then type the name of a workgroup you want to the computer to join.

The workgroup name must be different from the computer name.

3. Choose the OK button.

See Also

[Joining a Domain](#)

[Network Settings Dialog Box](#)

[Domain Settings Dialog Box](#)

## Joining a Domain

Joining a Windows NT Advanced Server domain makes the shared resources of the domain available at your workstation. To join a domain, you must be logged on as a member of either the Administrators local group or the Domain Admins global group.

In addition, your Windows NT workstation must have an account on the domain. To obtain a domain account for your computer, ask your network administrator. If you also have an account that is a member of the Domain Admins global group for the domain you want to join, you can add the workstation account to the domain at the same time you join the domain.

### To join a domain

1. In the Network Settings dialog box, choose the Change button beside the Domain or Workgroup name.
2. In the Domain Settings dialog box, select the Domain option, and then type the correct domain name for the domain you want the computer to join.
3. If you are the domain administrator, type the username and password for your account in the domain you are joining.  
If you choose this option, the computer name specified is automatically added to the specified domain if there is not yet an account for that computer.
4. Choose the OK button.
5. When you have successfully joined the domain, a welcome dialog box appears. Choose the OK button in the dialog box.
6. In the Network Settings dialog box, choose the OK button.
7. You cannot log onto the new domain until you restart Windows. To switch to the new domain immediately, choose the Yes button in the dialog box that asks you to do so.

When you join a domain, any authorized user can log onto the domain from your workstation. This procedure does not, however, give you a user account on the domain. If you do not have a user account on the domain you are joining, request one from your network administrator.

See Also

[Joining a Domain from a Remote Workstation](#)

[Joining a Workgroup](#)

[Network Settings Dialog Box](#)

[Domain Settings Dialog Box](#)

## Joining a Domain from a Remote Workstation

If you are working at a remote workstation, you can join a Windows NT Advanced Server domain by connecting to a Remote Access Server on the network. Your workstation must be a Remote Access Services (RAS) client.

Joining a Windows NT Advanced Server domain makes the shared resources of the domain available at your workstation. To join a domain, you must be logged on as a member of either the Administrators local group or the Domain Admins global group.

In addition, your Windows NT workstation must have an account on the domain. To obtain a domain account for your computer, ask your network administrator. If you also have an account that is a member of the Domain Admins global group for the domain you want to join, you can add the workstation account to the domain at the same time you join the domain.

### To join a domain

1. Start the Remote Access Service and connect to the network.
2. In the Network Settings dialog box, choose the Change button beside the Domain or Workgroup name.
3. In the Domain Settings dialog box, select the Domain option, and then type the correct domain name for the domain you want the computer to join.
4. If you are the domain administrator, type the username and password of your account on the domain you are joining. If you choose this option, the computer name specified is automatically added to the specified domain if there is not yet an account for that computer.
5. Choose the OK button.
6. When you have successfully joined the domain, a welcome dialog box appears. Choose the OK button in the dialog box.
7. In the Network Settings dialog box, choose the OK button.
8. The new domain setting does not take effect until you restart Windows. To switch to the new domain immediately, choose the Yes button in the dialog box that asks you to do so.

When you join a domain, any authorized user can log onto the domain from your workstation. This procedure does not, however, give you a user account on the domain. If you do not have a user account on the domain you are joining, request one from your network administrator.

See Also

[Joining a Domain](#)

[Joining a Workgroup](#)

[Network Settings Dialog Box](#)

[Domain Settings Dialog Box](#)

## Configuring Network Bindings

You can choose the Bindings button in the Network Settings dialog box to add or remove network bindings. For example, if you rarely use a particular physical network, you can simply unbind (disconnect) that network adapter card from all network components.

Note: Do not attempt to change binding settings unless you are an experienced network administrator familiar with the requirements of your network software.

### To view bindings for network components

1. In the Network Settings dialog box, choose the Bindings button.
2. In the Show Bindings For box of the Network Bindings dialog box, select the component whose bindings you want to view. Or select All Components to see a list of all bound components.

### To enable or disable binding paths for selected network components

1. In the Network Bindings dialog box, select a binding path.  
The left side of the box shows a dimmed light bulb if the binding path is disabled, and shows a shining light bulb if the binding path is enabled.
2. To enable the binding path, choose the Enable button. To disable the binding path, choose the Disable button. The icon beside the selected binding shows the current state of that binding path.
3. Choose the OK button.

See Also

[Network Settings Dialog Box](#)

[Domain Settings Dialog Box](#)

## Updating or Removing Network Components

You can choose the Network option in Control Panel to update or remove the configuration information for network software or adapter cards installed on your computer.

### To update a network component

1. In the Installed Network Software or the Installed Adapter Cards list of the Network Settings dialog box, select the component you want to update.
2. Choose the Update button.
3. Complete the dialog boxes that appear and, when asked, insert disks from the manufacturer that contain the updated driver information for the selected component.

### To remove a network component

1. In the Installed Network Software or the Installed Adapter Cards list of the Network Settings dialog box, select the component you want to remove.
2. Choose the Remove button.
3. If a dialog box appears, complete the requested information. Choose the Help button in the dialog box or press F1 for more information.

When you remove a network component, the information is removed from your system configuration. The related software remains on your hard disk.

When you complete all your changes and close the Network Settings dialog box, a message reminds you to restart your computer for the changes to take effect.

See also

[Network Settings Dialog Box](#)

## Network Settings

If you log on as a member of the Administrators group for your computer, you can use the Network Settings dialog box to change the computer's network configuration, to change the computer name, and to change the workgroup or domain that the computer is a member of.

Choose one of the following buttons for information about this dialog box:

- [Add Software](#)
- [Add Adapter](#)
- [Bindings](#)
- [Configure](#)
- [Description](#)
- [Change \(Computer Name\)](#)
- [Change \(Domain or Workgroup\)](#)
- [Installed Adapter Cards](#)
- [Installed Network Software](#)
- [Networks](#)
- [Remove](#)
- [Update](#)

## Domain Settings for a Windows NT Workstation

Use the Domain Settings dialog box to join a [workgroup](#) or [domain](#). This dialog box appears when you choose the Change button beside the domain or workgroup name in the Network Settings dialog box.

Choose one of the following buttons for information about this dialog box:

-  [Workgroup](#)
-  [Domain](#)
-  [Administrator User Name and Password](#)

See Also

[Joining a Domain](#)

[Joining a Workgroup](#)

[Network Settings Dialog Box](#)

## Domain Settings for a Domain Controller or Server

Use the Domain Settings dialog box during Windows NT Setup to specify whether the current computer is a domain controller or a server. This dialog box appears automatically during Setup.

After Setup is complete, you can add or promote servers by choosing Server Manager.

Choose one of the following buttons for information about this dialog box:

- [Controller in New Domain](#)
- [Server in Domain](#)
- [Administrator Name and Password](#)

## Network Provider Search Order

Use the Network Provider Search Order dialog box to specify the order in which networks are searched in certain network operations. This dialog box appears when you choose the Networks button in the Network Settings dialog box. This option is only available if your site uses more than one kind of network provider.

After you specify the order for searching networks in this dialog box, Windows NT always searches in that order. After Windows NT finds the specified server, directory, file, or other item on one network, it does not continue to search the networks listed lower in the search order.

### Access Networks in This Order

 Select a network name whose search order you want to change.

### Up and Down Button

 Choose the Up or Down button to move the selected network higher or lower in the search order.

See Also

[Network Settings Dialog Box](#)

## Network Bindings

Use the Network Bindings dialog box to add or remove bindings between network components. Bindings make the component's services available to other network components that can benefit from them. If your computer has more than one network protocol, you can also use this dialog box to change the binding path order. This dialog box appears when you choose the Bindings button in the Network Settings dialog box.

The icons at the left of the list of current binding paths shows whether each binding is enabled or disabled. A lighted bulb indicates that the binding is enabled, a dimmed bulb that the binding is disabled.

Choose one of the following buttons for information about this dialog box:

-  [Show Bindings For](#)
-  [Upper/Lower Bindings List](#)
-  [Enable](#)
-  [Disable](#)
-  [Up Arrow](#)
-  [Down Arrow](#)

See Also

[Configuring Network Bindings](#)  
[Network Settings Dialog Box](#)

**Binding Path Order**

Binding paths are processed in the order listed. If the network protocol you use most frequently is first in the binding list, average connection time is lower.

Some protocols are faster than others for certain network topologies. Putting the faster protocol first in the binding list improves performance.

### **Up Arrow**

 If your Windows NT computer uses more than one network protocol, choose the Up Arrow button to move the selected binding path up in the binding list.

### **Down Arrow**

 If your Windows NT computer uses more than one network protocol, choose the Down Arrow button to move the selected binding path down in the binding list.

## Network Adapter Card Installation

Use this dialog box to select the network adapter or software component that you want to install.

### Network Adapter Card

 Click the arrow at the right of the setting you want to change, and then scroll through the list to choose the network component you want to install. Or press `TAB` to move the selection cursor to the setting you want to change, and then press `ALT+DOWN ARROW` to select a setting.

If you have a disk with software from a vendor, select `<Other>`.

Choose the Continue button. Follow the instructions on the screen to supply disks. Then complete the information in the dialog box that appears. Choose the Help button in that dialog box for more information.

See Also

[Adding Network Adapter Cards and Software](#)

## **What Is SNMP?**

With the Microsoft Simple Network Management Protocol (SNMP) services, a Windows NT computer can report its current status to an SNMP management system on a TCP/IP network.

SNMP sends status information to one or more hosts when the host requests it or when a significant event occurs on the server. The SNMP service can also report network information called traps to a host.

The SNMP service uses hostnames and IP addresses to recognize the hosts to which it reports information and from which it receives requests.

See Also

[What Is TCP/IP?](#)

[Installing TCP/IP and SNMP](#)

[Configuring TCP/IP and SNMP](#)

## What Is TCP/IP?

Transmission Control Protocol/Internet Protocol (TCP/IP) is a networking transport that provides communication across any set of interconnected networks, between computers with diverse hardware architectures, using almost any packet-switched network hardware. TCP/IP can be used to connect to non-Windows Networking hosts.

TCP/IP refers to the Internet protocols used to connect a worldwide internetwork of universities, research labs, Department of Defense installations, and corporations. TCP/IP includes a set of standards for communication between computers and conventions for connecting networks and routing traffic.

See Also

[What Is SNMP?](#)

[Installing TCP/IP and SNMP](#)

[Configuring TCP/IP and SNMP](#)

## Installing TCP/IP and SNMP

The TCP/IP networking transport and utilities are not installed with Windows NT if you used Express Setup. After Windows NT is installed, the TCP/IP Protocol and SNMP service can be installed by choosing the Network option in the Control Panel.

**Note** You must be logged on as an Administrator to install TCP/IP and SNMP.

### To install TCP/IP Protocol and SNMP services

1. In Control Panel, choose the Network icon.
2. In the Network Settings dialog box, choose the Add Software button.
3. To install TCP/IP, select TCP/IP Protocol from the Network Software list.  
To install SMNP, select SNMP Driver from the Network Software list.
4. Choose the Continue button. Then follow the onscreen instructions to install TCP/IP or SNMP software on the workstation.

After the software is installed, you can select it in the Installed Network Software list and choose the Configure button to configure it.

See Also

[What Is SNMP?](#)

[What Is TCP/IP?](#)

[Configuring TCP/IP and SNMP](#)

[Network Settings Dialog Box](#)

## Configuring TCP/IP and SNMP

After the [TCP/IP](#) protocol and [SNMP](#) service are installed, you can configure settings for each on your workstation.

### To configure TCP/IP protocol

1. In Control Panel, choose the Network icon.
2. In the Installed Network Software list, select TCP/IP Protocol and then choose the Configure button.
3. Complete the options in the TCP/IP Configuration dialog box. For help while you are working in this dialog box, press F1.

### To configure SNMP

1. In the Installed Network Software list of the Network Settings dialog box, select SNMP Service and then choose the Configure button.
2. Complete the options in the SNMP Service Configuration dialog box. For help while you are working in this dialog box, press F1.

