Displays an information overview of your computer's hardware and operating system.

Displays information about your computer's monitor and display adapter (graphics card).

Displays information about local or network printer.	your currently selected	ed default printer. Let	ts you display informat	ion about any installed

Displays information about your computer's memory usage and characteristics.

Displays information about local and network disk drives to which you have access.

Displays information about your keyboard and mouse (or other pointing device).

Displays information about any multimedia devices connected to your computer.

Displays information about any network resources available to your computer.

Displays information about your Internet and dial-up connections.

Displays information provided by your system vendor.

Because the information on this tab is provided.

Because the information on this tab is provided by a third party, Symantec cannot guarantee its accuracy.

Lists categories of information available from your system vendor. Categories containing more information include a plus sign (+) to the left of the title. To view all the information in these categories, click the plus sign.

Because the information on this tab is provided by a third party. Symantec cannot quarantee its accuracy

Because the information on this tab is provided by a third party, Symantec cannot guarantee its accuracy.

Shows the type, speed, and version number of your computer's central processing unit (CPU). You can select and copy this information for pasting to another application. Click and one of the computer's central processing unit (CPU). You can select and copy this information for pasting to another application. Click and drag the mouse across the text to select it. Then press Ctrl-C to copy it to the Windows Clipboard. Shows whether the computer has a math co-processor. Math coprocessor support improves system performance and is required by some high-end graphics and database applications.

Shows the manufacturer and software revision date of the BIOS (basic input/output system) chip. You might need this information when calling for technical support or upgrading your system hardware.

Shows your computer's bus type. The bus transfers data between the computer's internal components. You might need this information when calling for technical support or upgrading your system hardware. Before installing new expansion or interface cards in the computer, make sure the cards are compatible with the system bus type.

Shows the type and number of data ports installed in the computer. Data ports connect computers to devices such as printers, modems, and scanners.

Shows the amount of installed physical memory (RAM) and the percentage of it currently in use. You might need this information when calling for technical support or upgrading your system hardware.

Shows the size of each local floppy disk drive. You can select and copy this informat You can select and copy this information for pasting to another application. Click and drag the mouse across the text to select it. Then press Ctrl-C to copy it to the Windows Clipboard. Shows the size of each local hard disk drive.

Shows any local multimedia devices, such as CD-ROM players, sound cards, and joystick adapters.

You can select and copy this information for pasting to another application. Click and drag You can select and copy this information for pasting to another application. Click and drag the mouse across the text to select it. Then press Ctrl-C to copy it to the Windows Clipboard.

Shows the computer's currently selected resolution, color depth, and display adapter (graphics card) type.

You can select and copy this information for pasting to another application. Click and drag the model of the computer's currently selected resolution, color depth, and display adapter (graphics card) type. You can select and copy this information for pasting to another application. Click and drag the mouse across the text to select it. Then press Ctrl-C to copy it to the Windows Clipboard.

Shows the version of Windows installed on your computer.
You can select and copy this information for pastir You can select and copy this information for pasting to another application. Click and drag the mouse across the text to select it. Then press Ctrl-C to copy it to the Windows Clipboard.

Shows the version of DOS installed on your computer.
You can select and copy this information for p You can select and copy this information for pasting to another application. Click and drag the mouse across the text to select it. Then press Ctrl-C to copy it to the Windows Clipboard. Lists the currently installed drivers your computer uses to access network resources.

Lets you create System Information reports.
You can customize reports and then You can customize reports and then print them, save them to files, or send them as electronic mail attachments.

Compares your computer's CPU, memory, and motherboard performance to that of other industry standard computers.

Lets you display detailed information data ports.	on about your computer's	operating system, centra	al processing unit (CPU), and

Displays a graphical representation of an average 16-MHz 386SX computer. This is the baseline speed against which your computer is compared.	

Displays a graphical representation of an average 33-MHz 486DX computer compared to the baseline speed of 1.0 for a 16-MHz 386SX computer.

Displays a graphical representation of an average 90-MHz Pentium computer compared to the baseline speed of 1.0 for a 16-MHz 386SX computer.

Shows your computer's speed compared to the baseline speed of 1.0 for a 16-MHz 386SX computer. For example, if the bar graph for Your System shows a reading of 9.4, your system is 9.4 tim For example, if the bar graph for Your System shows a reading of 9.4, your system is 9.4 times faster than the 16-MHz 386SX computer.

Reruns the System Benchmark. The results can vary depending on conditions at the time you perform the benchmark, such as the number of other applications or processes that are running.				

Closes this dialog box.

