#### **Introducing Speed Disk**

Speed Disk is the fastest, most efficient way to optimize your hard disks. Speed Disk <u>defragments</u> files and rearranges them for fastest access. Speed Disk has been improved in this version of Norton Utilities to optimize faster and better than ever before. It even defragments and optimizes the Windows <u>swap file</u>.

When you start Speed Disk, it scans your primary hard disk and recommends an optimization based on the amount of file <u>fragmentation</u>. You can use the recommended optimization or customize it. Speed Disk can also show you information about file fragmentation and disk <u>cluster</u> usage.

After using Speed Disk, you will notice marked improvements in computer performance. In addition to the performance gains, optimizing disks improves the chances of recovering deleted or damaged files.

Speed Disk can also reduce wear and tear on the disk's read/write heads. When files are fragmented, the read/write heads must make several passes over the disk to locate all of a file's data.

Use Speed Disk regularly to help maintain optimal computer performance and ensure better data recovery. It's a good idea to run Speed Disk any time you have modified large numbers of files.

Use the Disk Optimization sensor of Norton System Doctor to monitor your disks continuously while you work. When disks become too fragmented, Norton System Doctor can start Speed Disk automatically to optimize them.

Click here **I** to optimize your disks with Speed Disk now.

{button ,AL(`About fragmentation;About Speed Disk features;About customizing the full optimization;To optimize your disks;About the disk map;About the Disk Optimization sensor',0,'',`')} <u>More Info...</u> Click here for more information.

#### About fragmentation

The data storage space on a disk is divided into discrete units called <u>clusters</u>. When files are written to the disk, they are broken up into cluster-sized pieces. When all the pieces of a file are located in adjacent or <u>contiguous</u> clusters, the file can be accessed quickly because all of the information is in one place.

Files change constantly during the normal course of computer operations. When files become smaller or are deleted, they leave behind empty clusters. When files need to grow, there may not be any adjacent clusters available to accommodate the new data. In that case, the operating system finds free clusters elsewhere in which to store the new data.

Over time, the file's data becomes separated in clusters scattered across the surface of the disk. The file is said to be <u>fragmented</u>. As files become increasingly fragmented, computer performance deteriorates because it takes longer to locate all the data that make up each file.

Free space fragmentation is another consequence of file fragmentation. As file clusters become scattered, the available free space is also broken up into many smaller units. When a new file is written to a disk having fragmented free space, the file becomes immediately fragmented if there is no single free space area large enough to accommodate the file's data.

Speed Disk optimizes disks by defragmenting the files and free space. When files are unfragmented, disks perform better, and the chances of recovering deleted files are much improved.

{button ,AL(`Introducing Speed Disk;About the fragmentation report;Note on calculating fragmentation levels;To optimize your disks;About customizing the full optimization;About the Disk Optimization sensor',0,`,`')} <u>More</u> <u>Info...</u> Click here for more information.

#### Note on calculating fragmentation levels

There may be a discrepancy between fragmentation levels reported by Speed Disk and Microsoft's Disk Defragmenter. This is because Speed Disk and Disk Defragmenter use different methods to compute the percentage of disk fragmentation. Speed Disk uses the total number of movable file fragments to compute fragmentation levels, whereas Microsoft uses only the number of fragmented movable files to determine disk fragmentation.

Fragmentation levels computed by Speed Disk and Disk Defragmenter vary, depending on how many total file fragments there are on a disk. Because Speed Disk gives more weight to highly fragmented files in determining fragmentation levels, Speed Disk gives a better overall indication of exactly how fragmented a disk is. This is important because optimization is most beneficial for the more highly fragmented files on a disk.

{button ,AL(`Introducing Speed Disk;About fragmentation;About the fragmentation report',0,`',`')} <u>More Info...</u> Click here for more information.

### About Speed Disk features

Speed Disk includes a variety of features to let you view disk-related information and customize how Speed Disk works.

There are several ways you can view disk and fragmentation information:

<pre>{button ,JI(`sd32.HLP&gt;TASK',`SDW_TASK_CUSTOMIZE_LEGEND_COLO</pre>	RS')} <u>Disk Map</u>
{button ,JI(`sd32.HLP>TASK',`SDW_TASK_VIEW_FILE_DETAILS')}	Block Details
{button ,JI(`sd32.HLP>TASK',`SDW_TASK_VIEW_FRAG_REPORT')}	Fragmentation Report
You can customize Speed Disk by choosing:	
{button ,JI(`sd32.HLP>TASK',`SDW_TASK_CUSTOMIZE_PROCESS')}	Optimization options
{button ,JI(`sd32.HLP>TASK',`SDW_TASK_CLEAR_UNUSED_SPACE')}	Security options
{button,JI(`sd32.HLP>TASK',`SDW_TASK_SET_BACKGROUND_PREFER	RENCES')} Background

{button ,AL(`Introducing Speed Disk;About the disk map;About the Fragmentation Report;About optimizing files and free space;About customizing the full optimization;About display and sound options;About security and file integrity;About running Speed Disk in the background',0,`',`')} <u>More Info...</u> Click here for more information.

#### About the disk map

When you choose a drive to optimize, Speed Disk scans it and displays the contents in the form of a disk map. Each block on the map represents a number of <u>clusters</u> on your disk. The number of clusters per block varies depending on the size of your disk and your screen resolution. The blocks are color-coded to represent various file types, such as the swap file, and files slated to be placed first, last, and at the end of the disk.

Click on any block in the disk map to display the Block Detail window. The Block Detail window lists the cluster numbers stored on that region of the disk, the file that occupies each cluster, and whether each file is <u>fragmented</u>, optimized (unfragmented), or unmovable.

Clicking a filename in the Block Detail window highlights all blocks in the disk map occupied by that file. This is useful for determining how the file fragments are distributed across the disk.

{button ,AL(`Introducing Speed Disk;About the block detail view;About display and sound options;To customize the disk map',0,`',`')} <u>More Info...</u> Click here for more information.

#### About unmovable files

Some files must remain in a particular location on the disk. For example, some copy-protected programs expect the program files to reside in a specific location on your disk. Speed Disk identifies many such files, and does not move them during file optimization.

You can customize the optimization by specifying any other files you do not want Speed Disk to move. You can specify unmovable files by name, or you can specify a class of files as unmovable, based on the file attributes.

For example, if you specify that Read Only files are unmovable, Speed Disk does not move any files that have the Read Only file attribute set. If you specify Read Only and Hidden files as unmovable, Speed Disk does not move files that have both these attributes set. In the latter case, Speed Disk still moves files with only the Read Only or only the Hidden attribute set.

{button ,AL(`About customizing the full optimization;To specify files as unmovable;To customize optimizations',0,`',`')} <u>More Info...</u> Click here for more information.

#### About the Fragmentation Report

The Fragmentation Report shows the level of file <u>fragmentation</u> on a file-by-file basis. The Fragmentation Report window displays a <u>folder tree</u> that you can use to navigate to any specific folder on the disk. Clicking an a folder displays a list of the files it contains and fragmentation information about those files.