See Also

[What Is SNMP?](#)

[What Is TCP/IP?](#)

[Installing TCP/IP and SNMP](#)

[Network Settings Dialog Box](#)

[TCP/IP Configuration Dialog Box](#)

[SNMP Service Configuration Dialog Box](#)

## TCP/IP Configuration

Use the TCP/IP Configuration dialog box to specify settings for [TCP/IP](#) utilities. This dialog box appears when you choose the Network option in Control Panel, and then select TCP/IP Protocol in the Installed Network Software list and choose the Configure button.

To configure TCP/IP, you must know the [IP address](#) and [subnet mask](#) for your network adapter.

Choose one of the following buttons for information about this dialog box:

- [Default Gateway](#)
- [Adapter](#)
- [IP Address](#)
- [Subnet Mask](#)
- [Windows Networking Adapter](#)
- [Scope ID for Windows Networking](#)
- [Connectivity](#)

See Also

[What Is TCP/IP?](#)

[Configuring TCP/IP and SNMP](#)

[TCP/IP Connectivity](#)

**Default Gateway**

Specifies the Internet Protocol (IP) address of the default gateway, which is used to forward packets to other networks. This parameter is required only for nodes on internetworks. If this parameter is not provided, IP functionality is limited to the local network.

To determine the address of the local gateway, ask your network administrator.

### **Adapter**

 Select a network adapter that has been installed and bound to TCP/IP. The Internet Protocol (IP) Address and Subnet Mask values can be different for each adapter card that is bound to TCP/IP on your computer.

**IP Address**

Specifies the Internet Protocol (IP) address associated with the selected network adapter. An entry is added to the registry for each interface bound to the TCP/IP transport.

To determine the correct IP Address, ask your network administrator.

**Subnet Mask**

Specifies the subnet mask associated with the selected adapter. Each interface used by TCP/IP must have a subnet mask configured. This allows the workstation to separate the Internet Protocol (IP) address into host and network IDs, and also to subdivide the host ID portion of an IP address so that a large network address block can be partitioned into a number of smaller subnetworks. This parameter is entered into the registry for each network interface bound to the TCP/IP transport.

To determine your network's subnet policy and correct Subnet Mask, ask your network administrator.

**Windows Networking Adapter**

Specifies the adapter that you want to host Windows Networking. If a workstation has more than one network adapter installed and bound to TCP/IP, only one adapter can host Windows Networking services (both client and server).

**Scope ID for Windows Networking**

Specifies the NetBIOS scope parameter for the NetBIOS over TCP/IP (NBT) module, which provides NetBIOS naming services.

To determine the correct Scope ID, ask your network administrator.

## Connectivity

 To configure connectivity parameters for TCP/IP utilities, choose the Connectivity button, which displays the TCP/IP Connectivity dialog box.

## TCP/IP Connectivity Configuration

Use the TCP/IP Connectivity dialog box to set a number of options for Microsoft TCP/IP and other TCP/IP-based applications. This dialog box appears when you choose the Connectivity button in the TCP/IP Configuration dialog box.

Configuring these parameters allows a Windows NT user to specify remote TCP/IP nodes by name rather than address.

All Domain Name Service (DNS) elements in this dialog box are optional.

Choose one of the following buttons for information about this dialog box:

- [Hostname](#)
- [TCP Domain Name](#)
- [Name Resolution Search Order](#)
- [Domain Name Service \(DNS\) Search Order](#)
- [Domain Search Order](#)

See Also

[What Is TCP/IP?](#)

[Configuring TCP/IP and SNMP](#)

[TCP/IP Configuration Dialog Box](#)

**Hostname**

Specifies the name for this computer, which is used to identify the local workstation for authentication by remote TCP/IP utilities such as **r**cp, **r**sh, and **r**exec. Other TCP/IP utilities and applications can also use this value to find the name of the local workstation.

By default, the hostname is the computer name in Windows NT. But a hostname can also be assigned by your network administrator to identify a host on the local network. Names are stored in a table that maps to Internet Protocol (IP) addresses for use by the Domain Name Service (DNS).

To determine the correct hostname to use, ask your network administrator.

**TCP Domain Name**

Specifies the local workstation's domain in the form of the fully qualified name for the workstation, which is *hostname.domain*. During Domain Name Service (DNS) queries, the local domain is appended to short names unless the Domain Search Order has been specified.

The TCP Domain Name identifies your group under a naming hierarchy with descending levels of detail, for example, myteam.group7.edu. The first part identifies a department or division, the middle part gives the institution name, and the last part indicates a general institutional category (such as education or commercial).

To determine the correct TCP Domain Name for your group, ask your network administrator.

**Name Resolution Search Order**

Specifies the order that the workstation follows in trying to resolve hostnames. The options specify whether resolution is from the Domain Name Service (DNS) or from host files, or a combination of the two.

The default setting is Hosts File Only.

### **Domain Name Service (DNS) Search Order**

 To add an entry to the Search Order list, type the hostname or IP address in the box on the left, and then choose the Add button. To delete an entry, select it in the list on the right, and then choose the Remove button.

 To change the list order, select an entry. Then from the Order buttons, choose the Up button to move the entry higher in the list, or the Down button to move it lower in the list.

The DNS Search Order lists up to three servers to be used for name resolution. These servers are queried in the order specified from top to bottom.

If Name Resolution Search Order is Hosts File Only, this option is not available.

### **Domain Search Order**

 To add an entry to the Search Order List, type a domain suffix to be used in Domain Name Service (DNS) queries in the box on the left, and then choose the Add button.

This parameter overrides the use of TCP Domain Name in search queries, but it is not required. As with DNS Search Order, the order of entries in the Search list determines the priority in which suffixes are added.

## SNMP Agent

Use the SNMP Agent dialog box to provide information to network administrators who need to remotely configure the SNMP for your computer. This dialog box appears when you choose the Agent button in the SNMP Service Configuration dialog box.

The information in this dialog box is for the network administrator's information only. It does not affect the operation of your Windows NT computer.

For information about the SNMP Agent dialog box, choose one of the following topics:

-  [Contact](#)
-  [Locations](#)
-  [Service](#)

See Also

[Configuring TCP/IP and SNMP](#)

[SNMP Service Configuration Dialog Box](#)

**Contact**

 Enter the name and telephone number of the person the network administrator should contact if there are any questions or problems concerning your SNMP configuration.

**Location**



Enter the physical location of your computer, for example, Building 3, Room 124.

## Service

Check all boxes that indicate network capabilities provided by your Windows NT computer:

- Physical:** Select this check box if your Windows NT computer manages any physical TCP/IP device, such as a repeater.
- Datalink/Subnetwork:** Select this check box if your Windows NT computer manages a TCP/IP subnetwork or datalink, such as a bridge.
- Internet:** Select this check box if your Windows NT computer acts as an Internet Protocol (IP) gateway.
- End-to-End:** Select this check box if your Windows NT computer acts as an IP host.
- Applications:** Select this check box if your Windows NT computer includes any applications that use TCP/IP, such as electronic mail.

## SNMP Service Configuration

Use the SNMP Service Configuration dialog box to specify parameters for SNMP services. This dialog box appears when you select SNMP Service in the Network Software list and choose the Configure button.

Choose one of the following buttons for information about this dialog box:

- Send Traps with These Communities
- Trap Destinations for My Community
- Security
- Agent

See Also

[What Is SNMP?](#)

[Configuring TCP/IP and SNMP](#)

[SNMP Security Configuration Dialog Box](#)

### **Send Traps with These Communities**

 To add an entry, type the community name in the box on the right, and then choose the Add button. To remove a community, select its name in the list on the left, and then choose the Remove button.

A community is a group of hosts that a server running the SNMP service belongs to. You can specify one or more communities to which the current workstation will send traps. The community name is placed in the SNMP packet when the trap is sent.

By default, this list contains the name Public. If the SNMP service is installed and running, this list also contains community names previously specified.

## Trap Destinations

Trap destinations are the names or IP addresses of hosts to which you want the SNMP service to send traps.

 To add a trap destination for the selected community name, type the hostname or IP address in the box on the right and then choose the Add button. To remove a trap destination, select its name in the list on the left and then choose the Remove button.

## Agent



To configure the agent for SNMP services, choose the Agent button.

## Security

 To configure security for SNMP services, choose the Security button, and complete the options in the dialog box that appears.

## SNMP Security Configuration

Use the SNMP Security Configuration dialog box to specify security parameters for SNMP services. This dialog box appears when you choose the Security button in the SNMP Service Configuration dialog box.

Choose one of the following buttons for information about this dialog box:

- [Send Authentication Trap](#)
- [Accept Community Names](#)
- [Accept SNMP Packets from Any Host](#)
- [Only Accept SNMP Packets from These Hosts](#)

See Also

[What Is SNMP?](#)

[Configuring TCP/IP and SNMP](#)

[SNMP Service Configuration Dialog Box](#)

### **Send Authentication Trap**



To specify whether an authentication trap is sent, select this option.

The SNMP service can send a trap to the trap destination(s) when it receives a request for information that does not contain the correct community name and that does not match an accepted hostname for the service. The trap indicates that the request failed authentication.

### **Accept Community Names**

 To add an entry, type the community name in the box on the right, and then choose the Add button. To remove an entry, select its name in the list on the left, and then choose the Remove button. For the SNMP service to accept requests from a host, that host must belong to a community that appears in this list. Typically, all hosts belong to Public, which is the default name for the common community of all hosts.

### **Accept SNMP Packets from Any Host**

- Select this option to ensure that no SNMP packets are rejected on the basis of source host ID. If this option is selected, hosts listed under the Only Accept SNMP Packets From These Hosts option have no effect.

### **Only Accept SNMP Packets from These Hosts**



Select this option to ensure that SNMP packets are accepted only from the hosts listed. To add an entry to the list, type the hostname or Internet Protocol (IP) address in the box on the right, and then choose the Add button. To remove a community, select its name in the list on the left, and then choose the Remove button.

**Packet**

In a packet-switching network, a packet is a transmission unit of fixed maximum size that consists of binary information representing both data and a header containing an ID number, source and destination addresses, and error-control data.

**Domain Name Service (DNS)**

A hierarchical naming service usually provided on networked UNIX systems for mapping hostnames with Internet Protocol (IP) addresses.

**SNMP**

Simple Network Management Protocol. This service sends status information to the host on a TCP/IP network.

**TCP/IP**

Transmission Control Protocol/Internet Protocol, the Internet protocols used to connect a worldwide internetwork of universities, research labs, Department of Defense installations, and corporations. TCP/IP includes standards for how computers communicate and conventions for connecting networks and routing traffic.

**Subnet Mask**

A 32-bit value that allows the recipient of Internet Protocol (IP) packets to distinguish the network ID portion of the IP address from the host ID. To determine your network's subnet policy and your correct subnet mask, ask your network administrator.

**IP Address**

The Internet Protocol (IP) address is used to identify a node on a network and to specify routing information on an internet. Each node on the internet must be assigned a unique IP address, which is made up of the official network ID (assigned by the Defense Data Network-Network Information Center) plus a unique host ID assigned by the network administrator.

To determine the correct IP address, ask your network administrator.

## DEC EtherWORKS LC Adapter Card Setup

Use this dialog box to configure settings for the DEC EtherWORKS LC adapter card (sometimes referred to as DEC100).

### IRQ Level

Select an interrupt level for this adapter card. Do not set this to Interrupt 3 if you have two COM ports (COM1=IRQ4 and COM2=IRQ3).

### Memory Address

Select a number (expressed as a hexadecimal string) to specify the base memory (I/O) address used by this network adapter card. This number must match the card's memory address settings. See the documentation for your adapter for more information.

### I/O Port Address

Select Primary if this is the first (primary) adapter card. Select Secondary if another card is your primary network adapter.

## DEC EtherWORKS Turbo Adapter Card Setup

Use this dialog box to configure settings for the DEC EtherWORKS Turbo adapter card (sometimes referred to as DEC201).

### IRQ Level

Select an interrupt level for this adapter card. Do not set this to Interrupt 3 if you have two COM ports (COM1=IRQ4 and COM2=IRQ3).

### Memory Base Address

Select a number (expressed as a hexadecimal string) to specify the base memory (I/O) address used by this network adapter card. This number must match the card's memory address settings. See the documentation for your adapter for more information.

### I/O Port Base Address

Select Primary if this is the first (primary) adapter card. Select Secondary if another card is your primary network adapter.

## DEC Turbo Channel Ethernet Adapter Card Setup

Use this dialog box to configure settings for the DECstation adapter card.