Displays information about the System Benchmark tests and the factors that affect the test results.

Lists the categories available for displaying detailed system information. To view all the information in a category, click the plus (+) sign r



To view all the information in a category, click the plus (+) sign next to the category name.

Identifies your computer's monitor type, display adapter (graphics card), and current display resolution.

 $Lists\ the\ categories\ available\ for\ displaying\ detailed\ information\ about\ your\ computer's\ video\ system.$

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To view all the information in a category, click the plus (+) sign next to the category name.

Lets you select the printer for which information will be displayed. Click the down-arrow to display a list of all installed printers and print devices, including network printers and FAX cards.

ldentifies the comput network printer, its p	ath is shown under	Connected To.	printer i	o commedea ii tii	c actable printer to a

Displays detailed information about the printer currently selected in the drop-down list box.

To view all the information in a category, click the plus (+) sign next to the category. To view all the information in a category, click the plus (+) sign next to the category name.

The pie-chart indicates how much of your computer's memory is currently in use. If you have selected an item in the box at right, its memory usage is indicated by the red portion of the pie-chart.

Shows the total installed physical memory (RAM) and the currently available Windows memory.

Windows memory is larger than the physical memory because it includes both the physical and virtual memory. The disk space used for virtual memory is provided by the Windows swap file. If Windows is managing your virtual memory, the swap file can potentially grow to the size of the free space on the disk, and this free space will also be reflected in the size of the Windows memory. For memory management, Windows also uses a portion of the disk space occupied by running programs (EXE and DLL files). Thus, Windows memory can be greater than the sum of the sizes of RAM and the swap file.

Shows the amount of memory that is currently unoccupied.

Shows the amount of memory that is currently occupied.

Shows the amount of memory that is occupied by the items that are currently selected in the list box.

Dynamic link libraries (DLLs) can be shared between running programs. If a DLL is being shared by the selected programs, the memory space it occupies is only counted once. For this reason, the Selection value may be less than the sum of the selected items' Size values listed in the box to the right.

Lists the programs and other processes that are currently occupying memory on your computer.

Click a column heading to sort the list by item, type, or size. Click items to include their memory usage data in the pie-chart graphic. Double click an item name to display detailed information about that item.

library (DLL) is a special support file that can be shared by multiple Windows programs.

Configures System information to include currently running dynamic link libraries in the list box. A dynamic link

Lists the categories available for displaying detailed information about your computer's memory usage (RAM).

To view all the information in a category, click the plus (+) sign next to the category name.

J , : 2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	 ,	-		item in the box a

Shows the size of the disk drive that is currently selected in the drop-down list box.

Shows the unoccupied space on the disk drive that is currently selected in the drop-down list box.

Shows the occupied space on the disk drive that is currently selected in the drop-down list box.

Shows the disk space used by the currently selected items.

Lets you select the disk drive whose information will be displayed on the Drive tab.

Context click this drop-down list box and choose Configure from the context Context click this drop-down list box and choose Configure from the context menu to specify which drives to include in the list. Lists the folders and files available for inclusion in the disk space calculations for currently selected items.

8

Click a folder name to select it. Click the plus (+) sign next to the folder name to view all the subfolders.

Tests the speed of the disk drive currently selected in the drop-down list box.

Lets you display detailed information about the disk drive currently selected in the drop-down list box.

Lets you select which drives appear in the Drive tab drop-down list box.

Click a drive to check or uncheck it. Checked drives appear in the Drive tab drop-down list box.

Click a drive to check or uncheck it. Checked drives appear in the Drive tab drop-down list box.

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

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

Select to measure the speed of the currently selected drive, with the aid of disk caching.

Select to measure the actual speed of the currently selected drive, without the aid of disk caching.

Tests the selected drive again.

Due to normal variations in system conditions, repeated logical benchmark testing may yield slightly different results.

Lists the drives available for testing. Click a drive in the drop-down list to select it.

Lets you select from a list of drives available for displaying detailed information.

Lists the categories available for displaying detailed information about the currently selected disk drive.

To view all the information in a category, click the plus (+) sign next to the category name.

Identifies the type of keyboard and mouse (or other pointing device) attached to your computer.

Lists the categories available for displaying detailed information about your computer's keyboard and mouse (or other pointing device).



To view all the information in a category, click the plus (+) sign next to the category name.

Identifies any Waveform, MIDI, MCI, joystick, and other multimedia devices attached to your computer.

Lists the categories available for displaying detailed information about any Waveform, MIDI, MCI, joystick, and other multimedia devices attached to your computer.