The fragmentation information available for individual files includes:

- Level of optimization displayed as a percentage (how unfragmented the file is)
- Number of fragments that the file is divided into
- Total number of <u>clusters</u> comprising the file
- Fragmented files appear in boldface font

{button ,AL(`Introducing Speed Disk;About the disk map;About Speed Disk features',0,`',`')} <u>More Info...</u> Click here for more information.

#### About optimizing files and free space

Speed Disk automatically scans the selected disk and recommends a type of optimization based on the amount of file <u>fragmentation</u>. You can follow the recommendation or specify what you want Speed Disk to optimize:

Full Optimization

-defragments and optimizes the files and consolidates the free disk space to one area on the disk. This method gives the best results, but also takes the longest. If you select this method, you can also customize how the optimization is performed.

Unfragment Files Only

optimizes as many files as possible without consolidating the free disk space. This method is faster than a full optimization, but may not optimize as many files as efficiently. Some large files may not be optimized at all.
 Unfragment Free Space

-quickly consolidates the free space to one area of the disk, but does not optimize any files. Use this method before installing new software or creating a <u>compressed volume</u> if you don't have time for a full optimization.

Once you have selected the extent of optimization for a particular disk, you can save your selection. Thereafter, Speed Disk uses that style of optimization whenever it optimizes that drive.

By default, Speed Disk optimizes the Windows swap file to enhance the performance of Windows and any Windows applications. Uncheck this option to disable swap file optimization (not recommended).

{button ,AL(`To optimize your disks;To customize optimizations;To specify what is optimized;About customizing the full optimization;About optimizing the Windows swap file;To control swap file optimization',0,`',`')} <u>More Info...</u> Click here for more information.

#### About customizing the full optimization

You can customize how the files and folders are arranged when Speed Disk performs a full (file and free space) optimization in the following ways:

 {button,PI(`sd32.HLP',`FILES\_PLACED\_FIRST')}
 Specify files to place first

 {button,PI(`sd32.HLP',`FILES\_PLACED\_LAST')}
 Specify files to place last

 {button,PI(`sd32.HLP',`FILES\_PLACED\_END')}
 Specify files to place at the end of the disk

 {button,PI(`sd32.HLP',`OPTIMIZE\_BY\_DATE')}
 Optimize the files by access and modification dates

 {button,PI(`sd32.HLP',`OPTIMIZE\_BY\_DATE')}
 Place folders first on the disk

 {button,PI(`sd32.HLP',`FOLDERS\_PLACED\_FIRST')}
 Place folders first on the disk

 {button,PI(`sd32.HLP',`SORT\_FOLDER\_CONTENTS')}
 Sort folder entries

 {button,PI(`sd32.HLP',`UNMOVABLE\_FILES')}
 Specify files that should not be moved

Once you have customized the optimization for a particular disk, you can save the customizations. Speed Disk will always use the saved settings when optimizing that drive. Just click Save on the Options dialog box.

{button ,AL(`About fragmentation;About unmovable files;To optimize your disks;About optimizing files and free space;To customize optimizations',0,`',`')} <u>More Info...</u> Click here for more information.

## About display options

Use the options on the Appearance tab of the Options dialog box to customize the look of Speed Disk.

Speed Disk can display the disk map graphics as blocks or bars. While displayed as bars, you can still click on any spot to see the Block Details window, showing the clusters and files stored in that region of the disk.

{button ,AL(`About the disk map;About Speed Disk features;To play a sound file during optimization;To customize the disk map',0,`',`')} <u>More Info...</u> Click here for more information.

## About security and file integrity

Speed Disk includes features to help ensure file integrity and data security during optimization.

Speed Disk can check the data as it is optimized to verify that it is rewritten correctly to the disk. Using verification adds significant time to the optimization process, but this option guarantees that data is not lost due to problems with older or faulty disks.

Speed Disk can "wipe" (write zeros to) all unused clusters on the disk after finishing the optimization. This enhances security by erasing old data that might otherwise be left in spaces marked as "free." Such data could later be retrieved from your disk.

Speed Disk can verify writes and wipe the free space regardless of whether you select a full, file, or free space optimization.

{button ,AL(`About Speed Disk features;To wipe free space for security;To verify disk writes during optimization',0,`',`')} <u>More Info...</u> Click here for more information.

### About running Speed Disk in the background

You can run Speed Disk efficiently in the <u>background</u> while you work by <u>minimizing</u> it after starting the optimization. When Speed Disk detects a pause in disk activity, it begins optimizing the disk.

You can specify how long a pause in disk activity is necessary before Speed Disk begins optimizing in the background.

You can also configure Speed Disk to wait for a specified time period of communication port inactivity before beginning background optimizations. If you are using fax software to send and receive faxes, you should enable this feature to avoid conflicts between the fax software and Speed Disk.

Norton System Doctor includes the Disk Optimization sensor, which can automatically monitor a disk while you work and notify you when the files become too <u>fragmented</u>. You can configure Norton System Doctor to run Speed Disk automatically when fragmentation exceeds a specified value.

{button ,AL(`Introducing Speed Disk;To run Speed Disk in the background;About the Disk Optimization sensor',0,`',`')} <u>More Info...</u> Click here for more information.

#### About optimizing the Windows swap file

The <u>swap file</u> is vital to Windows performance. Windows uses this file for temporary data storage, freeing up more of the faster physical memory (<u>RAM</u>) for applications. The swap file grows and shrinks dynamically to meet changing system conditions.

Because the swap file changes continuously, it can become <u>fragmented</u> quickly. When the swap file is fragmented, Windows performance suffers. By default, Speed Disk defragments and optimizes the swap file to help maintain optimal Windows performance.

Because of its dynamic nature, the swap file can become fragmented again soon after optimization. If the swap file is located in the midst of other changing files on the disk, its high rate of fragmentation can result in the other files becoming more fragmented than they otherwise would. To minimize the fragmentation that can result from frequent swap file changes, Speed Disk normally places the swap file last on the disk, after the other files and before the consolidated free space. This speeds future optimizations.

Specifying a minimum size for the swap file causes Windows to reserve space on the disk for it. This can keep the size of the swap file relatively stable. If you have specified a minimum size for the swap file, Speed Disk places it first on the disk for optimal Windows and application performance.

{button ,AL(`About optimizing files and free space;To optimize your disks',0,`',`')} <u>More Info...</u> Click here for more information.

### **Command-line options for Speed Disk**

You can run Speed Disk from the command-line by clicking Run from the Start menu. Use the following syntax:

SD32 [drive:]...[/F | /U | /Q]

- *drive*: Optimizes the specified drives. Each drive letter specified must be followed by a colon. This option overrides those that may have been previously selected in Speed Disk.
- /F Full optimization
- /U Defragment files only
- /Q "Quick"-defragment free space only

The options may be entered in any order.