### Slot Number



Select a number to specify the slot in the computer where the adapter card resides.

## **DEC Etherworks PC Adapter Card Setup**

Use this dialog box to configure settings for the DEC PC adapter card.

### **Slot Number**



Select a number to specify the slot in the computer where the adapter card resides.

## 3Com Etherlink 16 Adapter Card Setup

Use this dialog box to configure settings for the 3Com Etherlink II 16 adapter card (sometimes referred to as Elnk16).

For more information on this adapter card, choose one of the following topics:

- [IRQ Level](#)
- [I/O Port Address](#)
- [Memory Address](#)
- [Memory Size](#)
- [Transceiver Type](#)
- [Zero Wait State](#)

### IRQ Level

 Select an interrupt level for this adapter card. IRQ3 is the default setting. If you have two COM ports (COM1=IRQ4 and COM2=IRQ3), do not set this adapter card to IRQ3. IRQ2 is a good alternative.

### **I/O Port Address**



Select a number (expressed as a hexadecimal string) to specify the I/O port base address.

### **Memory Address**

 Select a number (expressed as a hexadecimal string) to specify the memory-mapped Windows base address used by this network adapter card. This number must match the card's memory address settings. See the documentation for your adapter for more information.

### Memory Size



Select a size to specify the memory-mapped Windows size (transfer buffer size) for this adapter card.

**Transceiver Type**

Select External or OnBoard to specify the transceiver for this adapter card. (Select External for a DEC/Intel/Xerox (DIX) connection.)

**Zero Wait State**



Select this check box if the fast RAM on your computer is zero wait state.

## Novell NE2000 Network Card Setup

Use this dialog box to configure settings for the Novell NE2000 adapter card.

### IRQ Level

Select an interrupt level for this adapter card. Do not set this to IRQ3 if you have two COM ports (COM1=IRQ4 and COM2=IRQ3).

### I/O Port Address

Select a number (expressed as a hexadecimal string) to specify the I/O port base address.

## Novell NE1000 Network Card Setup

Use this dialog box to configure settings for the Novell NE1000 adapter card.

### IRQ Level

Select an interrupt level for this adapter card. Do not set this to IRQ3 if you have two COM ports (COM1=IRQ4 and COM2=IRQ3).

### I/O Port Address

Select a number (expressed as a hexadecimal string) to specify the I/O port base address.

## 3Com Etherlink II Adapter Card Setup

Use this dialog box to configure settings for the 3Com Etherlink II adapter card (sometimes referred to as Elnkii).

For more information on this dialog box, choose one of the following topics:

- [IRQ Level](#)
- [I/O Port Address](#)
- [Transceiver Type](#)
- [Memory Mapped](#)

### **IRQ Level**

 Select an interrupt level for this adapter card. IRQ3 is the default setting. If you have two COM ports (COM1=IRQ4 and COM2=IRQ3), do not set this adapter card to IRQ3. IRQ2 is a good alternative.

### **I/O Port Address**



Select a number (expressed as a hexadecimal string) to specify the I/O port base address.

**Transceiver Type**

Select External or OnBoard to specify the transceiver for this adapter card. (Select External for a DEC/Intel/Xerox (DIX) connection.)

**Memory Mapped**

Select this check box if this adapter card is memory mapped.

## 3Com Etherlink III Adapter Card Setup

Use this dialog box to configure settings for the 3Com Etherlink III adapter card (sometimes referred to as Elnk3).

### I/O Port Address



From the list provided, select the I/O port base address.

## 3Com Etherlink MicroChannel Adapter Card Setup

Use this dialog box to configure settings for the 3Com Etherlink II MicroChannel adapter card.

For more information on this dialog box, choose one of the following topics:

- [IRQ Level](#)
- [I/O Port Base](#)
- [Memory Base Address](#)
- [Memory Size](#)

### IRQ Level

 Select an interrupt level for this adapter card. Do not set this to Interrupt 3 if you have two COM ports (COM1=IRQ4 and COM2=IRQ3).

**I/O Port Base**

Select a number (expressed as a hexadecimal string) to specify the I/O port base address.

### **Memory Base Address**

 Select a number (expressed as a hexadecimal string) to specify the base memory (I/O) address used by this network adapter card. This number must match the card's memory address settings. See the documentation for your adapter for more information.

### Memory Size



Select 8 for low or 16 for high.

## MS Loopback Adapter Card Setup

Use this dialog box to configure the Microsoft Loopback adapter card.

### Frame Type

 From the list provided, select the frame type that corresponds to your network protocol. The default setting is 802.3. If you do not know what to enter, ask your network administrator.

**Advanced Micro Devices AM1500T/AM2100/PCNet  
Novell/Anthem NE1500T or NE2100  
Adapter Card Setup**

Use this dialog box to configure the Advanced Micro Devices (AMD) AM1500T, AM2100, or PCNet, or the Novell/Anthem NE1500T or NE2100 adapter card. For information on the dialog box, choose one of the following topics:

- [IRQ Level](#)
- [DMA Channel](#)
- [I/O Port Address](#)

### IRQ Level

 Select an interrupt level for this adapter card. Do not set this to Interrupt 3 if you have two COM ports (COM1=IRQ4 and COM2=IRQ3).

### **I/O Port Address**



Select a number (expressed as a hexadecimal string) to specify the I/O port address.

**DMA Channel**



Select 5, 6, or 7 to specify the DMA channel used by this adapter card.

## **DayStar Digital LocalTalk Adapter Card Setup**

Use this dialog box to configure the DayStar LocalTalk adapter card.

Because this card is always set in polling mode (IRQ level 0), you do not have to set an IRQ level.

### **I/O Base Addr**



Select a number (expressed as a hexadecimal string) to specify the I/O port base address.

## Novell 3200 Adapter Card Setup

Use this dialog box to configure settings for the Novell NE3200 adapter card.

### IRQ Level

Select an interrupt level for this adapter card. Do not set this to Interrupt 3 if you have two COM ports (COM1=IRQ4 and COM2=IRQ3).

### I/O Port Address

Select a number (expressed as a hexadecimal string) to specify the I/O port base address.

## Proteon 1390 Adapter Card Setup

Use this dialog box to configure settings for the Proteon 1390 adapter card.

For more information about this dialog box, choose one of the following topics:

- [IRQ Level](#)
- [I/O Port Base Address](#)
- [DMA Channel](#)
- [Cable Type](#)
- [Card Speed](#)
- [Network Address](#)

### IRQ Level

 Select an interrupt level for this adapter card. Do not set this to Interrupt 3 if you have two COM ports (COM1=IRQ4 and COM2=IRQ3).

### **I/O Port Base Address**



Select a number (expressed as a hexadecimal string) to specify the I/O port base address.

**DMA Channel**



Select 5, 6, or 7 to specify the DMA channel used by this adapter card.

**Cable Type**



Select unshielded twisted pair (UTP) or shielded twisted pair (STP).

**Card Speed**



Select 4 or 16 megabits per second.

### Network Address

 To use a network address other than the one burned into the adapter card, enter the network address in hexadecimal form, in the following format:

XX-XX-XX-XX-XX-XX

For instance, 01-02-03-4E-2D-1F

If you leave the network address blank, the network address burned into the adapter card is used. If you do not know the network address, ask your network administrator.

## Proteon 1990 Adapter Card Setup

Use this dialog box to configure settings for the Proteon 1990 adapter card.

For information on this dialog box, choose one of the following topics:

- [IRQ Level](#)
- [I/O Port Base Address](#)
- [DMA Channel](#)
- [Cable Type](#)
- [Card Speed](#)
- [Network Address](#)

## Sonic Adapter Card Setup

### IRQ Level

Select an interrupt level for this adapter card. Do not set this to Interrupt 3 if you have two COM ports (COM1=IRQ4 and COM2=IRQ3).

### I/O Port Base

Select a number (expressed as a hexadecimal string) to specify the I/O port base address.

### Memory Base Address

Select a number (expressed as a hexadecimal string) to specify the base memory (I/O) address used by this network adapter card. This number must match the card's memory address settings. If you do not enter a memory base address, the address that is burned in on the adapter card is used. See the documentation for your adapter for more information.

## IBM Token Ring Adapter Card Setup

Use this dialog box to configure settings for the IBM Token Ring adapter card.

### I/O Port Base Address

Select Primary if this is the first (primary) adapter card. Select Secondary if another card is your primary network adapter.

### Network Address

To use a network address other than the one burned into the adapter card, enter the network address in hexadecimal form, in the following format:

XX-XX-XX-XX-XX-XX

For instance, 01-02-03-4E-2D-1F

If you leave the network address blank, the network address burned into the adapter card is used. If you do not know the network address, ask your network administrator.

## IBM Token Ring MCA Adapter Card Setup

Use this dialog box to configure settings for the IBM Token Ring adapter card for Micro Channel Architecture (MCA).

### Network Address

 To use a network address other than the one burned into the adapter card, enter the network address in hexadecimal form, in the following format:

XX-XX-XX-XX-XX-XX

For instance, 01-02-03-4E-2D-1F

If you leave the network address blank, the network address burned into the adapter card is used. If you do not know the network address, ask your network administrator.

## Ungermann-Bass Adapter Card Setup

Use this dialog box to configure settings for the Ungermann-Bass adapter.

### Interrupt Number

Select an interrupt level for this adapter card. Do not set this to Interrupt 3 if you have two COM ports (COM1=IRQ4 and COM2=IRQ3).

### I/O Port Base Address

Select a number (expressed as a hexadecimal string) to specify the I/O port base address.

### Memory Address

Select a number (expressed as a hexadecimal string) to specify the base memory (I/O) address used by this network adapter card. This number must match the card's memory address settings. See the documentation for your adapter for more information.

## Ungermann-Bass NDIS Adapter Card Setup

Use this dialog box to configure settings for the Ungermann-Bass NDIS adapter.

### Interrupt Number

Select an interrupt level for this adapter card. Do not set this to Interrupt 3 if you have two COM ports (COM1=IRQ4 and COM2=IRQ3).

### I/O Port Base Address

Select a number (expressed as a hexadecimal string) to specify the I/O port base address.

### Memory Address

Select a number (expressed as a hexadecimal string) to specify the base memory (I/O) address used by this network adapter card. This number must match the card's memory address settings. See the documentation for your adapter for more information.

### Net Number

Select 1 if there is only one network provider. Or select a number to specify which network provider this card is connected to.

### Size

Select Small or Big to specify how much memory is allocated for the adapter card.

## SMC (WD) Ethercard 8003EP Adapter Card Setup

Use this dialog box to configure settings for the SMC (Western Digital) Ethercard 8003EP adapter card.

### IRQ Level

Select an interrupt level for this adapter card. IRQ2 is a common choice for this adapter card. Do not set this to Interrupt 3 if you have two COM ports (COM1=IRQ4 and COM2=IRQ3).

### Memory Base Address

Select a number (expressed as a hexadecimal string) to specify the base memory (I/O) address used by this network adapter card. This number must match the card's memory address settings. See the documentation for your adapter for more information.

### I/O Port Address

Select a number (expressed as a hexadecimal string) to specify the I/O port base address.

## **SMC (WD) Ethercard WD8013 Adapter Card Setup**

Use this dialog box to configure settings for the SMC (Western Digital for MicroChannel) Ethercard WD8013 adapter card.

### **IRQ Level**

Select an interrupt level for this adapter card. IRQ2 is a common choice for this adapter card. Do not set this to Interrupt 3 if you have two COM ports (COM1=IRQ4 and COM2=IRQ3).

### **Memory Base Address**

Select a number (expressed as a hexadecimal string) to specify the base memory (I/O) address used by this network adapter card. This number must match the card's memory address settings. See the documentation for your adapter for more information.

### **I/O Port Address**

Select a number (expressed as a hexadecimal string) to specify the I/O port base address.

## **NetBIOS Interface**

The NetBIOS interface is the link between Windows NT and the network protocol drivers that communicate with drivers for specific network adapter cards. Use this dialog box to configure the NetBIOS interface.

### **Network Route**

From the list provided, select a route from the NetBIOS interface to a network card driver.

### **Lana Number**

Type the number of the local area network adapter (LANA) that you want the NetBIOS to access.

## Redirector Setup

 Select Minimize Memory Used, Balance, or Maximize Throughput & Connections to specify how much memory is allocated for the service.