`Q:

To view all the information in a category, click the plus (+) sign next to the category name.

Compares your computer's multimedia performance to that of an industry standard computer.

Displays information about the Multimedia Benchmark tests and the factors that affect the test results.

Allows the multimedia benchmark tests to take advantage of MMX, if your CPU supports it.

MMX is technology built into newer processors that improves multimedia performance. CPUs that support MMX can process multiple data elements in parallel, thus speeding software execution. By benchmarking your system with and without MMX enabled, you can see the kind of performance improvements that would result from purchasing multimedia software written to take advantage of this feature.



This checkbox is enabled only if your CPU supports MMX.

Displays information about available network resources. For Microsoft networks, this information includes the names of shared resources. For Novell NetWare networks, this information includes servers, volumes, users, and groups.

`⊘:

Click Details to display more information about any Novell NetWare item in this list box.

Displays details about the Novell NetWare server, user, or group currently selected in the list box. Click an item from the list box to select it before you click Details.

Click an item from the list box to select it before you click Details.

This is unavailable because you are not curr a server, user, or group from the list box.	ently connected to a	Novell NetWare netw	ork or you have not s	elected

Displays details about the selected Novell NetWare server, user, or group.

Shows your Internet Protocol (IP) address.

If your IP address is automatically assigned, and you are not currently connected to the Internet, this shows "Assigned by server."

Shows your Internet Protocol (IP) subnet mask, if you are currently connected to the Internet. This number is combined with your IP address to identify your network.

If your IP address is automatically assigned, and you are not currently connected to the Internet, this shows "Assigned by server."

Shows the Domain Name System (DNS) server, which identifies your computer to the network. The DNS server assigns your computer a unique identification number that enables you to connect to the network.

Shows the primary Windows NetBIOS network protocol.	Internet Naming Service	e (WINS) server. WIN	S lets you use programs t	hat require the

Shows the secondary Windows Internet Naming Service (WINS) server. WINS lets you use programs that require the NetBIOS network protocol. If you have both a primary and secondary WINS server, your computer tries to access the secondary server if the primary server is unavailable.

Lists your current dial-up networking ("remote access service") connections. To view all the information available for a connection, click the plus

To view all the information available for a connection, click the plus (+) sign next to the connection name.

Lets you choose the type of Windows sockets to display information about.

Shows the path and filename of Windows Sockets protocol.	the WINSOCK DLL (dyn	amic link library) that in	nplements the currently	selected

Describes the WINSOCK DLL (dynamic link library) that implements the currently selected Windows Sockets protocol.				

Shows the earliest version of the Windows Sockets protocol supported by the selected Windows sockets dynamic link library.			

Shows the latest version of the Windows Sockets protocol supported by the selected Windows sockets dynamic link library.

Lets you display detailed information about your Internet and dial-up connections.

Lists the categories available for displaying detailed information about your Internet and dial-up connections.

To view all the information in a category, click the plus (+) sign next to the category name. To view all the information in a category, click the plus (+) sign next to the category name.

Shows the current status of the selected WINSOCK DLL.

Configures System Information to create a general report for the currently displayed tab only.

Configures System Information to create a general report for all tabs.

Configures System Information to create a general report for all tabs. The Technical Support report also includes additional detailed information and listings of your computer's configuration and startup files.

`Q:

This is particularly useful when troubleshooting hardware and software problems.

Configures System Information to create a custom report according to the selected custom options.

Lets you select configuration options for custom reports.

Lets you print, save, or email the currently selected report.

Closes this dialog box without printing the currently selected report.

Configures System Information to print the selected report to the default printer. Click of to set printer options or to select a different printer.				

Configures System Information to print the selected report to a file. Use the text box to enter a filename. Click \blacksquare to save the file to an alternate folder or drive.

Configures System Information to attach the selected report to an electronic mail message.

You must have an e-mail program that complies with the MAPI or VIM standards to

You must have an e-mail program that complies with the MAPI or VIM standards to use this feature.

- This option is not available for one of the following reasons:

 You do not have an appropriate MAPI or VIM e-mail program installed.

 You are using an e-mail program that supports the VIM standard (such as a version of cc:Mail or Lotus Notes), but the location of the VIM dynamic link library (DLL) is not included in your computer's path.

Lets you set printer options or select a different printer.

Lets you select an alternate folder or drive for saving the selected report file.

Configures custom reports to include System tab information.

Lets you select System report options.

Configures custom reports to include Drive tab information.

Lets you select Drive report options.

Configures custom reports to include Network tab information.

Lets you select Network report options.

Configures custom reports to include Memory tab information.