For example, to start Speed Disk from the command-line such that it performs a quick optimization of drive E, you enter:

SD32 E: /Q

{button ,AL(`Introducing Speed Disk;About optimizing files and free space;About customizing the full optimization;To customize optimizations',0,`',`')} <u>More Info...</u> Click here for more information.

## To optimize your disks

Click here **I** to open Speed Disk.

Speed Disk scans the default disk and recommends an optimization type based on the degree of file fragmentation.

#### To optimize the default disk

Click Start to accept and start the recommended optimization, or choose another type of optimization and click Start.

### To optimize other disks

- 1 Click Cancel when Speed Disk recommends an optimization type.
- 2 Select the drives you want to optimize from the Drives box. Speed Disk scans the first drive you chose and suggests an optimization type based on the degree of file fragmentation.
- 3 Click Start to accept and start the recommended optimization, or choose another type of optimization and click Start.

{button ,AL(`Introducing Speed Disk;To customize optimization;About customizing the full optimization;To control swap file optimization;SDW Options dialog Optimization tab',0,`',`')} <u>More Info...</u> Click here for more information.

## To view the Fragmentation Report

The Fragmentation Report shows the level of file <u>fragmentation</u> on a file-by-file basis.

- 1 Click here **1** to open Speed Disk.
- Click Properties from the main Speed Disk dialog box. Click Fragmentation Report on the drop-down list. 2

3

{button ,AL(`About Speed Disk features;About fragmentation;About the disk map;To optimize your disks',0,`',`')} More Info...

### To customize optimizations

Speed Disk optimizes the disk while it defragments files and free space. The default optimization is designed to improve the performance of most computers by relocating frequently accessed files first on the disk, frequently modified files last, and moving infrequently used files to the very end of the disk. You can also customize full (file and free space) optimizations to fine tune Speed Disk for the way you use your computer.

### To customize the full optimization

- 1 Click here 🔟 to open Speed Disk.
- 2 Click Properties on the main Speed Disk window.
- 3 Click Options from the drop-down list.
- 4 Click Full Optimization.
- 5 Click Customize.

6 Choose the optimization options you want.

Speed Disk lets you specify:

{button ,JI(`sd32.HLP>task',`SDW\_TASK\_Directories\_First')} Eolders to place first on disk
{button ,JI(`sd32.HLP>task',`SDW\_TASK\_Files\_First')} Files to place first on disk
{button ,JI(`sd32.HLP>task',`SDW\_TASK\_SORT\_BY\_DATE')} File access and modification dates
{button ,JI(`sd32.HLP>task',`SDW\_TASK\_Sort\_Files\_Last')} Files to place last on disk
{button ,JI(`sd32.HLP>task',`SDW\_TASK\_Sort\_Files\_End')} Files to place at the end of disk
{button ,JI(`sd32.HLP>task',`SDW\_TASK\_Sort\_Folder\_Contents')} Sort Folder Entries
{button ,JI(`sd32.HLP>task',`SDW\_TASK\_UNMOVABLE\_FILES')} Files that should not be moved

Click Save in the Options dialog box to have Speed Disk always use these settings for the selected disk drive.

{button ,AL(`About customizing the full optimization;To optimize your disks;To specify what is optimized;About security and file integrity;To wipe free space for security;To verify disk writes during optimization',0,'',`')} <u>More</u> <u>Info...</u> Click here for more information.

### To specify what is optimized

Speed Disk can optimize files, free space, or both. Though optimizing only files or free space is faster, you'll see better performance improvements after a full optimization.

- 1 Click here **1** to open Speed Disk.
- 2 Click Properties from the main Speed Disk dialog box.
- 3 Click Options from the drop-down list.
- 4 Click the option specifying what you want optimized.
- Click Save to have Speed Disk always use this method for the selected disk drive.

{button ,AL(`To optimize your disks;About optimizing files and free space;About customizing the full optimization;About optimizing the Windows swap file;SDW Options dialog Optimization tab',0,`',`')} <u>More Info...</u> Click here for more information.

## To control swap file optimization

Speed Disk can defragment the Windows <u>swap file.</u> and relocate it on the disk for optimal performance.

1 Click here **1** to open Speed Disk.

- 2 Click Properties from the main Speed Disk dialog box.
- **3** Click Options from the drop-down list.

4 Check Optimize Swap File to let Speed Disk optimize the swap file. If you don't want Speed Disk to optimize the swap file, uncheck this option.

{button ,AL(`About optimizing the Windows swap file;To customize the optimization;About customizing the full optimization;SDW Options dialog Optimization tab',0,`',`')} <u>More Info...</u> Click here for more information.

### To wipe free space for security

Wiping free space enhances security by erasing old data that might otherwise be left in spaces marked as "free" after the optimization.

- 1 Click here **1** to open Speed Disk.
- 2 Click Properties from the main Speed Disk dialog box.
- 1 Click Options from the drop-down list.
- 2 Check Wipe Free Space.

{button ,AL(`About security and file integrity;About Speed Disk features;About customizing the full optimization;To customize the optimization;To verify disk writes during optimization',0,`',`')} <u>More Info...</u> Click here for more information.

### To customize the disk map

You can customize the look of the disk map by specifying the colors used for different classes of files. You can also have the disk map display file classes as bars rather than discrete blocks.

Click here **1** to open Speed Disk.

#### To specify disk map colors

- 1 Click Legend. The Legend button is only available when the disk map is displayed.
- 2 Click the colored square beside any block description in the disk map Legend.
- 3 Choose the color you want used to represent this class of files in the disk map.

#### To customize disk map graphics

- 1 Click Properties from the main Speed Disk window.
- 2 Click Options from the drop-down list.
- 3 Click the Appearance tab.
- 4 Choose Block or Bar graphics.

{button ,AL(`About the disk map;About the fragmentation report;To view block details;to view the fragmenation report;SDW\_Options\_Appearance\_tab',0,`',`')} <u>More Info...</u> Click here for more information.

### To optimize files by access and modification dates

Speed disk can automatically place frequently accessed files that are not frequently modified (such as program files) first on the disk for faster access. Frequently modified files that tend to get fragmented are placed after the other files, to speed optimization in the future. Rarely accessed files are placed at the very end of the disk.

- 1 Click here **1** to open Speed Disk.
- 2 Click Properties from the main Speed Disk dialog box.
- **3** Click Options from the drop-down list.
- 4 Click Full Optimization.
- 5 Click Customize.
- 6 Click the By Date tab.
- 7 Check Sort Files By Last Access Date.

8 Choose the time span you want Speed Disk to use to judge whether files are accessed frequently or infrequently.

{button ,AL(`About customizing the full optimization;To customize optimizations;SDW customize dialog by date tab',0,`',`')} <u>More Info...</u> Click here for more information.

# To run Speed Disk in the background

Click here **I** to open Speed Disk.

After starting the optimization, you can minimize Speed Disk to have it optimize in the background while you continue with your other work. When Speed Disk runs in the background, it pauses whenever it detects something writing to the disk and resumes optimizing after a time you specify.