## Replicator Setup

 Select Minimize Memory Used, Balance, or Maximize Throughput & Connections to specify how much memory is allocated for the service.

## Server Services Setup

Use this dialog box to adjust the relationship between memory allocated to network connections and memory allocated to applications running on your computer, and to manage connectivity with Microsoft LAN Manager 2.x servers on the network.

### Optimization

Select one of the options provided. For information on the options, choose one of the following topics:

Minimize Memory Used

Balance

Maximize Throughput for File Sharing

Maximize Throughput for Network Applications

### Make Browser Broadcasts to LAN Manager 2.1

Select this check box if there is a LAN Manager 2.x server on your network and you want that server to browse shared resources on this computer.

### **Maximize Throughput for File Sharing**

Choose this option to allocate maximum memory for file sharing applications. This setting is best for Windows NT Advanced Servers on a large network.

### **Maximize Throughput for Network Applications**

Choose this option to optimize server memory for distributed applications that do their own memory caching, such as Microsoft SQL Server. This setting is best for Windows NT Advanced Servers on a large network.

## **Network Software Installation**

Use this dialog box to select supporting network software to install for your computer.

Select the software component you want to install, and then choose the OK button.

If you have a disk with software from a vendor, select Other.

## Workstation

### Optimization

Select Minimize Memory Used, Balance, or Maximize Connections to specify how much memory is allocated for the adapter card.

## **DLC Protocol**

Use this dialog box to configure the Data Link Control protocol.

### **Optimization**

Select Minimize Memory Used, Balance, or Maximize Connections to specify how much memory is allocated for the adapter card.

## NetBEUI Protocol

Use this dialog box to adjust the relationship between memory allocated to network connections and memory allocated to applications running on your computer.

### Optimization

Select one of the options provided. For information on the options, choose one of the following topics:

Minimize Memory Used

Balance

Maximize Throughput and Connections

**Minimize Memory Used**



Choose this option to allocate memory for ten network connections or fewer.

**Balance**

Choose this option to support as many as 64 connections. Balance is the default setting for NetBEUI software.

### **Maximize Throughput and Connections**

Choose this option to support as many network connections as your computer's hardware will allow. This setting is best for Windows NT Advanced Servers on a large network.

## **Bindings**

The network consists of a series of software layers, where each layer has a specific function. Each network component can be bound to one or more components above or below it to make that component's services available to others.



Choose this button to add or remove bindings for network components.

### **Domain or Workgroup Change Button**

 To join a workgroup or a Windows NT Advanced Server domain, choose this button and complete the information in the Domain Settings dialog box.

You cannot join a workgroup or a different domain from a Windows NT Advanced Server. To join a different domain, you must reinstall Windows NT Advanced Server. If your server is a domain controller, you can change the domain name to one that is not currently used by the network. If your server is not a domain controller, you can change the domain name only if it has been changed on the domain controller, and only to the new domain name.

Note: If you change the name of a domain, you must also change the domain name on all servers and workstations in the domain, and you must reestablish any trust relationships with other domains.

## Description

 To create a custom description of any network component, select the item in the Installed Network Software or Installed Adapter Card list. Then type a description in this box.

For example, you might add text to specify the slot in the computer where an adapter card is installed.

## Remove

 To remove a network software component or adapter card, select the item in the Installed Network Software or Installed Adapter Card list. Then choose the Remove button. The dialog box for removing the component is supplied by the manufacturer. Choose the Help button in the dialog box for more information.

When you remove a network component, the information is removed from your system configuration. The related software remains on your hard disk.

## Update

 To update a network software component or adapter card, select the item in the Installed Network Software or Installed Adapter Card list. Then choose the Update button and complete the information in the dialog boxes that appear.

You will be asked to insert disks from the manufacturer that contain the updated driver information for the selected component.

## Configure

 To configure any network adapter card or software component, select the item in the Installed Network Software or Installed Adapter Card list. Then choose the Configure button and complete the information in the dialog boxes that appear.

Double-clicking the name in the list is the same as choosing the Configure button.

### **Add Adapter**

 To install a network adapter card, choose this button. Then complete the information in the dialog boxes that appear.

### **Add Software**

 To install a network software component, choose this button. Then complete the information in the dialog boxes that appear.

### **Installed Adapter Cards**

 To configure, update, or remove drivers for any network adapter cards on the computer, select the driver name in this list, and then choose the appropriate button.

### **Installed Network Software**

 To configure, update, or remove any network component that is not a network adapter card, select the software in this list. Then choose the appropriate button.  
A network component is software bound to a network adapter card or to another network component, such as protocol stacks and services.

## Restarting Your Computer

 From the File menu in Program Manager, choose Shutdown. Do not flip the power switch to restart your computer.

**Bindings**

A series of bound paths from the upper-layer network services and protocols to the lowest layer of adapter card device drivers. Each network component can be bound to one or more network components above it or below it to make the component's services available to any component that can benefit from them.

### Show Bindings List

 To select the component binding you want, choose the arrow at the right of the list, and then scroll through the list. Or press `TAB` to move the selection cursor, and then press `ALT+DOWN ARROW` to select a binding.

Select the All Components item to see a list of all bound components.

### Upper/Lower Bindings List

 To select a binding path to enable or disable, select a binding path in the list. The icon at the left of the list shows the current status of that binding. A lighted bulb indicates that the binding is enabled, a dimmed bulb that the binding is disabled.

### **Enable Button**

 To enable a binding path, select the binding in the Upper/Lower Bindings list. Then choose the Enable button.

### **Disable Button**

 To disable a binding path, select the binding in the Upper/Lower Bindings list. Then choose the Disable button.

### **Computer Name Change Button**



To change the computer name, choose this button and type a new computer name in the dialog box.

To change the computer name, you must be logged on to a user account that is a member of either the Administrators local group or the Domain Admins global group.

There must already be an account for this computer name if it is to be a member of a Windows NT Advanced Server domain. Otherwise, you cannot access the shared resources of the domain from your computer.

A computer name must be unique in its domain and can contain up to 15 characters.

## Workgroup



To join a workgroup, select the Workgroup option and then type a workgroup name.

To change the workgroup membership of your workstation, you must be logged on to a user account that is a member of either the Administrators local group or the Domain Admins global group.

The workgroup name must not be the same as the computer name. The name can be, for example, an existing workgroup created under Windows for Workgroups.

A workgroup name can have as many as 15 characters. It cannot contain any of the following characters:

; : " < > \* + = \ | ? ,

## Domain

 To join a domain, select the Domain option and then type the domain name where this computer has an account.

To change the domain membership of your workstation, you must be logged on to a user account that is a member of either the Administrators local group or the Domain Admins global group. In addition, your workstation must have an account on the domain you want to join.

To obtain the correct domain name, ask your network administrator. If you are unsure, select the Workgroup option and complete the dialog box. You can choose the Network option in Control Panel to join the domain when you know the correct domain name.

### **Domain Administrator's User Name and User Password**

 To add your workstation to the specified domain and join the domain at the same time, type a username and password that identifies an account in the Domain Admins global group for the specified domain.

If you do not have an administrator account on the specified domain, you must request a workstation account from your network administrator.

### **Controller in New Domain**

 To create a new domain where this computer is the domain controller, choose this option. Then type a domain name.

### **Server in Domain**

To set up a server in a domain, select this option. Then type the domain name where this computer has an account.

### **Networks Button**

 To set network search order if your computer is connected to more than one kind of network provider, choose this button and complete the Network Provider Search Order dialog box. This button is not available if you use only one kind of network.

**Domain**

A set of servers and workstations grouped together for efficiency and security. A domain is the basic administrative unit in Windows NT Advanced Server. A network can be divided, for example, into domains by department, workgroup, or building floor.

Domains keep large networks manageable. For example, users displaying a list of servers see only the servers for their domain. But they can still access resources on servers in any domain.

**Workgroup**

A set of servers and workstations grouped together for efficiency. A workgroup keeps the network manageable. For example, users displaying a list of printers see only the printers for their workgroup. But they can still access resources in any workgroup.

A network can be divided, for example, into workgroups by department or any other collection of computers that use the same shared files or other network resources.

**Computer Name**

A name of 15 characters or less that is used to identify a computer on the network. To change the computer name, choose the Network option in Control Panel and then choose the Change button beside the current computer name.

A computer cannot have the same name as either a Windows NT Advanced Server domain or another computer on the network.

If a computer is joining a Windows NT Advanced Server domain, it must use the name created for it by the network administrator. If the computer name does not have an account in the domain, you cannot log on to the domain or access any domain user accounts (including your own account).

**Computer Name**

There must already be an account for this computer name if it is joining a Windows NT Advanced Server domain. The computer name cannot be the same as that of another computer or of a Windows NT Advanced Server domain.

If you change the computer name or enter an incorrect name, and that computer name does not have an account in the domain, you will not be able to log on to the domain or access any domain user accounts, including your own.

**Domain Name**

If you change the current domain name, be sure your workstation has an account on the new domain. If it does not, you cannot log on to the domain or access any domain user accounts, including your own.

## NetBEUI

Use this dialog box to adjust the relationship between memory allocated to network connections and memory allocated to applications running on your computer.

### Optimization

Select one of the options provided. For information on the options, choose one of the following topics:

Minimize Memory Used

Balance

Maximize Throughput and Connections

## Computer Name

Use this dialog box to specify a new computer name.



To change the computer name, type a name of up to 15 characters. The name must not be the same as another computer name or the name of a Windows NT Advanced Server domain.

If this computer is a member of a Windows NT Advanced Server domain, the new computer name must have an account on the domain. If it does not, you cannot log on to the domain or access any domain user accounts, including your own.

## Browser

Use this dialog box to configure the Microsoft Network Browser Service.



To make additional domains available to the Browser, select the names in the left box, and then choose the Add button.



To make domains unavailable to the Browser, select the names in the right box, and then choose the Remove button.

## Import LMHOSTS File

The LMHOSTS file contains manually specified mappings of Internet protocol (IP) addresses to names used by the Microsoft LAN Manager NetBIOS. If your Windows NT system already has an LMHOSTS file available, you can import it for your TCP/IP configuration.

 To use an existing LMHOSTS file, type the full path specification in the box provided, and then press the Import button. Otherwise, choose the Cancel button.

When TCP/IP installation is complete, the LMHOSTS file is located in the WINNT\SYSTEM32\DRIVERS\ETC directory.

## Network Component Already Exists

The network software component you are trying to has already been installed on your computer.

 To modify the configuration of the component, select its name in the Installed Network Software box, and then choose the Configure button.

To install a new version of the software, select its name in the Installed Network Software box, and then choose the Update button.

## Intel Ether Express 16 LAN Adapter

Use this dialog box to configure the Intel Ether Express 16 LAN Adapter card.

For information about this dialog box, choose one of the following topics:

- [IRQ Level](#)
- [I/O Port Address](#)
- [I/O Channel Ready](#)
- [Transceiver Type](#)

### IRQ Level

Select an interrupt level for this adapter card. IRQ2 is a common choice for this adapter card. Do not set this to Interrupt 3 if you have two COM ports (COM1=IRQ4 and COM2=IRQ3).

### **I/O Port Address**



Select a number (expressed as a hexadecimal string) to specify the I/O port base address. The I/O port base address is set by the setup software that comes with the adapter card. The value you enter here must correspond to the address set by the software. For further information, see the documentation provided with the adapter card.

**I/O Channel Ready**

I/O Channel Ready optimizes the timing of 16-bit data transfer according to the capabilities of your computer.

Most computers use late channel ready timing, the default. If your computer hangs or acts strangely, try the Early setting. If neither setting works correctly, select Never to turn off 16-bit data transfer. The network card will work correctly, but network performance will slow dramatically because the data transfer is in 8-bit mode.

### Transceiver Type



From the list provided, select the transceiver type for this adapter card:



**Thick Net:** Select Thick Net for an AUI or DEC/Intel/Xerox (DIX) connection.



**Thin Net:** Select Thin Net for a BNC or coaxial (COAX) connection.



**Twisted Pair:** Select Twisted Pair for a TPE connection.

## **RPC Name Service Provider Configuration**

Use this dialog box to configure the Remote Procedure Call Locator.

### **Name Service Provider**

 Choose the arrow button to the right of the Name Service Provider box, and then select a name from the list that appears. The Windows NT Locator, which is installed with Windows NT, is the default name service provider.