Lets you select Memory report options.

Configures custom reports to include Printer tab information.

Configures custom reports to include Input tab information.

Configures custom reports to include Display tab information.

Configures custom reports to include Multimedia tab information.

Configures custom reports to include Internet tab information.

Lets you select Internet report options.

Configures System Information to include Internet tab general information in the custom report.

information displayed when you click Details on the Internet tab.	

Configures System Information to include Internet tab detailed information in the custom report. This is the

Configures custom reports to include information provided by your system vendor.

Because the information on this tab is provided by a third party, Symantec

Because the information on this tab is provided by a third party, Symantec cannot guarantee its accuracy.

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

This is unavailable because no reports are currently selected in the Reports to Print group box.

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

Configures System Information to include System tab general information in the custom report.

Configures System Information to include System tab detailed information in the custom report. This is the information displayed when you click Details on the System tab.	

Configures System Information to include the System Benchmark Chart in the custom report. This is the performance graph that is displayed when you click Benchmark on the System tab.

If your printer cannot print graphics, a text list of benchmarks results is substituted.

If your printer cannot print graphics, a text list of benchmarks results is substituted.

Configures System Information to include listings of your computer's configuration and startup files in the custom report.

This option is useful when troubleshooting hardware and software problems



This option is useful when troubleshooting hardware and software problems.

Lists the drives available for inclusion in the custom report.

Configures System Information to include total drive space, used space, and available space for each currently selected disk drive.

Configures System Information to include detailed drive information in the custom report.

Configures System Information to include the Benchmark charts for the currently selected disk drives in the cus report.	tom

nfigures System Information to include Network tab general information in the custom report including ormation about network clients and servers.	

Configures System Information to include a moderately detailed level of Network information in the custom report including Microsoft Network second level objects and Novell NetWare volumes, users, groups, and printers.

Configures System Information to include all available Network information in the custom report including all Microsoft Network objects and Novell NetWare volumes, users, groups, and printers.

Configures System Ir reports.	nformation to include in	nformation about curre	ntly unattached NetWar	re servers in custom

Configures System Information to include Memory tab general information in the custom report.

Configures System Information to include Memory tab detailed information in the custom report. This is the information displayed when you click Details on the Memory tab.

This button is disabled because no detailed information is available for this tab.

Closes System Information.

Click to open the Norton Companion associated with this tab.

This button is disabled because there is no Companion topic specific to this tab.

This button is disabled because there is no benchmark test available for this tab.

To open System Information: Click here

to open System Information.

Click here {button ,AL("SI32_T0050;SI32_T0140;SI32_T0150;SI32_T0160;SI32_T0170;SI32_T0180;SI32_T0190;SI32_T0200;SI32_T0210")} for related information.

- To benchmark your system:
 1 Click the System tab.
 2 Click Benchmark to perform the system benchmark.

Click here {button ,AL("SI32_I0160;SI32_I0165;SI32_T0023;SI32_T0027")} for related information.

- To benchmark your disk drive:
 1 Click the Drive tab.
 2 Click Benchmark to perform the drive benchmark.

Click here {button ,AL("SI32_I0090;SI32_I0160;SI32_I0165;SI32_T0020;SI32_T0027")} for related information.

To benchmark your computer's multimedia capabilities: 1 Click the Multimedia tab. 2 Click Benchmark to perform the multimedia benchmark.

Click here {button ,AL("SI32_I0160;SI32_I0165;SI32_T0023;SI32_T0020")} for related information.

To mail a report:

- Click Reports on any System Information tab.
 Select the option button corresponding to the scope of the report you want to mail.
 Optional: Click Select to specify custom report options.
- Click Print.
- **5** Click Mail To User and then click Print.

Your electronic mail system sends the reports to the recipients you specify. The e-mail feature is not available unless you are connected to a compatible electronic mail system.

Click here {button ,AL("SI32_I0180;SI32_T0070;SI32_T0080")} for related information.

- To open System Information from Norton System Doctor:
 Choose Open System Information from the context (right-click) menu of a Norton System Doctor sensor.

- Or, **1 2**

Click here {button ,AL("SI32_I0130;SI32_T0060;SYSDOC32_I0010")} for related information.

To open System Information from Windows:

System Information appears on many of the standard Windows right-click menus. If System Information appears on a context menu, click it to open System Information to an appropriate tab. For example, System Information appears on the context menu of My Computer and on the context menus of drives listed in My Computer.

Click here {button ,AL("SI32_I0130;SI32_T0050")} for related information.