## To set background options

- 1 Click Properties from the main Speed Disk dialog box.
- 2 Click Options from the drop-down list.
- **3** Click the Advanced tab.
- 4 Customize the background options to your needs.

{button ,AL(`About running Speed Disk in the background;About the file fragmentation sensor;To optimize your disks;SDW Options dialog Advanced tab',0,`',`')} <u>More Info...</u>Click here for more information.

## To specify files to place last

Files placed last should be files that are frequently modified, such as word processor documents, working spreadsheets, and cache files. Placing these files last allows them to be optimized more quickly in the future.

- 1 Click here **1** to open Speed Disk.
- 2 Click Properties from the main Speed Disk dialog box.
- **3** Click Options from the drop-down list.
- 4 Click Full Optimization.
- 5 Click Customize.
- 6 Click the Files Last tab.
- 7 Type a filename in the File Specification box.

To browse for files to add, click the folder icon to the right of the box.

You can use <u>wildcard</u> notation when specifying filenames. The question mark (?) wildcard represents a single character, and the asterisk (\*) wildcard represents any number of characters. Thus, myfile.n?? represents myfile.n01, myfile.new, and so on, and myfile.\* represents any filename beginning with myfile.

You can also use wildcards to specify all the files in a folder. Type the path to the folder and \*.\* to specify all files, or  $* \ *$  to specify all files including files in any subfolders.

8 Click Add.

{button ,AL(`About customizing the full optimization;To customize optimizations;SDW customize dialog files last tab',0,`',`')} <u>More Info...</u> Click here for more information.

# To specify folders to place first

- 1 Click here **1** to open Speed Disk.
- 2 Click Properties from the main Speed Disk dialog box.
- **3** Click Options from the drop-down list.
- 4 Click Full Optimization.
- 5 Click Customize.
- 6 Click the Folders tab.
- 7 Check Move folders to front.
- 8 Optional: Click Add.
- 9 Optional: Use the dialog box to choose specific folders that will be placed at the beginning of all the folders.
- {button ,AL(`About customizing the full optimization;To customize optimizations;SDW customize dialog folders tab',0,`',`')} <u>More Info...</u> Click here for more information.

## To specify files to place first

Files placed first are accessed fastest. Files that are frequently accessed but not modified, such as program (.EXE and .DLL) files, should be placed first on the disk.

- 1 Click here **1** to open Speed Disk.
- 2 Click Properties from the main Speed Disk dialog box.
- 3 Click Options from the drop-down list.
- 4 Click Full Optimization.
- 5 Click Customize.
- 6 Click the Files First tab.
- 7 Type a filename in the File Specification box.

To browse for files to add, click the folder icon to the right of the box.

You can use <u>wildcard</u> notation when specifying filenames. The question mark (?) wildcard represents a single character, and the asterisk (\*) wildcard represents any number of characters. Thus, myfile.n?? represents myfile.n01, myfile.new, and so on, and myfile.\* represents any filename beginning with myfile.

You can also use wildcards to specify all the files in a folder. Type the path to the folder and \*.\* to specify all files, or  $* \ *$  to specify all files including files in any subfolders.

8 Click Add.

{button ,AL(`About customizing the full optimization;To customize optimizations;SDW customize dialog files first tab',0,`',`')} <u>More Info...</u> Click here for more information.

# To specify files as unmovable

Certain files should not be moved on your disk. Speed Disk automatically recognizes most of these files and does not move them during optimization. You can also specify additional files that should not be moved during the optimization.

1 Click here **1** to open Speed Disk.

- 2 Click Properties from the main Speed Disk dialog box.
- 3 Click Options from the drop-down list.
- 4 Click Full Optimization.
- 5 Click Customize.
- 6 Click the Unmovables tab.
- 7 Enter a filename into the File Specification box.

To browse for files to add, click the folder icon to the right of the box. (Hidden files do not display in the list.)

8 Click Add.

You can also specify a whole class of files as unmovable, based on the file attributes. Checking Read Only, Hidden, or System prevents Speed Disk from moving files having that attribute. Checking a combination of these attributes prevents Speed Disk from moving files having that particular combination of attributes.

{button ,AL(`About customizing the full optimization;To customize optimizations;SDW customize dialog Unmovables tab',0,`',`')} <u>More Info...</u> Click here for more information.

### To verify disk writes during optimization

Speed Disk can check during the optimization to verify that data is rewritten correctly to the disk. Using verification adds significant time to the optimization process, but this option guarantees that data is not lost during the optimization process because of problems with older or faulty disks.

- 1 Click here **1** to open Speed Disk.
- 2 Click Properties from the main Speed Disk dialog box.
- 3 Click Options from the drop-down list.

Check Verify Writes.
 This slows the opti

This slows the optimization process somewhat.

{button ,AL(`About Speed Disk features; About security and file integrity; To wipe free space for security', 0, `', `')} <u>More Info...</u> Click here for more information.

### To view block details

The Block Detail window lists the cluster numbers stored in the corresponding region of the disk, the file that occupies each <u>cluster</u>, and whether the file is <u>fragmented</u>, optimized (unfragmented), or unmovable.

Click here **I** to open Speed Disk.



Click any block on the disk map in the Speed Disk main window.

The disk map must be visible to view block details. If it's not, click Show Map.

{button ,AL(`Introducing Speed Disk;About the disk map;About display and sound options',0,`',`')} <u>More Info...</u> Click here for more information.

## To open Speed Disk

You can open any of the Norton Utilities programs from the Norton Utilities Integrator.

To open Speed Disk:

- 1 Double-click Norton Utilities Integrator on the Windows desktop.
- 2 Click Optimize Performance in the left pane of the Integrator.
- **3** Click Speed Disk in the right pane.
- Or, click here
- to open Speed Disk immediately.

{button ,AL(`Introducing Speed Disk;About running Speed Disk in the background',0,`',`')} <u>More Info...</u> Click here for more information.

### To sort folder entries

Speed Disk can sort folder entries (the files in the folder) during optimization. The files are sorted accordingly when you type DIR at the DOS prompt (provided you are not using other directory sorting techniques, such as the DIRCMD environment variable).

- 1 Click here 1 to open Speed Disk.
- 2 Click Properties from the main Speed Disk dialog box.
- **3** Click Options from the drop-down list.
- 4 Click Full Optimization.
- 5 Click Customize.
- 6 Click the Sort Entries tab.
- 7 Check Sort Folder Entries.
- 8 Choose the sorting options you want.

Windows Explorer provides its own means of sorting the display of folder contents, and is unaffected by this Speed Disk option.

{button ,AL(`About customizing the full optimization;To customize optimizations;SDW customize dialog sort folder entries tab',0,`',`')} <u>More Info...</u> Click here for more information.

Displays the contents of the selected drive in the form of a map. Click a block anywhere on the disk map to view a list of files that are stored in that region of the disk.

This is unavailable because no disk drive is currently selected.
Hides the disk map.

Displays a disk map that represents the contents of the drive being optimized as color-coded blocks or bars.

Lists the drives available for optimization.