### **Network Address**

 If you choose the DCE Cell Directory Service, enter the network address of the provider.

## **Installing Remote Access Service**

### **To install Remote Access Service**

1. In the Network Settings dialog box, choose the Add Software button.
2. In the Add Network Software dialog box, select Remote Access Service from the Network Software box, and then choose the Continue button.
3. Follow the instructions on the screen. If you need help at any point, choose the Help button in the dialog box displayed, or press F1.
4. In the Network Settings dialog box, choose the OK button.

To start Remote Access Service, you must restart Windows NT. When you choose the OK button in the Network Settings dialog box, another dialog box asks you if you want to restart Windows NT now. To start Remote Access Service, choose the Yes button.

## NWLink Configuration

Use this dialog box to configure the NetWare Link (NWLink) IPX/SPX compatible transport.

For information about dialog box options, choose one of the following topics:

- [Adapter Name](#)
- [Network Number](#)
- [Frame Type](#)

**Adapter Name**

 From the list provided, select the network adapter card that you want to bind to NWLink. Only network adapter cards actually installed on your computer are listed.

### **Network Number**

 Enter the network number in decimal form. The default setting is 0. If you do not know the network number, ask your network administrator.

### Frame Type

 From the list provided, select the frame type that corresponds to your network protocol. The default setting is Ethernet\_802.3. If you do not know what to enter, ask your network administrator.

## FTP Server Service

With the Microsoft File Transfer Protocol (FTP) Server service, a Windows NT computer can transfer files to and from remote computers that support the FTP and TCP/IP protocols. The FTP Server service supports all Windows NT FTP client commands.

Use this dialog box to configure the FTP Server service. For information on the dialog box, choose one of the following topics:

- Maximum Connections
- Idle Timeout (min)
- Home Directory
- Allow Anonymous Connections
- Username
- Password
- Allow Only Anonymous Connections

Note: When you first install FTP Server, you must also complete security configuration for users to access volumes on your computer. For further information, see Appendix A, "Network Protocols," in the Windows NT System Guide.

**Maximum Connections**

Specifies the maximum number of FTP users who can be connected to the system simultaneously. The default value is 20; the maximum is 50.

**Idle Timeout (min)**

Specifies how many minutes an inactive user can remain connected to the FTP service. The default value is 10 minutes; the maximum is 60 minutes. If you enter 0, an inactive user can remain connected indefinitely.

**Home Directory**

Specifies the initial directory for users.

### **Allow Anonymous Connections**

Select this check box to enable users to connect to the FTP Server using the user name Anonymous. A password is not necessary, but the user is prompted to enter an e-mail address as the password.

By default, anonymous connections are not allowed.

**Username**

Specifies the local user account that is accessed when users log on as Anonymous. The default is the standard Guest system account. Access permissions for anonymous FTP users are the same as those for the specified local user account.

**Password**

Specifies a password required to log on as Anonymous. The default is the default password for the Windows NT Guest account.



If you have changed the password for the Guest account, enter the Guest account password here.

### **Allow Only Anonymous Connections**

Select this check box to accept logons only from the Anonymous user name. By default, this option is not enabled.

This option is useful if you do not want users to connect using their own user names because FTP passwords are unencrypted. Requiring users to connect to the FTP Server as Anonymous protects network security. However, all users will have only the access privilege provided by the account you specify in the Username box.

## Network Settings

Your Windows NT installation does not now have a network.

- Choose the Yes button if you want Windows NT to automatically detect a network adapter card in your computer and install the network software you need.
- Choose the No button to return to the Network Settings dialog box, where you can manually install network software and network adapter card drivers.

## Change Domain Name

Use this dialog box to change the domain name for your Windows NT Advanced Server.

You cannot use this dialog box to join a different domain. To join a different domain, you must reinstall Windows NT Advanced Server. If your server is a domain controller, you do not have to reinstall to change the domain name to one that is not currently used by the network. If your server is not a domain controller, you can change the domain name only if it has been changed on the domain controller, and only to the new domain name.

Note: If you change the name of a domain, you must also change the domain name on all servers and workstations in the domain, and you must reestablish any trust relationships with other domains.

### Domain Name



Enter the new domain name, and then choose the OK button.

## Managing Server Properties

### To manage server properties

1. In the Control Panel window, choose the Server icon.

The Server dialog box appears, displaying a summary of connections and resource usage.

2. To change the computer description, type new text in the Description box.
3. To administer a property associated with one of the buttons at the bottom of the Server dialog box, choose a button and complete the dialog box for that property.

There are five buttons: [Users](#), [Shares](#), [In Use](#), [Replication](#), and [Alerts](#).

4. When you finish managing properties, choose the OK button in the Server dialog box.

See Also

[Viewing User Sessions](#)

[Viewing Shared Resources](#)

[Viewing Resources In Use](#)

[Managing Export Replication](#)

[Managing Import Replication](#)

[Setting the Logon Script Path](#)

[Managing Administrative Alerts](#)

## Viewing User Sessions

### To view a list of users connected to the computer

1. In the Control Panel window, choose the Server icon.
2. In the Server dialog box, choose the Users button.

The User Sessions dialog box appears. The Connected Users box lists the network users who are connected to the computer.

3. To view the resources opened by one user, select a user name from the Connected Users box.

The Resource box lists the shared resources that user is connected to.

4. Optionally, to disconnect one user, select the user name from the Connected Users box and then choose the Disconnect button. To disconnect all users, choose the Disconnect All button.

Warn users before disconnecting them.

5. To exit choose the Close button, and then in the Server dialog box choose the OK button.

See Also

[Viewing Shared Resources](#)

[Viewing Resources In Use](#)

[Special Shares](#)

## Viewing Shared Resources

Use the Shared Resources dialog box to view the shared resources available on the computer, and the users connected over the network to a selected shared resource.

Note: To share directories or manage shared directories, use File Manager. To share printers or manage shared printers, use Print Manager.

### To view a list of the computer's shared resources

1. In the Control Panel window, choose the Server icon.
2. In the Server dialog box, choose the Shares button.

The Shared Resources dialog box appears. The Sharename box lists the shared resources available on the computer.

3. To view the users connected to a shared resource, select a share name from the Sharename box.

The Connected Users box lists the users connected to that resource.

4. Optionally, to disconnect one user from all shared resources, select the user name from the Connected Users box and then choose the Disconnect button. To disconnect all users from all shared resources, choose the Disconnect All button.

Warn users before disconnecting them.

5. To exit choose the Close button, and then in the Server dialog box choose the OK button.

See Also

[Viewing User Sessions](#)

[Viewing Resources In Use](#)

[Special Shares](#)

## Viewing Resources In Use

### To view a list of the computer's open shared resources

1. In the Control Panel window, choose the Server icon.
2. In the Server dialog box, choose the In Use button.

The Open Resources dialog box appears. The Opened By box lists the computer's open resources.

3. Optionally, to close an open resource, select that resource from the list and then choose the Close Resource button. To close all open resources, choose the Close All Resources button.

Warn connected users before closing resources.

4. Optionally, choose the Refresh button to update the displayed information.
5. To exit choose the Close button, and then in the Server dialog box choose the OK button.

See Also

[Viewing User Sessions](#)

[Viewing Shared Resources](#)

## Managing Export Replication

Only Windows NT Advanced Servers can be set up as replication export servers; Windows NT workstations cannot.

Make sure an appropriate logon account has been assigned to the Directory Replicator service before performing the following procedure.

### To set up an export server

1. Use File Manager to create the subdirectories that will be exported. These must be subdirectories of the replication From Path.

Optionally, to these subdirectories add the files that will be exported. However, it is not necessary to add files at this time. Once you set up replication, any files later added to these subdirectories will be exported automatically. You can also later add additional subdirectories to the From Path.

2. From Control Panel, choose the Server option.
3. In the Server dialog box, choose the Replication button.
4. In the Directory Replication dialog box, select the Export Directories option.
5. Optionally, to change the path from which subdirectories will be exported, type a local path in the From Path box.
6. To export subdirectories to a domain or computer, under Export Directories choose the Add button, and then complete the Select Domain dialog box that appears. The domain name or computer name is added to the To List.

Note: By default, the To List contains a blank entry and this computer automatically exports to the local domain. If any entries are added to the To List, the local domain is no longer exported to. If necessary, the domain name must be explicitly added to the To List.

7. To stop exporting subdirectories to a domain or computer, under Export Directories, select the domain or computer from the To List, and then choose the Remove button.
8. To manage locks, stabilization, and subtree replication for the subdirectories exported from this computer, under Export Directories choose the Manage button, and then complete the dialog box that appears.
9. To exit, choose the OK button in the Directory Replication dialog box.

If it does not already exist, the system creates the special REPL\$ share, required for export replication. If it is not already running, the system starts the Directory Replicator service.

10. In the Server dialog box, choose the OK button.

See Also

[Configuring Service Startup](#)

[Managing Import Replication](#)

[Setting the Logon Script Path](#)

## **Directory Replication**

Directory replication is the duplication of a master set of directories from a server (called an export server) to specified servers or workstations (called import computers) in the same or other domains. A Windows NT Advanced Server can be an export server, an import computer, or both. A Windows NT workstation can only be an import computer.

Replication simplifies the task of maintaining identical sets of directories and files on multiple computers, because only a single master copy of the data must be maintained. Once replication is set up, replication occurs each time a change is made to one of the files in a directory set for export.

## **Directory Replicator service**

Before replication can occur, an appropriate logon account must be assigned to the Directory Replicator service of each computer that will participate in replication.

From a Windows NT Advanced Server, use User Manager for Domains to create a domain user account that the Directory Replicator service will use to log on. This account must have the Password Never Expires option selected, all logon hours allowed, and membership in the domain's Backup Operators group.

For each computer that will participate in replication, use the Server option in Control Panel to configure the Directory Replicator service to start up automatically, and to log on using the user account described above.

## Managing Import Replication

Both Windows NT Advanced Servers and Windows NT workstations can be set up as import computers.

Make sure an appropriate logon account has been assigned to the Directory Replicator service before performing the following procedure.

### To set up an import computer

1. From Control Panel, choose the Server icon.
2. In the Server dialog box, choose the Replication button.
3. In the Directory Replication dialog box, select Import Directories.
4. Optionally, to change the path in which imported subdirectories will be stored, type a local path in the To Path box.
5. To import subdirectories from a domain or export server, under Import Directories choose the Add button, and then complete the Select Domain dialog box that appears. The domain name or computer name is added to the From List.

Note: By default, the From List contains a blank entry and this computer automatically imports from the local domain. If any entries are added to the From List, the local domain is no longer imported from. If necessary, the domain name must be explicitly added to the From List.

6. To stop importing subdirectories from an export server or domain, select the domain name or computer name in the From List, and then choose the Remove button.
7. To view a list of the subdirectories that have been imported to this computer, or to manage locks on those imported subdirectories, under Import Directories choose the Manage button, and then complete the dialog box that appears.
8. To exit, choose the OK button in the Directory Replication dialog box.

If it is not already running, the system starts the Directory Replicator service.

9. In the Server dialog box, choose the OK button.

See Also

[Configuring Service Startup](#)

[Managing Export Replication](#)

[Setting the Logon Script Path](#)

## Setting the Logon Script Path

A *logon script* is an optional file that runs each time a user logs on. It can be a batch file (.BAT or .CMD filename extension) or an executable program (.EXE filename extension). A *logon script path* is a local path to the directory where logon scripts are stored.

When a server authenticates a logon request and that user account has a logon script assigned, the system locates the logon script by combining a local logon script path specified in the Server option of Control Panel with a filename (and optionally a relative path) specified in User Manager.

For a domain, master copies of every logon script should be stored under one replication export directory of one Windows NT Advanced Server. Copies of these master logon scripts should be replicated to the other servers of the domain. Then, for each Windows NT Advanced Server, the path to imported logon scripts must be entered in the Logon Script Path box of the Directory Replication dialog box.

For Windows NT workstations, the logon script path cannot be changed from the default (usually, C:\WINNT\SYSTEM32\REPL\IMPORT\SCRIPTS).

### To configure the logon script path for a server

1. From Control Panel, choose the Server icon.
2. In the Server dialog box, choose the Replication button.
3. In the Logon Script Path box, type a local path.