- To print a report:
 1 Click Reports on any System Information tab.
 2 Select the option button corresponding to the scope of the report you want to print.
 Click Select to specify custom report options.
- Click Select to specify custom report options.
 Click Print.
 Click Print To Printer.
- **5** Click Print.

Click here {button ,AL("SI32_I0180;SI32_T0040;SI32_T0080")} for related information.

To save a report to a file:

- Click Reports on any System Information tab.
 Select the option button corresponding to the scope of the report you want to save.
- Click Select to specify custom report options.
- Click Print.
 Click Print to File and specify the location and name of the file to which you want the report information saved. (If you don't enter a complete path for the file, the report is saved to the current folder.)
- 5 Click Print.

Click here {button ,AL("SI32_I0180;SI32_T0040;SI32_T0070")} for related information.

To specify drives to show in the Drive tab list box: 1 Click the Drive tab.

- 2 Right-click anywhere within the Drive tab.
- 3 Click Configure.
- 4 Select the drives that you want to appear in the list box or deselect those drives that you want to exclude.

Click here {button ,AL("SI32_I0090;SI32_T0100;SI32_T0140")} for related information.

To view detailed drive information: 1 Click the Drive tab.

- Click Details.
 Use the drop-down list box to select the drive for which you want detailed information.

Click here {button ,AL("SI32_I0090;SI32_I0130;SI32_T0090;SYSDOC32_I0010")} for related information.

To view detailed memory information: 1 Click the Memory tab. 2 Do one of the following: To see details about a particular ite

- - To see details about a particular item in the list box, double-click that item.
- **`⊘**: To get detailed information about all aspects of your computer's memory, click the Details button.

Click here {button ,AL("SI32_I0180;SI32_I0080;SYSDOC32_I0010")} for related information.

To view detailed network information:

- 1 Click the Network tab.
- 2 Select an item from the list box and then click Details to open the Network Details dialog box.

Network details are available only for Novell NetWare networks.

You can open multiple Network Details dialog boxes. The last one you open displays information on the item currently selected in the Network tab list box. If you select a different item, the contents of the last dialog box changes. All open Network Details dialog boxes close when you switch to a different tab.

Click here {button ,AL("SI32_I0180;SI32_I0120;SI32_I0170;SYSDOC32_I0010")} for related information.

To view detailed system information:1 Click the System tab.2 Click Details.

Click here {button ,AL("SI32_I0180;SI32_I0050;SYSDOC32_I0010")} for related information.

To view drive information:

- 1 Click the Drive tab.
- Select a drive from the drop-down list box.Select one or more folders to see how much disk space they occupy.

Hold down the Shift or Ctrl key to select more than one folder. Check Include Subfolders if you want to include the space occupied by subfolders of the selected folders.

The Disk Usage pie chart and the displayed text below it show how much disk space is occupied by the selected items.

Click here {button ,AL("SI32_I0180;SI32_I0090;SI32_T0090;SI32_T0100;SYSDOC32_I0010")} for related information.

- To view input information:
 Click the Input tab.
 Click the plus (+) signs to get more information about your input devices.

Click here {button ,AL("SI32_I0180;SI32_I0100")} for related information.

To view memory information:

- 1 Click the Memory tab.
- 2 Select one or more items in the list box to see how much memory they occupy. You can use the list box's column headings to control the ordering of the list box items. For example, to list the items alphabetically by type, click the Type column heading.
- Hold down the Shift or Ctrl key to select more than one item.

The Windows Memory Usage pie chart and the displayed text below it show how much memory is used by the selected items.

Click here {button ,AL("SI32_I0180;SI32_I0080;SI32_T0110;SYSDOC32_I0010")} for related information.

- To view multimedia information:
 Click the Multimedia tab.
 Click the plus (+) signs to get more information about your installed multimedia devices.

Click here {button ,AL("SI32_I0180;SI32_I0110")} for related information.

- To view network information:
 1 Click the Network tab.
 2 Click the plus (+) signs to get more information (if available) about the networks to which your computer is attached.

Click here {button ,AL("SI32_I0180;SI32_I0120;SI32_I0170;SI32_T0120;SYSDOC32_I0010")} for related information.

- To view printer information:
 1 Click the Printer tab.
 2 Use the drop-down list box to select a printer.

Click here {button ,AL("SI32_I0180;SI32_I0070")} for related information.

To view system information:

Click the System tab.

You can select the information in this tab's text fields and copy it to the Windows Clipboard. You can then paste the information directly into other Windows applications.

Click here {button ,AL("SI32_I0180;SI32_I0050;SI32_T0130;SYSDOC32_I0010")} for related information.