You can select more than one drive by holding down the SHIFT or CTRL key and clicking the drives you want to optimize. Use the Optimization tab of the Speed Disk Options dialog box to save custom options for each drive.

Click to begin optimizing the selected drive or drives.

Click to set Speed Disk options, customize the optimization, and see the Fragmentation Report for the current disk.

Closes Speed Disk.

Defines the color codes used by the disk map. You can change the disk map colors for a file category by clicking its color block.

Lists the details of the currently selected disk map block. Shows the cluster numbers stored in the corresponding region of the disk, the files associated with each cluster, and each file's fragmentation status.

When you select a file in this list, all of the blocks that contain any portion of the file are highlighted in the disk map. This is useful for determining the distribution of a file's fragments across the disk.

Displays a color-coded graphic of used, partially used, swap file, memory file, unused, unmovable, and bad clusters within the currently selected disk map block.

Displays the folder tree for the currently selected drive. Clicking a folder in the tree shows fragmentation information for the files that folder contains.

Displays the file fragmentation report for the currently selected folder. For each file this report shows the percentage that is optimized, the number of fragments, and the number of clusters occupied.



Fragmented files appear in bold.

Click to display a list of drives for which the optimization can be customized. From the list presented, click the drive whose optimization you want to customize.

Click to save the Full Optimization customizations for the drive shown in the drive box. Speed Disk will always use the saved settings when optimizing that drive.

Click to have Speed Disk completely defragment the hard disk, optimizing files and free space. Full Optimization produces the best performance improvements, but takes longer to complete than optimizing only files or free space.

Click to have Speed Disk optimize as many files as possible without consolidating the free disk space. This method is faster than a full optimization, but may not optimize as many files as efficiently. Some large files may not be optimized at all.

Click to have Speed Disk quickly consolidate the free space to one area of the disk, without optimizing any files. Use this method before installing new software or creating a compressed disk volume if you don't have time for a full optimization.

This is unavailable because the currently selected drive is a compressed disk volume.

The swap file is used by Windows to maximize available system memory. By default, Speed Disk optimizes the swap file to enhance the performance of Windows and any Windows applications. Uncheck this option to disable swap file optimization (not recommended).

This option is global. It applies to all optimizations of all drives.

Check to have Speed Disk place empty space after files when you optimize a disk. This empty space allows for file growth without causing fragmentation, and makes later optimizations faster.

This is unavailable for one of the following reasons:

- The swap file is not found
  - The swap file is on a network drive
  - The swap file is on a compressed drive
  - The swap file is named something other than WIN386.SWP
- Restart your computer and try again. If this feature is still unavailable, check your Windows settings to determine your swap file usage (if any).

Click to customize the full optimization by specifying files to place first, last, and at the end of the disk. You can also specify unmovable files and have the files sorted during optimization. You can only customize full optimizations.

This is unavailable because the Full Optimization option is not selected.

Closes this dialog box and saves any changes you have made.

Closes this dialog box without saving any changes you have made.

Configures Speed Disk to place all folders first on the disk during full optimization.

Lists the folders that Speed Disk is to place first on the disk during full optimization.

Lets you select a folder name to include in the Folders to place first list.

This is unavailable because the Move folders to front check box is not currently checked.

Removes the currently highlighted folder name from the Folders to place first list.

This is unavailable because the Folders to place first list is currently empty.

Shows the organization of your disk after full optimization with the currently selected options.

Closes this dialog box and accepts any changes you have made.

Closes this dialog box without accepting any changes you have made.

Type a filename to be added to the list of files placed first on the disk. This area of the disk (the outer tracks) are accessed fastest by the computer. Files that are frequently accessed but not modified, such as program (.EXE and .DLL) files, should be placed first on the disk.

You can use <u>wildcard</u> notation when specifying filenames. The question mark (?) wildcard represents a single character, and the asterisk (\*) wildcard represents any number of characters. Thus, myfile.n?? represents myfile.n01, myfile.new, and so on, and myfile.\* represents any filename beginning with myfile..

You can also use wildcards to specify all the files in a folder. Type the path to the folder and \*.\* to specify all files, or  $*\setminus*$  to specify all files including files in any subfolders.

Click to browse the disk for files to be placed first on the disk.

Files that are frequently accessed but not modified, such as program (.EXE and .DLL) files, should be placed first on the disk.

Lists the files that Speed Disk is to place first on the disk during full optimizations.

Files that are frequently accessed but not modified, such as program (.EXE and .DLL) files, should be placed first on the disk.
Appends a filename that you have typed in the File Specification box to the list of files to be placed first during full optimizations.

Files that are frequently accessed but not modified, such as program (.EXE and .DLL) files, should be placed first on the disk.

This is unavailable because the File Specification box is currently empty.

Removes the currently highlighted filename from the list of files to be placed first during full optimizations.

This is unavailable because the list is currently empty.

Configures Speed Disk to arrange files during full optimization according to their last access and modification dates. Use the options below to set the time span Speed Disk uses to judge the frequency of file access.

For example, choosing Group Files By Month causes Speed Disk to consider files accessed within the last month as "frequently" accessed, and files not accessed within the last two months as "infrequently" accessed.

Uses a time period of one day to judge whether files are frequently or infrequently accessed and modified.

Uses a time period of one week to judge whether files are frequently or infrequently accessed and modified.

Uses a time period of one month to judge whether files are frequently or infrequently accessed and modified.

Uses a time period of one quarter (three months) to judge whether files are frequently or infrequently accessed and modified.

Uses a time period of one year to judge whether files are frequently or infrequently accessed and modified.

These options are unavailable because the Sort files by last access date check box is unchecked.

Type a filename to be added to the list of files placed last on the disk during full optimizations. These files are placed after most of the other files, right before the consolidated free space. Files that are frequently modified, and are therefore more likely to become fragmented, should be placed last. There they can grow into the free space without affecting the files that were placed first.

You can use <u>wildcard</u> notation when specifying filenames. The question mark (?) wildcard represents a single character, and the asterisk (\*) wildcard represents any number of characters. Thus, myfile.n?? represents myfile.n01, myfile.new, and so on, and myfile.\* represents any filename beginning with myfile..

You can also use wildcards to specify all the files in a folder. Type the path to the folder and \*.\* to specify all files, or  $*\setminus*$  to specify all files including files in any subfolders.

Click to browse the disk for files to be placed last on the disk during full optimizations.

These files are placed after most of the other files, right before the consolidated free space. Files that are frequently modified, and are therefore more likely to become fragmented, should be placed last, where they can grow into the free space without affecting the files that were placed first.

Lists the files that Speed Disk is to place last on the disk during full optimizations.

These files are placed after most of the other files, right before the consolidated free space. Files that are frequently modified, and are therefore more likely to become fragmented, should be placed last, where they can grow into the free space without affecting the files that were placed first.

Appends a filename that you have typed in the File Specification box to the list of files to be placed last during full optimizations.