Usually, you will enter a path to a \SCRIPTS subdirectory of the replication To Path. For example, C:\WINNT\SYSTEM32\REPL\IMPORT\SCRIPTS.

An entry is required. Do not enter a blank in the Logon Script Path box.

4. To exit choose the OK button, and then in the Server dialog box choose the OK button.

See Also

[Managing Export Replication](#)

[Managing Import Replication](#)

## **Managing Administrative Alerts**

You can determine which users and computers are notified when administrative alerts occur at this computer. Administrative alerts are generated by the system, and relate to server and resource use. They warn about security and access problems, user session problems, server shutdown because of power loss when the UPS service is available, and printer problems.

### **To manage the list of administrative alert recipients**

1. In the Control Panel window, choose the Server icon.
2. In the Server dialog box, choose the Alerts button.
3. To add a user or computer to the list of alert recipients, type the user name or computer name in the New Computer Or Username box, and then choose the Add button.
4. To remove a user or computer from the list of alert recipients, select the user name or computer name from the Send Administrative Alerts To box, and then choose the Remove button.
5. To exit, in the Alerts dialog box choose the OK button, and then in the Server dialog box choose the OK button.

## Starting and Stopping Services

Use the Services dialog box to start, stop, pause, or continue a service, and optionally to pass startup parameters to the service.

Note: Stopping the Server service disconnects all users who are connected over the network to the computer. Warn connected users before stopping the Server service.

### To start, stop, pause, or continue a service

1. In the Control Panel window, choose the Services icon.
2. In the Services dialog box, select the service.
3. Choose the Start, Stop, Pause, or Continue button.

Optionally, to pass startup parameters to a service, type the parameters in the Startup Parameters box before choosing the Start button.

4. In the Services dialog box, choose the Close button.

See Also

[Configuring Service Startup](#)

[The Default Services](#)

## Services

Use the Services dialog box to start, stop, pause, or continue each of the services available on the computer, and to pass startup parameters to the service. For more information, choose one of the following buttons.

- [Service](#)
- [Status](#)
- [Startup](#)
- [Start button](#)
- [Stop button](#)
- [Pause button](#)
- [Continue button](#)
- [Startup button](#)
- [Startup Parameters](#)

See Also

[Starting and Stopping Services](#)

[Configuring Service Startup](#)

[The Default Services](#)

**Service**

One service at a time can be selected. Once selected, a service can be stopped, started, paused, continued, or configured for startup.

## Status

The status of a service can be:

- Started
- Paused
- Stopped (represented by a blank entry)

## Startup

The startup type of a service can be

- Automatic (service starts every time the system starts)
- Manual (service can be started by a user or a dependent service)
- Disabled (service cannot be started)

### **Start button**



To start a service that is stopped, select the service, and then choose the Start button.

Optionally, to pass startup parameters to the service, type text in the Startup Parameters box before choosing the Start button.

### **Stop button**

 To stop a service that is running, select the service, and then choose the Stop button. If another service is dependent on the service you stop, you will be warned before the action completes.

Note: Stopping the Server service disconnects all users who are connected over the network to the computer. Warn connected users before stopping the Server service.

### **Pause button**



To pause a service that is running, select the service, and then choose the Pause button.

### **Continue button**

 To return a service that has been paused to normal operation, select the service, and then choose the Continue button.

## Startup button

To configure service startup you must be logged on to a user account that has membership in the Administrators local group.

 To specify the startup type of a service or to assign a logon account to a service, select the service, choose the Startup button, and complete the dialog box that appears.

### **Startup Parameters**

 To pass startup parameters to a service, select the service, type the parameters in the Startup Parameters box, and then choose the Start button.

## Configuring Service Startup

To configure service startup, you must be logged on to a user account that has membership in the Administrators local group.

### To configure startup for a service

1. In the Control Panel window, choose the Services icon.
2. In the Services dialog box, select the service.
3. Choose the Startup button.
4. In the Service Startup dialog box, select a startup type of Automatic, Manual, or Disabled.
5. To specify the user account the service will use to log on, select System Account or This Account.
6. If you select This Account, also choose the Browse button  and specify a user account by completing the Add User dialog box that appears.

After closing the Add User dialog box, type the password for the user account in both the Password and Confirm Password boxes.

7. Choose the OK button, and then in the Services dialog box choose the Close button.

See Also

[The Default Services](#)

## The Default Services

The services listed below are provided with Windows NT. In addition to these default services, other services may be listed in the Services dialog box for a computer (for example, network transports or other services that have been installed on that computer).

For more information on the default services, choose one of the following buttons.

- [Alerter](#)
- [Clipbook Server](#)
- [Computer Browser](#)
- [Directory Replicator](#)
- [Event Log](#)
- [Messenger](#)
- [Net Logon](#)
- [Network DDE](#)
- [Network DDE DSDM](#)
- [Remote Procedure Call \(RPC\) Locator](#)
- [Remote Procedure Call \(RPC\) Service](#)
- [Schedule](#)
- [Server](#)
- [UPS](#)
- [Workstation](#)

See Also

[Starting and Stopping Services](#)

[Configuring Service Startup](#)

**Alerter service**

Notifies selected users and computers of administrative alerts that occur on this computer. Used by the Server and other services. Requires the Messenger service.

**Clipbook Server service**

The Clipbook Server service supports the Clipbook Viewer application, allowing pages to be seen by remote Clipbooks.

**Computer Browser service**

Maintains an up-to-date list of computers, and provides the list to applications when requested. Provides the computer lists displayed in the Select Computer and Select Domain dialog boxes.

**Directory Replicator service**

Replicates directories, and the files in those directories, between computers.

**Event Log service**

Records system, security, and application events in the event logs.

**Messenger service**

Sends and receives messages sent by administrators or by the Alerter service.

**Net Logon service**

For Windows NT workstations, supports pass through authentication of account logons. Used when the workstation participates in a domain.

For Windows NT Advanced Server, performs authentication of account logons, and also keeps the domain's security database synchronized between the domain controller and the other Windows NT Advanced Servers of the domain.

**Network DDE service**

The Network DDE (Dynamic Data Exchange) service provides a network transport as well as security for DDE conversations.

**Network DDE DSDM service**

The Network DDE DSDM service manages the shared DDE conversations and is used by the Network DDE service. DSDM stands for DDE Share Database Manager.

### **Remote Procedure Call (RPC) Locator service**

The Remote Procedure Call (RPC) Locator service allows distributed applications to use the Microsoft RPC name service. The RPC Locator service manages the RPC name service database.

The server side of a distributed application registers its availability with the RPC Locator service. The client side of a distributed application queries the RPC Locator service to find available compatible server applications.

## **Remote Procedure Call (RPC) service**

The Remote Procedure Call (RPC) Service is the RPC subsystem for Microsoft Windows NT. The RPC subsystem includes the endpoint mapper and other miscellaneous RPC services.

**Schedule service**

The Schedule service must be running if the AT command is to be used. The AT command can be used to schedule commands and programs to run on a computer at a specified time and date.

**Server service**

Provides remote procedure call (RPC) support, and file, print, and named pipe sharing.

**UPS service**

Manages an uninterruptible power supply connected to this computer.

**Workstation service**

Provides network connections and communications.

## Service Startup

Use the Service Startup dialog box to configure when and how the service is started, and to specify the user account the service used to log on. For more information, choose one of the following buttons.

- [Startup Type](#)
- [Automatic](#)
- [Manual](#)
- [Disabled](#)
- [Log On As](#)
- [System Account](#)
- [This Account](#)
- [Browse button](#)
- [Password and Confirm Password](#)

See Also

[Configuring Service Startup](#)

[The Default Services](#)

### Startup Type



To specify the startup type of the service, choose Automatic, Manual, or Disabled.

**Automatic**

Automatic services start every time the system starts.

Note: The Server service will not start automatically unless the computer has at least 12MB of random-access memory.

## **Manual**

Manual services can be started by a user or by a dependent service.

**Disabled**

Disabled services cannot be started by users, nor by dependent services.

## **Log On As**

When services start, they log on.

Most services must log on to the system account. Usually, of the default services provided with Windows NT only the Directory Replicator and Schedule services log on using other user accounts.

## **System Account**

When services start, they log on. Most services must log on using the system account.

**This Account**

Select this option to assign a logon user account to a service.

When services start, they log on. Although most services must log on to the system account, some services can be configured to log on to special user accounts. (Usually, of the default services provided with Windows NT, only the Directory Replicator and Schedule services will be configured in this manner.)

A user account used to log on a service should be created in User Manager specifically for that purpose. Make certain that the user account has the Password Never Expires option selected, and has membership in the appropriate groups. The particular group memberships assigned will depend on the operations that must be accomplished by the service.

**Browse button** 

 To specify the user account the service will log on to, select This Account, choose the Browse button, and then complete the Add User dialog box that appears.

### **Password and Confirm Password**

 In the Password box, type the password for the user account entered in This Account box. Type the same password in the Confirm Password box.

This is the password that was assigned to that user account in User Manager. Remember, passwords are case sensitive.

## **Stopping Dependent Services**

The listed services are dependent on the service that you are stopping. If you choose the OK button, both the selected service and its dependent services will be stopped.

## Add User

Use the Add User dialog box to select the user account the service will use to log on.

This should be a user account created in User Manager specifically for logging on the service. Make certain that the user account has the Password Never Expires option selected, and has membership in the appropriate groups. The particular group memberships assigned will depend on the operations that must be accomplished by the service. Usually, of the default services provided with Windows NT only the Directory Replicator and Schedule services have a user account assigned in this manner.

For more information, choose one of the following buttons.

List Names From

Names

Add button

Search button

Add Name

## List Names From

The List Names From box shows the domain or computer from which the user account can be selected. The groups of that domain or computer are listed in the Names box.

When an asterisk (\*) appears next to a domain or computer name in the List Names From box, it indicates that the local groups of that domain or computer can be listed in the Names box. When the asterisk is absent, it indicates that local groups cannot be listed.

 To change the selected domain or computer, select a domain name or computer name from the list in the List Names From box.

**Names**

Lists the user accounts of the domain or computer selected in the List Names From box.

**Add button**

After a name is selected from the Names list, choosing Add places that name in the Add Name list.

### **Search button**

 To search for a particular user account, choose the Search button and complete the dialog box that appears.

### **Add Name**

A user account can be added to this box by typing its name in the box; by selecting it from the Names box and choosing the Add button; or by choosing the Search button and completing the dialog box that appears.

 To have the service log on using the account displayed in the Add Name list, choose the OK button.

## Local Group Membership

The Local Group Membership dialog box lists the user accounts and global groups that are members of the selected local group.

### Members Of

 To add user accounts or global groups to the Add Name list of the Add User dialog box, here in the Local Group Membership dialog box select one or more names from the Members Of list, and then choose the OK button.

### Members Button

 To list the members of a global group (that is itself a member of this local group), select the global group from the Members Of list, and then choose the Members button.

## Global Group Membership

The Global Group Membership dialog box lists the user accounts that are members of the selected global group.

### Members Of

 To add user accounts to the Add Name list of the Add User dialog box, here in the Global Group Membership dialog box select one or more names from the Members Of list, and then choose the OK button.

## Server

Use the Server dialog box to view and manage the server properties of this computer. For more information, choose one of the following buttons.

- [Usage Summary](#)
- [Sessions](#)
- [Open Files](#)
- [File Locks](#)
- [Open Named Pipes](#)
- [Description](#)
- [Users button](#)
- [Shares button](#)
- [In Use button](#)
- [Replication button](#)
- [Alerts button](#)

See Also

[Managing Server Properties](#)

## **Usage Summary**

This box contains summaries of connections and resource usage for the computer.

## **Sessions**

The number of users remotely connected to the computer.

**Open Files**

The number of files opened by connected users.

**File Locks**

The number of file locks by connected users.

## **Open Named Pipes**

The number of open named pipes.

A named pipe is an interprocess communication mechanism that allows one process to communicate with another local or remote process.

**Description**

The description can be any text. Typically, it might contain information such as the brand or model of the computer, the name of the computer's user, the user's telephone extension, the location of the computer, or a description of the computer's function.

The description is an optional entry.

### **Users button**



Choose the Users button to view a list of all the users connected over the network to the computer, and for one selected user, a list of all open resources.

Optionally, you can disconnect one or all of the users who are connected to the computer.