- To view video display information:
 1 Click the Display tab.
 2 Click the plus (+) signs to get more information about your computer's video device characteristics and capabilities.

Click here {button ,AL("SI32_I0180;SI32_T0060")} for related information.

- To view Internet and dial-up connection information:
 Click the Internet tab.
 Click the plus (+) signs under Remote Access Service Connections to get more information about your dial-up networking connections.

Click here {button ,AL("SI32_I0180;SI32_T0230")} for related information.

To view detailed Internet and dial-up information: Click the Internet tab. Click Details.

Click here {button ,AL("SI32_I0180;SI32_T0220")} for related information.

About System Information

System Information gives you quick, one-stop access to basic and detailed information about your computer. It provides technical details about your computer, the peripherals—keyboard, mouse, printers, and multimedia devices

—attached to your computer, and your computer's Internet and network connections. All of this information can be viewed on your screen, printed, and even <u>e-mailed</u> (if your computer is set up to use e-mail).

The System Information window has tabs corresponding to these nine categories of information:

System displays general information about your system and its attached hardware. It includes information about the CPU, BIOS, operating system, and installed network client software.

Memory indicates how much memory is available, how much is being used by each running program, and distinguishes 16-bit from 32-bit programs.

Drive graphically shows how much of a disk is used and how much disk space is occupied by each file.

Multimedia describes the audio, video, and joystick devices attached to your computer.

<u>Network</u> provides information about the Microsoft and Novell NetWare networks to which your computer is attached.

Display, Printer, and Input provide detailed information about your display and printer capabilities, and the types of input devices attached to your computer.

Internet provides detailed information about your system's Internet connection.

When you click a tab, System Information gathers and displays basic information about that category. The Windows registry and the loaded device drivers are the primary sources of information provided through the System, Input, Display, Multimedia, Printer, Network, and Internet tabs. For the Memory and Drive tabs, System Information gathers the information at the time you click the tab.

The <u>benchmark</u> tests compare the speed of your system and system components to that of other standard computers. Benchmarks are performed dynamically at the time you start benchmarking.

To open System Information:

Click here

😽 to open System Information.

You can also open System Information directly from <u>Norton System Doctor</u> and from many Windows context menus.

Click here

Why use System Information

There are many situations in which you might need to know some details of your computer system. You might need information before purchasing new software, installing new hardware, or calling a vendor for technical support. Whether you're new to the world of computers or intimately familiar with the inner workings of your system, System Information lets you access all the information you'll need quickly and easily.

System Information presents more information than the Windows Control Panel—literally hundreds of details that can help advanced users tackle a wide range of tasks. Whether you're evaluating new hardware, administering a network, maintaining common system configurations within a corporation, or just troubleshooting your own system, you'll find System Information an invaluable tool.

Click here {button ,AL("SI32 I0010;SI32 I0180;SI32 I0170;SI32 I0030;SI32 T0010")} for related information.

When to use System Information

Use System Information any time you need detailed information about your computer. For example, you can use System Information to check your system:

- Before deciding what hardware or software to purchase
- When installing new hardware or software
- Immediately after purchasing a computer or completing an upgrade
- Before connecting to the Internet
- When cleaning up your hard disk, to see how much space is used by any individual file, folder, or partition.
- When calling for technical support
- When troubleshooting a hardware or software problem
- Any time you need details about drive or memory usage

System Information can print reports about your system and its components. If you have problems with your computer, these reports can provide a complete description of your system. System Information gives you the option of e-mailing these reports directly to others. For example, you could send them directly to a network administrator.

To monitor memory usage, computer performance, CPU usage, and other real-time aspects of a computer's operations, use <u>Norton System Doctor</u>.

About the System tab

The System tab provides you with an overview of your system, including:

Manufacturer, type, and speed of the processor

Presence of a math coprocessor

Description of the BIOS and bus

Number and types of ports

 \Re Amount of physical <u>memory</u> (RAM), and the amount currently in use

Size of local floppy and hard disks

Types of multimedia devices

Video display type and currently selected resolution

Versions of Windows and DOS

Network client software in use

The information in the tab's fields can be copied to the Windows clipboard and pasted directly into other applications. Click the tab's Details button for more information about your operating system, <u>CPU</u>, and ports.

The System tab also lets you perform a system <u>benchmark</u> test.

To monitor the performance of various aspects of your system, use <u>Norton System Doctor</u>.

Click here $\{button ,AL("SI32_I0010;SI32_I0180;SI32_I0160;SI32_T0020;SI32_T0130;SI32_T0200")\}$ for related information.