These files are placed after most of the other files, right before the consolidated free space. Files that are frequently modified, and are therefore more likely to become fragmented, should be placed last, where they can grow into the free space without affecting the files that were placed first.

This is unavailable because the File Specification box is currently empty.

Removes the currently highlighted filename from the list of files to be placed last during full optimizations.

This is unavailable because the list is currently empty.

Type a filename to be added to the list of files that are not to be moved during full optimizations.

Click to browse the disk for files that should not to be moved during full optimizations.

Lists the files Speed Disk will not move during full optimizations.

Appends a filename that you have typed in the File Specification box to the list of files that will not be moved during full optimizations.

This is unavailable because the File Specification box is currently empty.

Removes the currently highlighted filename from the list of files that are not to be moved during full optimizations.

This is unavailable because the list is currently empty.

Lets you set Speed Disk options for running in the background.

Lets you specify how many minutes of disk inactivity should elapse before Speed Disk begins or resumes background optimization.

Lets you specify how many seconds of disk inactivity should elapse before Speed Disk begins or resumes background optimization.

Click to have Speed Disk wait for communication port inactivity before starting or resuming optimizations.

If you are using fax software to send and receive faxes, you should enable this feature to avoid conflicts between the fax software and Speed Disk.

Configures Speed Disk to verify that the information it moves during optimization is rewritten correctly to the disk. This will significantly slow the optimization process, but it guarantees that data is not lost due to problems with older or faulty disks.

Configures Speed Disk to write zeros in all unused clusters of the disk during optimization. This enhances security by permanently erasing any old copies of your data that would otherwise be left behind in the space freed during optimization.

Click to display the Disk Map with block-style graphics.

Click to display the Disk Map with bar-style graphics.

Click to specify a sound file (.WAV or .MID format) to be played during optimization.



You must have a sound card installed to use this feature.

Click to play the selected sound file.

Type the pathname of a sound file (.WAV or .MID format) to be played during optimization. You may also use the folder icon 10 to browse for a sound file.
Click to browse for a sound file to be played during optimization.

This is unavailable because the Play Music check box is not checked.

Lists the files that Speed Disk has determined to be unmovable.

Indicates the optimization action currently being performed, or the time elapsed since file optimization was begun.

Displays the progress of the optimization action currently being performed.

Indicates the percentage of your disk that is not fragmented.

Indicates the percentage of your disk that is not fragmented, and recommends a type of optimization based on that percentage.

Closes this dialog box without starting disk optimization.

Stops disk optimization.

Configures Speed Disk to sort folder file entries (the files in a folder) according to the criteria specified below. The entries are sorted accordingly when you type DIR at the DOS prompt (provided you are not using other directory sorting techniques, such as the DIRCMD environment variable). The folder entries also appear sorted when viewed in a disk editor program such as Disk Editor.

U Windows Explorer provides its own means of sorting the display of folder contents, and is unaffected by this Speed Disk option.

Sorts files by name (the portion of the filename preceding the last period).

Sorts files by file extension (the portion of the filename following the last period).

Sorts files by creation dates.

Sorts files by creation dates and times.

Sorts files by file size.

Configures Speed Disk to place subfolders first when folder entries are sorted.

Configures Speed Disk to sort folder entries in an ascending order.

Configures Speed Disk to sort folder entries in a descending order.

## To specify files to place at the end of the disk

Files placed at the end of the disk are accessed slowest. They should be files that are only rarely accessed or modified. By default, Speed Disk places infrequently accessed files at the end of the disk.

- 1 Click here **1** to open Speed Disk.
- 2 Click Properties from the main Speed Disk dialog box.
- 3 Click Options from the drop-down list.
- 4 Click Full Optimization.
- 5 Click Customize.
- 6 Click the Files At End tab.
- 7 Type a filename in the File Specification box.
- To browse for files to add, click the folder icon to the right of the box.

You can use <u>wildcard</u> notation when specifying filenames. The question mark (?) wildcard represents a single character, and the asterisk (\*) wildcard represents any number of characters. Thus, myfile.n?? represents myfile.n01, myfile.new, and so on, and myfile.\* represents any filename beginning with myfile.

You can also use wildcards to specify all the files in a folder. Type the path to the folder and \*.\* to specify all files, or  $*\setminus*$  to specify all files including files in any subfolders.

## 8 Click Add.

{button,AL(`About customizing the full optimization;To customize optimizations;SDW customize dialog files at end tab',0,`',`')} <u>More Info...</u> Click here for more information.

Speed Disk places these files at the very beginning of the disk (the outer  $\underline{tracks}$ ) for fastest access. Files that are frequently accessed but not modified, such as program (.EXE and .DLL) files, should be placed first on the disk.

Speed Disk places these files just before the consolidated free space on the disk. Files that are frequently modified, and are therefore more likely to become fragmented, should be placed last, where these files can grow into the free space without affecting the files that were placed first. This speeds future optimizations and can reduce subsequent disk fragmentation. By default Speed Disk places the contents of various cache and temporary files in this area.

Speed Disk places these files at the very end of the disk (the inner <u>tracks</u>), after the consolidated free space. This area of the disk is accessed relatively slowly by the computer. Place rarely used files at the end of the disk to free up space on the faster, outer disk tracks for those files you use more often.

Speed Disk can check file access and modification dates for you, and automatically arrange the files for optimal performance. Speed Disk moves the frequently accessed but unmodified files first, and the frequently modified files last. It notices the files that have not been accessed during twice the time span you specify, and moves them to the very end of the disk.

Placing folders first on the disk speeds access to the files they contain. In addition to having Speed Disk place all folders first on the disk, you can specify individual folders to place first.

Speed Disk can sort folder entries (the files in a folder) during optimization. The files and subfolders are sorted accordingly when you type DIR at the DOS prompt (provided you are not using other directory sorting techniques, such as DOS's DIRCMD environment variable). The folder entries also appear sorted when viewed in a disk editor program.

U Windows Explorer provides its own means of sorting the display of folder entries, and is unaffected by this Speed Disk option.

Certain files should not be moved on your disk. Speed Disk automatically recognizes most of these files and does not move them during optimization. This option lets you specify additional files that should not be moved during the optimization.

Type a filename to be added to the list of files placed at the end of the disk. This area of the disk is accessed relatively slowly by the computer. Place rarely used files at the end of the disk to free up space on the faster, outer disk tracks for those files you use more often.

You can use <u>wildcard</u> notation when specifying filenames. The question mark (?) wildcard represents a single character, and the asterisk (\*) wildcard represents any number of characters. Thus, myfile.n?? represents myfile.n01, myfile.new, and so on, and myfile.\* represents any filename beginning with myfile..

You can also use wildcards to specify all the files in a folder. Type the path to the folder and \*.\* to specify all files, or  $* \ * \$ to specify all files including files in any subfolders.

Click to browse the disk for files to be placed at the very end of the disk during full optimizations.

This area of the disk is accessed relatively slowly by the computer. Place rarely used files at the end of the disk to free up space on the faster, outer disk tracks for those files you use more often.

Lists the files that Speed Disk places at the end of the disk during full optimizations.