### **Shares button**

 Choose the Shares button to view a list of the computer's shared resources, and for one selected resource, a list of all the connected users. Optionally, you can disconnect one or all of the users who are connected to the computer.

Note: To share directories or manage shared directories, use File Manager. To share printers or manage shared printers, use Print Manager.

### **In Use button**



Choose the In Use button to view a list of the computer's open shared resources. Optionally, you can close one open resource or all open resources.

## Replication button

Directory replication exports copies of selected directories and files from this computer for storage on other computers, and imports selected directories and files from other computers for storage on this computer. Windows NT Advanced Servers can export and import. Windows NT workstations can only import.



Choose the Replication button to manage directory replication for the computer. For a server, also choose the Replication button to specify the path to user logon scripts.

## Alerts button

Administrative alerts are generated by the system and relate to server and resource use. They warn about security and access problems, user session problems, server shutdown because of power loss when the UPS service is available, and printer problems. For example, an alert is generated when disk space becomes low. You can determine which users and computers are notified when administrative alerts occur at this computer.



Choose the Alerts button to view and manage the list of users and computers that are notified when administrative alerts occur at this computer.

## User Sessions

Use the User Sessions dialog box to view a list of all the network users connected to the computer, and a list of all the resources opened by a selected user. Optionally, you can disconnect one or all of the users connected to the computer. For more information, choose one of the following buttons.

-  [Connected Users](#)
-  [Computer](#)
-  [Opens \(for Connected User\)](#)
-  [Time \(for Connected User\)](#)
-  [Idle](#)
-  [Guest](#)
-  [Number of Connected Users](#)
-  [Resource](#)
-  [Opens \(for Resource\)](#)
-  [Time \(for Resource\)](#)
-  [Disconnect button](#)
-  [Disconnect All button](#)

See Also

[Viewing User Sessions](#)

[Special Shares](#)

## Connected Users

This column lists the network users who are connected to the computer.

Each entry consists of a user account icon, followed by a user name. In some cases the user's computer name may be displayed instead of the user name.

**Computer**

The computer name of the user's computer.

**Opens**

The number of resources opened on this computer by this user.

**Time**

The hours and minutes that have elapsed since this session was established.

**Idle**

The hours and minutes that have elapsed since this user last initiated an action.

**Guest**

Whether this user is connected to this computer as a guest. Shown as Yes or No.

## **Connected Users**

The total number of users remotely connected to the computer.

## Resource

This column lists the shared resources to which the selected user is connected. Each entry consists of an icon indicating the type of resource, followed by the share name. A shared resource could be:

-  A shared directory
-  A named pipe
-  A shared printer
-  A resource of an unrecognized type

In some cases, a connection to a printer is monitored here as a connection to a named pipe.

**Opens**

For the selected user, the number of opens from the listed resource.

**Time**

The hours and minutes that have elapsed since this user first connected to the shared resource.

### **Disconnect button**

 To disconnect one user from the computer, select a user name from the Connected Users list, and then choose Disconnect.

Warn users before disconnecting them. If you do not, they may lose data.

### **Disconnect All button**



To disconnect all users from the computer, choose Disconnect All.  
Warn users before disconnecting them. If you do not, they may lose data.

## Shared Resources

Use the Shared Resources dialog box to view a list of the shared resources available on the computer, and for a selected resource, a list of connected users. Optionally, you can disconnect one or all of the users connected to the computer.

Note: To share directories or manage shared directories, use File Manager. To share printers or manage shared printers, use Print Manager.

For more information, choose one of the following buttons.

- [Sharename](#)
- [Uses](#)
- [Path](#)
- [Connected Users](#)
- [Time](#)
- [In Use](#)
- [Number of Connected Users](#)
- [Disconnect button](#)
- [Disconnect All button](#)

See Also

[Viewing Shared Resources](#)

[Special Shares](#)

## Sharename

This column lists the shared resources available on the computer. Each entry consists of an icon representing the type of shared resource, followed by the share name. A shared resource could be:

-  A shared directory
-  A named pipe
-  A shared printer
-  A resource of an unrecognized type

In some cases, a connection to a printer is monitored here as a connection to a named pipe.

**Uses**

The number of connections to the shared resource.

**Path**

The path of the shared resource.

## Connected Users

This column lists the users who are connected to the selected shared resource. Each entry consists of a user account icon, followed by a user name. In some cases the user's computer name may appear instead of the user name.

**Time**

The hours and minutes that have elapsed since the user first connected to the selected shared resource.

**In Use**

Whether the user currently has a file open from the selected shared resource (shown as Yes or No).

**Connected Users**

The total number of users connected to the selected shared resource.

### **Disconnect button**

 To disconnect one user from all shared resources, select the user name from the list of Connected Users, and then choose Disconnect.

Warn users before disconnecting them. If you do not, they may lose data.

### **Disconnect All button**



To disconnect all users from all shared resources, choose Disconnect All.  
Warn users before disconnecting them. If you do not, they may lose data.

## Special Shares

A computer's shared resources include those resources (such as directories) that have been shared by a user or an administrator, plus any special shares that may have been created by the system.

Depending on the configuration of the computer being administered, some or all of the following special shares may appear when Windows NT presents a list of the computer's shared resources. These shares are created by the system. In most cases, these special shares should not be deleted or modified. For more information choose one of the following buttons.

 [driveletter\\$](#)

 [ADMIN\\$](#)

 [IPC\\$](#)

 [PRINT\\$](#)

 [REPL\\$](#)

 [NETLOGON](#)

See Also

[Viewing Shared Resources](#)

[Managing Export Replication](#)

***driveletter\$***

A share which allows administrative personnel to connect to the root directory of a storage device. Shown as A\$, B\$, C\$, D\$, and so on. For example, D\$ is a share name by which drive D might be accessed by an administrator over the network.

For a Windows NT workstation, only members of the Administrators and Backup Operators can connect to these shares. For a Windows NT Advanced Server, members of the Server Operators group can also connect to these shares.

## **ADMIN\$**

A resource used by the system during remote administration of a computer. The path of this resource is always the path to the Windows NT system root (the directory in which Windows NT is installed: for example, C:\WINNT).

For a Windows NT workstation, only members of the Administrators and Backup Operators can connect to this share. For a Windows NT Advanced Server, members of the Server Operators group can also connect to this share.

**IPC\$**

A resource sharing the named pipes that are essential for communication between programs. Used during remote administration of a computer, and when viewing a computer's shared resources.

**PRINT\$**

A resource used during remote administration of printers.

## **REPL\$**

A resource created by the system when a Windows NT Advanced Server is configured as a replication export server. It is required for export replication.

Note: This resource is only provided for Windows NT Advanced Servers which are configured as replication export servers. It is not provided for Windows NT workstations.

## **NETLOGON**

A resource used by the Net Logon service of a Windows NT Advanced Server while processing domain logon requests.

Note: This resource is only provided for Windows NT Advanced Servers. It is not provided for Windows NT workstations.

## Open Resources

Use the Open Resources dialog box to view a list of the computer's open shared resources. Optionally, you can close one open resource or all open resources. For more information, choose one of the following buttons.

- [Open Resources](#)
- [File Locks](#)
- [Opened By](#)
- [For](#)
- [Locks](#)
- [Path](#)
- [Refresh button](#)
- [Close Resource button](#)
- [Close All Resources button](#)

See Also

[Viewing Resources In Use](#)

## **Open Resources**

The total number of resources that are open on the computer.

**File Locks**

The total number of file locks on open resources.

## Opened By

This column lists the computer's open resources. Each entry consists of an icon representing the type of resource, followed by the user name (or sometimes the computer name) of the user who has opened the resource. An open resource could be:

-  A file
-  A named pipe
-  A print job in a print spooler
-  A resource of an unrecognized type

In some cases, a print job is shown here as an open named pipe.

**For**

The permission granted when the resource was opened.

**Locks**

The number of locks on the resource.

**Path**

The path of the open resource.

### Refresh button



Choose the Refresh button to update the display with current information.

### **Close Resource button**

 To close one resource, select a resource from the list of open resources, and then choose the Close Resource button.

Warn connected users before closing resources. If you do not, they may lose data.

### **Close All Resources button**



To close all resources that are open on the computer, choose the Close All Resources button. Warn connected users before closing resources. If you do not, they may lose data.

## Directory Replication

Use the [Directory Replication](#) dialog box to manage replication properties for the computer, and to specify a local path to user logon scripts. For more information, choose one of the following buttons.

- [Do Not Export](#)
- [Export Directories](#)
- [Manage button \(under Export Directories\)](#)
- [From Path](#)
- [To List](#)
- [Do Not Import](#)
- [Import Directories](#)
- [Manage button \(under Import Directories\)](#)
- [To Path](#)
- [From List](#)
- [Add button](#)
- [Remove button](#)
- [Logon Script Path](#)

See Also

[Managing Export Replication](#)

[Managing Import Replication](#)

[Setting the Logon Script Path](#)

**Do Not Export**

Prevents replication from this computer. Subdirectories are not exported.

**Export Directories**

Enables replication from this computer. Subdirectories of the From Path are exported.

**Manage button (under Export Directories)**

Displays the Manage Exported Directories dialog box, where export locks can be added or removed, and export stabilization and subtree export can be enabled or disabled.

**From Path**

A local path to a directory from which subdirectories and files are exported.

The default From Path is C:\WINNT\SYSTEM32\REPL\EXPORT. If Windows NT is installed in a location other than C:\WINNT, the system adjusts the default accordingly. Usually, you will not need to change the default From Path.

**To List**

Subdirectories are exported from this export server to the domains and computers of the To List.

By default, the To List contains a blank entry and this computer automatically exports to the local domain. If any entries are added to the To List, the local domain is no longer exported to. If necessary, the domain name must be explicitly added to the To List.

Replication to a domain name does not always succeed when some or all import computers of that domain are located across a wide area network (WAN) bridge from this export server. In this situation, you must explicitly add the computer names of those import computers to the To List.

**Do Not Import**

Prevents replication to this computer. Subdirectories are not imported.

**Import Directories**

Allows replication to this computer. Subdirectories are imported.

**Manage button (under Import Directories)**

Displays the Manage Imported Directories dialog box, where import locks can be added or removed.

**To Path**

A local path to a directory in which imported subdirectories and files are stored.

The default To Path is C:\WINNT\SYSTEM32\REPL\IMPORT. If Windows NT is installed in a location other than C:\WINNT, the system adjusts the default accordingly. Usually, you will not need to change the default To Path.

## **From List**

Subdirectories are replicated to this import computer from the domains and computers of the From List.

By default, the From List contains a blank entry and this computer automatically imports from the local domain. If any entries are added to the From List, the local domain is no longer imported from. If necessary, the domain name must be explicitly added to the From List.

Replication from a domain name does not always succeed when export servers of that domain are located across a wide area network (WAN) bridge from this import computer. In this situation, you must explicitly add the computer names of those export servers to the From List.

**Add button**

Displays the Select Domain dialog box.

The Add button under Export Directories is used to add a computer name or domain name to the To List.

The Add button under Import Directories is used to add a computer name or domain name to the From List.

**Remove button**

Removes a selected computer name or domain name from the list.

The Remove button under Export Directories is used to remove a computer name or domain name from the To List.

The Remove button under Import Directories is used to remove a computer name or domain name from the From List.

## **Logon Script Path**

A local path to a directory where logon scripts are stored. When a server authenticates a logon request and that user account has a logon script assigned, the system locates the logon script by combining the local path specified here, with a filename (and optionally a relative path) specified in User Manager.

For a domain, master copies of every logon script should be stored under one replication export directory of a Windows NT Advanced Server. Copies of these master logon scripts should be replicated to the other servers of the domain. Then, for each Windows NT Advanced Server, the local path to imported logon scripts should be entered here, in the Logon Script Path box.

Usually, you will enter a path to a \SCRIPTS subdirectory of the replication To Path. For example, C:\WINNT\SYSTEM32\REPL\IMPORT\SCRIPTS.

An entry is required. Do not enter a blank in the Logon Script Path box.

## Directory Replication

Use the [Directory Replication](#) dialog box to manage replication properties for the computer. For more information, choose one of the following buttons.

-  [Do Not Import](#)
-  [Import Directories](#)
-  [Manage button](#)
-  [To Path](#)
-  [From List](#)
-  [Add button](#)
-  [Remove button](#)

See Also

[Managing Import Replication](#)

**Add button**

Displays the Select Domain dialog box. Used to add a computer or domain to the From List.