About the Display tab

The Display tab lists details about your video monitor, $\underline{\text{graphics card}}$, and video $\underline{\text{device driver}}$. The device driver information includes the following:

Version number

Physical characteristics (such as width and height in millimeters and pixels, pixel dimensions, system colors, number of pens, and number of fonts)

Graphics capabilities

Windows and other applications use this information to position dialog boxes, draw lines, size fonts, and so forth. Click here {button ,AL("SI32_I0010;SI32_I0180;SI32_T0210")} for related information.

About the Printer tab

The Printer tab provides information about any installed printer, including network (shared) printers and fax machines. Details available through this tab include the printer type, port, characteristics, and capabilities. You can use this information to compare the capabilities of the various printers connected to your system.

By default, this tab displays information about the printer designated the default Windows printer. You can select another printer from the drop-down list, which shows the names of all installed local and network printers.

Click here {button ,AL("SI32_I0010;SI32_I0180;SI32_T0190")} for related information.

About the Memory tab

The Memory tab provides general and detailed information about system <u>memory</u> and about every application, process, and <u>device driver</u> that is loaded into memory. The tab includes a graphical display showing the number of bytes of Windows memory currently available, used by all applications, and used by one or more selected applications, processes, or <u>DLLs</u>.

"Windows memory" includes both the physical memory (<u>RAM</u>) installed on your system plus Windows <u>virtual</u> memory. Virtual memory is provided by the Windows swap file.

Windows can use free disk space to increase the size of the swap file to meet system demands. If Windows is managing your virtual memory settings, Windows memory will include all of the free space on the disk used for the swap file. If you have selected to manage your own virtual memory settings, then Windows memory will include the maximum swap file size you have specified.

When EXE (program) and DLL (dynamic link library) files are in use, Windows also uses a portion of their disk space similarly to how it uses virtual memory, so Windows memory can be even larger than the sum of the sizes of physical memory and the swap file.

Double-clicking an item in the Memory tab list will display details for that item. Clicking the Details button displays additional descriptive information about system memory and current $\underline{16\text{-bit}}$ and $\underline{32\text{-bit}}$ memory usage. The details include dynamic device driver address and other information, static device driver information, free 16-bit global entries, and information about every application and DLL that is currently running.

To update the memory usage information, you must switch to a different System Information tab and then return to the Memory tab.

Norton System Doctor includes a number of memory sensors that provide real-time readings of various aspects of memory usage.

Click here {button ,AL("SI32 I0010;SI32 I0180;SI32 T0110;SI32 T0160;SYSDOC32 I0010")} for related information.

About the Drive tab

The Drive tab lets you:

View the <u>folder tree</u> of any hard disk (including compressed disks), network drive, CD-ROM drive, or floppy disk to which you have access.

Select one or more <u>folders</u> to see how much disk space they use.

See both graphical and numeric breakdowns of current disk usage.

View technical details for a selected drive (such as bytes per <u>sector</u>, sectors per <u>cluster</u>, and whether casesensitive file searches are supported).

Perform a drive <u>benchmark</u> test. The Drive Benchmark measures disk drive speed. You can benchmark hard disks, network drives, and CD-ROM drives. The physical and logical drive benchmark results show both the actual speed of the drive and the effective speed (the speed when the drive is aided by <u>disk caching</u>).

Specify the drives about which you can access information. This feature lets you exclude problematic drives from the Drive tab's drop-down list box. For example, you can exclude a drive that contains highly confidential information, a large drive that slows down Drive tab performance, or a faulty drive that may cause the system to crash.

To refresh the drive information (to reflect changes to the contents of a drive), you must select a different drive and then select the original drive again, or close and reopen System Information.

You can use the Physical Information provided in the Details dialog box together with Disk Editor to help rebuild a crashed disk. You should print out this information and keep it to use in the event of a disk failure. To get real-time readings of various disk conditions, use <u>Norton System Doctor</u>.

Click here

{button ,AL("SI32_I0010;SI32_I0180;SI32_T0010;SI32_T0030;SI32_T0090;SI32_T0100;SI32_T0140;SYSDOC32_I0010 ")} for related information.

About the Input tab

The Input tab identifies the type of keyboard and mouse or other pointing device attached to the computer, and provides detailed information on each.

Keyboard information includes the keyboard type, subtype, number of function keys, three-digit code page it uses, delay factor, speed, and layout type. Mouse information includes the mouse type, X and Y thresholds (related to mouse speed), speed, number of buttons, and whether the mouse buttons are swapped (so that the right mouse button is the <u>primary mouse button</u>).