This area of the disk is accessed relatively slowly by the computer. Place rarely used files at the end of the disk to free up space on the faster, outer disk tracks for those files you use more often.

Appends a filename that you have typed in the File Specification box to the list of files to be placed at the end of the disk during full optimizations.

This area of the disk is accessed relatively slowly by the computer. Place rarely used files at the end of the disk to free up space on the faster, outer disk tracks for those files you use more often.

This is unavailable because the File Specification box is currently empty.

Removes the currently highlighted filename from the list of files to be placed at the end of the disk during full optimizations.

This is unavailable because the list is currently empty.

Click to see a legend describing the colors used in the disk map. You can use the map legend to change the colors used to represent different file classes.
### **Recommended Optimization dialog box**

After Speed Disk has scanned the default disk (if you have just started Speed Disk) or the disk you chose from the drive list, this dialog box suggests an optimization based on the amount of file <u>fragmentation</u> Speed Disk found. You can accept the recommendation, choose another optimization from the list, or configure other Speed Disk options before beginning optimization.

This dialog box contains the following:

# Start

Click to begin the optimization now according to the option selected below.

## Cancel

Click to dismiss this dialog box. After clicking Cancel, you can configure optimization options from the Speed Disk Options dialog box.

#### **Full Optimization**

Click to have Speed Disk completely defragment the hard disk, optimizing both files and free space. Full Optimization produces the best performance improvements, but takes longer to complete than optimizing only files or free space.

### **Unfragment Files Only**

Click to have Speed Disk optimize as many files as possible without consolidating the free disk space. This method is faster than a full optimization, but may not optimize as many files as efficiently. Some large files may not be optimized at all.

#### **Unfragment Free Space**

Click to have Speed Disk quickly consolidate the free space to one area of the disk, without optimizing any files. Use this method before installing new software or creating a <u>compressed volume</u>, if you don't have time for a full optimization.

### **Optimize Swap File**

By default, Speed Disk optimizes the Windows <u>swap file</u> to enhance the performance of Windows and any Windows applications. Uncheck this option to disable swap file optimization (not recommended). This option is global. It applies to all optimizations of all drives.

{button ,AL(`To optimize your disks;To customize optimizations;To specify what is optimized;About customizing the full optimization;About optimizing the Windows swap file;To control swap file optimization',0,`',`')} <u>More Info...</u> Click here for more information. Click to begin the optimization now according to the options selected below.

# **Options dialog: Optimization tab**

The Optimization tab lets you customize the optimization for any drive. Once you have chosen optimization options for a particular drive, save your customizations and Speed Disk uses them whenever it optimizes that drive.

This dialog box contains the following:

#### Drive

Click to display a list of drives for which the optimization can be customized. From the list presented, click the drive whose optimization you want to customize.

### **Full Optimization**

Click to have Speed Disk completely defragment the hard disk, optimizing both files and free space. Full Optimization produces the best performance improvements, but takes longer to complete than optimizing only files or free space.

#### Customize

Click to customize the full optimization by specifying files to place first, last, and at the end of the disk. You can also specify unmovable files and have the files sorted during optimization. You can only customize full optimizations.

### Save

Click to save the Full Optimization customizations for the drive shown in the drive box. Speed Disk will always use the saved settings when optimizing that drive.

#### **Unfragment Files Only**

Click to have Speed Disk optimize as many files as possible without consolidating the free disk space. This method is faster than a full optimization, but may not optimize as many files as efficiently. Some large files may not be optimized at all.

#### **Unfragment Free Space**

Click to have Speed Disk quickly consolidate the free space to one area of the disk, without optimizing any files. Use this method before installing new software or creating a <u>compressed volume</u>, if you don't have time for a full optimization.

# **Optimize Swap File**

This option is checked by default. It makes Speed Disk optimize the Windows <u>swap file</u> to enhance the performance of Windows and any Windows applications. This option applies to all optimizations of all drives. Uncheck this option to disable swap file optimization (not recommended).

### **Verify Writes**

Check to have Speed Disk verify that the data moved during optimization is rewritten correctly to the disk. Verifying disk writes adds significant time to the optimization process, but this option guarantees that data is not lost due to problems with older or faulty disks.

#### Wipe Free Space

Check to have Speed Disk write zeros to all unused clusters on the disk after finishing the optimization. This enhances security by erasing old data that might otherwise be left in spaces marked as "free." Unwiped data could later be retrieved from your disk.

{button ,AL(`To optimize your disks;To customize optimizations;To specify what is optimized;About customizing the full optimization;About optimizing the Windows swap file;To control swap file optimization;SDW Options dialog',0,`',`')} More Info... Click here for more information.

# **Options dialog: Appearance tab**

The Appearance tab lets you customize the look of Speed Disk.

This dialog box contains the following:

### Disk Map

You can display the disk map graphics as blocks or bars. Click either Block or Bar to see in the sample graphic how the disk map will look. While displayed as bars, click any spot on the map to see the Block Details window, showing the clusters and files stored in that region of the disk.

{button ,AL(`About the disk map;About Speed Disk features;To play a sound file during optimization;To customize the disk map;SDW Options dialog',0,`',`')} <u>More Info...</u> Click here for more information.

# Options dialog: Advanced tab

You can run Speed Disk efficiently in the <u>background</u> while you work by <u>minimizing</u> it after starting the optimization. When Speed Disk detects a pause in disk activity, it begins optimizing the disk. The Advanced tab lets you customize how Speed Disk runs in the background.

This dialog box contains the following:

# **Begin After**

Type the number of minutes and seconds of disk inactivity that should elapse before Speed Disk starts or resumes background optimization.

# Watch Communication Ports

Click to have Speed Disk wait for communication port inactivity before starting or resuming optimizations. If you are using fax software to send and receive faxes, you should enable this feature to avoid conflicts between the fax software and Speed Disk.

{button, AL(`About background operation options;To run Speed Disk in the background;SDW Options dialog',0,`',`')} <u>More Info...</u> Click here for more information.

# Customize Full Optimization dialog: Files First tab

Speed Disk places the files you specify at the very beginning of the disk (the outer <u>tracks</u>) for fastest access. Files that are frequently accessed but not modified, such as program (.EXE and .DLL) files, should be placed first on the disk.

This dialog box contains the following:

#### **File Specification**

Type the full path and name of the file you want placed first on the disk. To browse for files, click the folder icon to the right of the box.

You can use <u>wildcard</u> notation when specifying filenames. The question mark (?) wildcard represents a single character, and the asterisk (\*) wildcard represents any number of characters. Thus, myfile.n?? represents myfile.n01, myfile.new, and so on, and myfile.\* represents any filename beginning with myfile.

You can also use wildcards to specify all the files in a folder. Type the path to the folder and \*.\* to specify all files, or  $* \ *$  to specify all files including files in any subfolders.

#### Add

After you have entered a name in the box, click Add to add the file to the list of files that Speed Disk places first during optimization.