**Remove button**

Removes a selected computer or domain from the From List.

## Manage Exported Directories

Use the Manage Exported Directories dialog box to add or remove export locks, and to enable or disable export stabilization and subtree export.

For more information, choose one of the following buttons.

- [Export Path](#)
- [Subdirectory](#)
- [Locks](#)
- [Stabilize](#)
- [Subtree](#)
- [Locked Since](#)
- [Export Settings For](#)
- [Add Lock button](#)
- [Remove Lock button](#)
- [Wait Until Stabilized](#)
- [Entire Subtree](#)
- [Add button](#)
- [Remove button](#)

**Export Path**

The path to the directory from which subdirectories and files are exported.

**Subdirectory**

A list of the subdirectories that are exported from this computer.

When a subdirectory is created in the export path (using File Manager or the command prompt), it is automatically added to this list.

**Locks**

The number of locks applied to the subdirectory.

A lock prevents subdirectory export, and more than one lock might be applied to a subdirectory. Export occurs only if this column has a value of zero.

**Stabilize**

Yes indicates that all files and subdirectories in that subdirectory tree must be stable (cannot be changed) for two minutes (or more) before replication can occur. No indicates that each file can be replicated as soon as it is changed.

The default is No. To change this setting, use the Wait Until Stabilize check box.

**Subtree**

Yes indicates that the entire subdirectory tree will be exported. No indicates that only the first-level subdirectory will be exported.

The default is Yes. To change this setting, use the Entire Subtree check box.

**Locked Since**

The date and time that the oldest lock was placed on this subdirectory.

**Export Settings For**

Shows the name of the selected subdirectory.

**Add Lock button**

Adds a lock to the selected subdirectory, preventing export.

**Remove Lock button**

Removes a lock from the selected subdirectory. Export only occurs when a subdirectory has zero locks.

**Wait Until Stabilized**

If selected, no changes can occur for two minutes (or more) to any subdirectory or file in the selected subdirectory tree before replication can occur. Helps to eliminate partial replication. If cleared, each file can be replicated as soon as it is changed.

This setting is reflected in the Stabilize column.

**Entire Subtree**

If selected, the first-level export subdirectory and its files will be exported, along with all its subdirectories and their files. If cleared, only the first-level export subdirectory and its files will be exported.

This setting is reflected in the Subtree column.

**Add button**

Displays the Add Subdirectory dialog box, used to add new subdirectories to the list of exported subdirectories.

However, this is usually unnecessary because it only adds an entry to the list, and does not actually create the subdirectory. When a subdirectory is created in the export path (using File Manager or the command prompt), it is automatically added to the list.

**Remove button**

Removes the selected subdirectory from the list of exported subdirectories.

However, this is usually unnecessary because it only removes the entry in the list, not the actual subdirectory. If that subdirectory still exists in the export path, it will still be exported and will later reappear in this list.

## Manage Imported Directories

Use the Manage Imported Directories dialog box to add or remove import locks. For more information, choose one of the following buttons.

- Import Path
- Subdirectory
- Locks
- Status
- Last Update
- Locked Since
- Import Settings For
- Add Lock button
- Remove Lock button
- Add button
- Remove button

**Import Path**

The path to the directory in which replicated subdirectories and files are stored.

**Subdirectory**

A list of the replicated subdirectories that are imported to this computer.

A subdirectory is automatically imported if it is exported by one of the export servers or domains in the From List of the Directory Replication dialog box. If it is imported, it is automatically added to this list.

**Locks**

A lock prevents import to the subdirectory. More than one lock might be applied to a subdirectory. Import to a subdirectory only occurs if this column has a value of zero.

## Status

-  "OK" indicates that the subdirectory is receiving regular updates from an export server and the imported data is identical to that exported.
-  "No Master" indicates that the subdirectory is not receiving updates. The export server might not be running, or the export server might have stopped exporting updates.
-  "No Sync" indicates that the subdirectory has received updates, but the data is not up to date. This could be due to a communications failure, open files on the import computer or export server, the import computer not having access permissions at the export server, or an export server malfunction.
-  A blank entry indicates that replication has never occurred for that subdirectory. Replication may not be properly configured for this import computer, for the export server, or both.

**Last Update**

The date and time that the last update was made to a file in this import subdirectory, or in its subtree.

**Locked Since**

The date and time that the oldest lock was placed on this subdirectory.

**Import Settings For**

Shows the name of the selected subdirectory.

**Add Lock button**

Adds a lock to the selected subdirectory, preventing import.

**Remove Lock button**

Removes a lock from the selected subdirectory. Import only occurs when a subdirectory has zero locks.

**Add button**

Displays the Add Subdirectory dialog box, used to add new subdirectories to the list of imported subdirectories.

However, this is usually unnecessary because this only adds an entry to the list, and does not create the actual subdirectory. When a subdirectory is exported by one of the export servers or domains in the From List of the Directory Replication dialog box, it is automatically imported and added to this list.

**Remove button**

Removes the selected subdirectory from the list.

However, this is usually unnecessary, because this only removes the entry from the list, and does not remove the actual subdirectory. If that subdirectory is exported by one of the export servers or domains in the From List of the Directory Replication dialog box, it will still be imported and will later reappear in this list.

## **Add Subdirectory**

Use the Add Subdirectory dialog box to add a subdirectory to the Subdirectory list.

However, this is usually unnecessary, since this action only adds an entry to the list and does not create the actual subdirectory. Instead, use File Manager or the command prompt to create export subdirectories on export servers. On import computers, imported subdirectories are automatically created the first time they are received from an exporting server.

### **Path**

This is either the import path or the export path.

### **Subdirectory Name**

 To add a subdirectory to the list, type its name in the Subdirectory Name box, and then choose the OK button.

## Alerts

Use the Alerts dialog box to view and manage the list of users and computers that are notified when administrative alerts occur at this computer. Administrative alerts are generated by the system, and relate to server and resource use. They warn about security and access problems, user session problems, server shutdown because of power loss when the UPS service is available, and printer problems.

For alerts to be sent, the Alerter and Messenger services must be running on the computer originating the alert. For alerts to be received, the Messenger service must be running on the destination computer. For more information, choose one of the following buttons.

-  [New Computer or Username](#)
-  [Send Administrative Alerts To](#)
-  [Add button](#)
-  [Remove button](#)

See Also

[Managing Administrative Alerts](#)

### **New Computer Or Username**

 To add a user or computer to the list of alert recipients, type the user name or computer name in the New Computer Or Username box, and then choose the Add button.

**Send Administrative Alerts To**

This box lists the computers and users who are notified when administrative alerts occur at this computer.

### **Add button**

 To add a user or computer to the list of alert recipients, type the user name or computer name in the New Computer Or Username box, and then choose the Add button.

### **Remove button**

 To remove a user or computer from the list of alert recipients, select the user name or computer name in the Send Administrative Alerts To box, and then choose the Remove button.

## Select Domain

Use the Select Domain dialog box to select a domain or a computer to be added to the replication From List or the replication To List.

Replicating to or from a domain name is a convenient way to set up directory replication between many computers, because each export server and import computer can specify only a few domain names for export or import, rather than a long list of many computer names.

### Domain

This box displays the current domain. You can type a *domainname* or a *\\computername* here.

### Select Domain

This box lists the available domains. If you double-click on a domain name, the computers in that domain are listed. You can select one of the listed domains or computers.

## **Close Resources**

Closing resources can result in loss of data. It is a good idea to send a warning to connected users before closing resources.

## **Close**

Closing resources can result in loss of data. It is a good idea to send a warning to connected users before closing resources.

## **Disconnect**

Disconnecting users can result in loss of data. It is a good idea to send a warning to connected users before disconnecting them.

## Find Account

Use the Find Account dialog box to locate a particular user account or group. For more information, choose one of the following buttons.

- Find User or Group
- Search All
- Search Only In
- Search button
- Search Results
- Add button

**Find User or Group**

In this box specify the name you want to search for. The system will search for user accounts or groups having that exact name.

**Search All**

When selected, this option causes the search to look for a matching user name or group in the local domain or computer, and in all domains trusted by the local domain.

**Search Only In**

When selected, this option causes the search to look for a matching user name or group in the domains and computers selected from the list. The list includes the local domain or computer, and all domains trusted by the local domain.

One or more domains and computers can be selected from the list.

**Search button**

Begins a search based on the parameters specified in the Find User Or Group box, and by the Search All and Search Only In options.

## Search Results

Contains a list of user accounts and groups found during a search. This list is filled as a search progresses.

One or more names can be selected from the Search Results list, and then added to the Add Name list of the Add User dialog box by choosing the Add button in the Find Account dialog box.

The list presents the matching users in the form *domainname\username (full name) description* or *computername\username (full name) description*.

The list presents the matching groups in the form *domainname\groupname description* or *computername\groupname description*.

**Add button**

Closes the Find Account dialog box, and adds the accounts selected in the Search Results list to the Add Name list of the Add User dialog box.

If the Search Results list is empty, or if no user accounts or groups are selected in the Search Results list, the Add button is unavailable.



## Devices

Use the Devices dialog box to start or stop devices. For more information, choose one of the following buttons.

-  [Device](#)
-  [Status](#)
-  [Startup](#)
-  [Start button](#)
-  [Stop button](#)
-  [Startup button](#)

See Also

[Starting and Stopping Devices](#)

[Configuring Device Startup](#)

**Device**

Lists the available devices. One device at a time can be selected. Once selected, a device can be stopped, started, or have its startup type configured.

**Status**

If Started is displayed in the Status column for a device, that device driver is loaded. If the Status column is blank, that device driver is not loaded.

## **Startup**

The startup type of the device.

A startup type of Boot, System, or Automatic indicates that the device is started automatically every time the system starts. Manual allows the device to be started by a user or a dependent device. Disabled prevents the device from being started by a user.

### **Start button**



To load a device driver, select the device from the list, and then choose the Start button.

## Stop button



To stop a device driver that is started, select the device, and then choose the Stop button. Some devices are essential to system operation and cannot be stopped. When such a device is selected, the Stop button is unavailable.

## **Startup button**

To manage the startup type for a device, you must be logged on to a user account that has membership in the Administrators local group.

 To change the startup type for a device, select the device, choose the Startup button, and complete the dialog box that appears.

## Device Startup

Use the Device Startup dialog box to configure when and how the selected device is started. For more information, choose one of the following buttons.

- [Startup Type](#)
- [Boot](#)
- [System](#)
- [Automatic](#)
- [Manual](#)
- [Disabled](#)

See Also

[Starting and Stopping Devices](#)

[Configuring Device Startup](#)

### **Startup Type**

 To specify the startup type of the device, choose one of the options and then choose the OK button.

### **Caution**

Changing the startup type of a Boot or System device can leave the system in an unusable state.

**Boot**

Boot devices start every time the system starts. Boot devices start before any other devices. Use for critical devices essential to system operation.

## **System**

System devices start every time the system starts. System devices start after Boot devices. Use for critical devices essential to system operation.

**Automatic**

Automatic devices start every time the system starts. Automatic devices start after Boot and System devices. Use for devices that are not critical for basic system operation.

**Manual**

Manual devices can be started by a user or a dependent device.

**Disabled**

Disabled devices cannot be started by users. However, disabled devices can be started by the system.

## Starting and Stopping Devices

### To start or stop a device

1. In the Control Panel window, choose the Devices icon.
2. In the Devices dialog box, select a device.

If Started is displayed in the Status column for a device, that device driver is loaded. If the Status column is blank, that device driver is not loaded.

3. Choose the Start or Stop button.

Some devices are essential to system operation and cannot be stopped. When such a device is selected, the Stop button is unavailable.

4. Choose the Close button.

See Also

[Configuring Device Startup](#)

## Configuring Device Startup

To configure device startup, you must be logged on to a user account that has membership in the Administrators local group.

### To set the startup type of a device

1. In the Control Panel window, choose the Devices icon.
2. In the Devices dialog box, select a device.
3. Choose the Startup button.
4. Under Startup Type, select Boot, System, Automatic, Manual, or Disabled.

#### **Caution**

Changing the startup type of a Boot or System device can leave the system in an unusable state.

5. Choose the OK button.
6. In the Devices dialog box, choose the Close button.

See Also

[Starting and Stopping Devices](#)