# Delete

To remove a file from the list of files placed first, click the file in the list, then click Delete.

{button ,AL(`About customizing the full optimization;To customize the full optimization;To specify files to place first;SDW customize dialog',0,`',`')} <u>More Info...</u> Click here for more information.

# Customize Full Optimization dialog: Files Last tab

Speed Disk places the files you specify before the consolidated free space on the disk. Files that are frequently modified, and are therefore more likely to become fragmented, should be placed last, where they can grow into the free space without affecting the files that were placed first. This speeds future optimizations and reduces subsequent disk fragmentation. By default Speed Disk places the contents of various cache and temporary files in this area.

This dialog box contains the following:

### **File Specification**

Type the full path and name of the file you want placed last on the disk. To browse for files, click the folder icon to the right of the box.

You can use <u>wildcard</u> notation when specifying filenames. The question mark (?) wildcard represents a single character, and the asterisk (\*) wildcard represents any number of characters. Thus, myfile.n?? represents myfile.n01, myfile.new, and so on, and myfile.\* represents any filename beginning with myfile.

You can also use wildcards to specify all the files in a folder. Type the path to the folder and \*.\* to specify all files, or  $*\setminus*$  to specify all files including files in any subfolders.

Add

After you have entered a name in the box, click Add to add the file to the list of files that Speed Disk places last during optimization.

Delete

To remove a file from the list of files placed last, click the file in the list, then click Delete.

{button ,AL(`About customizing the full optimization;To customize the full optimization;To specify files to place last;SDW customize dialog',0,`',`')} <u>More Info...</u> Click here for more information.

# Customize Full Optimization dialog: Files At End tab

Speed Disk places the files you specify at the very end of the disk (the inner <u>tracks</u>), after the consolidated free space. This area of the disk is accessed relatively slowly by the computer. Place rarely used files at the end of the disk to free up space on the faster, outer disk tracks for those files you use more often.

This dialog box contains the following:

# **File Specification**

Type the full path and name of the file you want placed at the end of the disk. To browse for files, click the folder icon 1 to the right of the box.

You can use <u>wildcard</u> notation when specifying filenames. The question mark (?) wildcard represents a single character, and the asterisk (\*) wildcard represents any number of characters. Thus, myfile.n?? represents myfile.n01, myfile.new, and so on, and myfile.\* represents any filename beginning with myfile.

You can also use wildcards to specify all the files in a folder. Type the path to the folder and \*.\* to specify all files, or  $* \ *$  to specify all files including files in any subfolders.

#### Add

After you have entered a name in the box, click Add to add the file to the list of files that Speed Disk places at the end of the disk during optimization.

# Delete

To remove a file from the list of files placed at the end of the disk, click the file in the list, then click Delete.

{button ,AL(`About customizing the full optimization;To customize the full optimization;To specify files to place at the end of the disk;SDW customize dialog',0,`',`')} <u>More Info...</u> Click here for more information.

# Customize Full Optimization dialog: Unmovables tab

Certain files should not be moved on your disk. Speed Disk automatically recognizes most of these files and does not move them during optimization. Use this tab to specify additional files that should not be moved during the optimization.

This dialog box contains the following:

#### **File Specification**

Type the full path and name of the file you want placed at the end of the disk. To browse for files, click the folder icon to the right of the box. (Hidden files do not display in the list.)

You can use <u>wildcard</u> notation when specifying filenames. The question mark (?) wildcard represents a single character, and the asterisk (\*) wildcard represents any number of characters. Thus, myfile.n?? represents myfile.n01, myfile.new, and so on, and myfile.\* represents any filename beginning with myfile.

You can also use wildcards to specify all the files in a folder. Type the path to the folder and \*.\* to specify all files, or  $*\setminus*$  to specify all files including files in any subfolders.

#### Add

After you have entered a name in the box, click Add to add the file to the list of files that Speed Disk places at the end of the disk during optimization.

# Delete

To remove a file from the list of files placed at the end of the disk, click the file in the list, then click Delete.

# Read Only, Hidden, System

You can also specify a whole class of files as unmovable, based on the file attributes. Checking Read Only, Hidden, or System prevents Speed Disk from moving files having that attribute. Checking a combination of these attributes prevents Speed Disk from moving files having that particular combination of attributes.

{button ,AL(`About customizing the full optimization;To customize the full optimization;To specify files as unmovable;SDW customize dialog',0,`',`')} <u>More Info...</u> Click here for more information.

# Customize Full Optimization dialog: By Date tab

Speed Disk can check file access and modification dates for you, and automatically arrange the files for optimal performance. Speed Disk moves the frequently accessed but unmodified files first, and the frequently modified files last. It notices the files that have not been accessed during twice the time span you specify, and moves these rarely accessed files to the very end of the disk.

This dialog box contains the following:

### Sort Files By Last Access Date

Check to have Speed Disk arrange the files by access and modification dates.

## **Group Files By**

Click the time span you want Speed Disk to use when judging the frequency of file access. For example, if you choose Month, Speed Disk considers files accessed within the last month as frequently accessed, and files not accessed within the last two months as rarely accessed.

{button ,AL(`About customizing the full optimization;To customize the full optimization;To optimize files by access and modification dates;SDW customize dialog',0,`',`')} <u>More Info...</u> Click here for more information.

# Customize Full Optimization dialog: Folders tab

Placing folders first on the disk speeds access to the files they contain. In addition to having Speed Disk place all folders first on the disk, you can specify individual folders to place first.

This dialog box contains the following:

### Move Folders To Front

Check to have Speed Disk place folders first on the disk during optimization.

Add

Click to display a list from which you can specify the folders you want placed first on the disk. All folders are placed first on the disk as a group. If you enter specific folders here, those folders are placed before all others.

# Delete

To remove a folder from the list of folders placed first, click the folder in the list, then click Delete.

{button ,AL(`About customizing the full optimization;To customize the full optimization;SDW customize dialog;To specify folders to place first',0,`',`')} <u>More Info...</u> Click here for more information.

# Customize Full Optimization dialog: Sort Entries tab

Speed Disk can sort folder entries (the files in a folder) during optimization. The files and subfolders are sorted accordingly when you type DIR at the DOS prompt (provided you are not using other directory sorting techniques, such as the DOS DIRCMD environment variable). The folder entries also appear sorted when viewed in a disk editor program.

Windows Explorer provides its own means of sorting the display of folder entries, and is unaffected by this Speed Disk option.

This dialog box contains the following:

#### **Sort Folder Contents**

Check the box to have Speed Disk sort folder entries according to the criteria you specify below.

# Sort Files By

Sort the files by name (the part of the filename preceding the final period), extension (the part of the filename following the final period), creation date, creation date and time, or size.

### Sort Order

Sort the entries in either ascending or descending order.

#### Place Subfolders First

Check the box to have Speed Disk place any subfolders first when sorting folder contents.

{button ,AL(`About customizing the full optimization;To customize the full optimization;SDW customize dialog;To sort folder entries',0,'','')} <u>More Info...</u> Click here for more information.