Click here {button ,AL("SI32_I0010;SI32_I0180;SI32_T0150")} for related information.

About the Multimedia tab

The Multimedia tab provides information about <u>Waveform</u>, <u>MIDI</u>, <u>MCI</u>, joystick, and auxiliary multimedia devices installed on your system. The tab displays a count of each type of multimedia device. Items in the tab's list box that are preceded by plus (+) signs can be expanded (by clicking the plus sign) to show the characteristics and capabilities supported by each device.

Click here {button ,AL("SI32_I0010;SI32_I0180;SI32_T0170")} for related information.

About the Network tab

The Network tab provides information about the networks to which your system is attached. The information appearing depends upon the type of network you have.

For a Microsoft network, this tab shows the hierarchy and names of network resources, such as remote folders, printers, faxes, or modems you can access.

For a Novell NetWare network, this tab includes information about the servers, volumes, users, and groups that are available. You can also get details about a specific aspect of your Novell NetWare network for example, the names and members of user groups, the available print servers, and the names of all users currently logged on.

Use Norton System Doctor to continuously monitor the throughput of network reads and writes.

Click here {button ,AL("SI32_I0010;SI32_I0180;SI32_I00170;SI32_T0120;SI32_T0180;SYSDOC32_I0010")} for related information.

About the Internet tab

The Internet tab shows information about your Internet connection. It includes information that can help you (or your Internet Service Provider) set up and maintain your Internet connection. The available information can also help you identify problems you may encounter when trying to connect to the Internet.

Your Remote Access Service Connections are your current dial-up networking connections. The Internet tab shows you information on the current connection state, current error state, device type and device name.

You can display information about the different versions of the WINSOCK DLL (dynamic link library). This library of computer routines implements the Windows Sockets protocol, which is required for Internet connections under Windows

The Details dialog box shows detailed information about your dial-up devices, dial-up connections, and winsock modules.

If you have Internet access, you can use the <u>Internet Packet Turnaround</u> sensor in <u>Norton System Doctor</u> to monitor the speed of transmission between your computer and an Internet site of your choice. You can also use the use the <u>Norton Utilities Live Update sensor</u> to download updates to Norton Utilities automatically and easily over the Internet.

Click here {button ,AL("SI32 I0010;SI32 I0180;SI32 I00170;SYSDOC32 I0010")} for related information.

About System Information features

System Information includes the following features:

Nine tabs providing eight categories of system information
Benchmark tests for your overall system, disk drives, and s

Benchmark tests for your overall system, disk drives, and system multimedia performance

Report options

Many of these features are of particular usefulness for <u>network administrators</u>.

Click here

{button ,AL("SI32_I0050;SI32_I0060;SI32_I0070;SI32_I0080;SI32_I0090;SI32_I0100;SI32_I0120;SI32_T0050;SI32_T0060")} for related information.

About the System Benchmark

The System Benchmark lets you compare the performance of many components of your system to the performance of other standard computers. This <u>benchmark</u> simulates a typical workload so that you get real-world performance comparisons.

The benchmark takes into account more than 100 factors that affect the performance of a system. Chief among these factors are those that stress the <u>CPU</u>, including its <u>bus</u> interface, the transfer rate between <u>memory</u> and the

CPU, the motherboard chip set, and the memory cache \mathfrak{P} both the built-in (L1) cache and the secondary (L2) cache. The benchmark emulates the processing instructions that Windows 32-bit applications commonly use.

The emphasis of the benchmark is on measuring how effectively the system uses the CPU in combination with the computer's memory. Therefore, the benchmark does not take into account such factors as the disk drives, the video display, other peripherals, or the network.

Processor speed (megahertz) will not always have a large effect on the System Information benchmark. For example, a system with a 486/66 CPU may give a faster benchmark than a similar system using a 486/100 CPU. This is caused by motherboards that automatically detect the processor speed and set memory wait states accordingly. Setting the memory wait states can result in the system performing slower than the full CPU speed. Because of the number of factors the benchmark takes into consideration, the results for your system are not likely to be identical to the results for one of the comparison systems, even if your processor type and speed match one of them.

Click here {button ,AL("SI32 I1160;SI32 I0130;SI32 I0180;SI32 I0050;SI32 T0020")} for related information.

About the Multimedia Benchmark

The Multimedia Benchmark tests the multimedia capabilities of your system, and compares the performance to that of a system conforming to the basic <u>Multimedia PC (MPC) Level 2 specification</u>. The benchmark dialog includes seven tabs that show your system's performance in these multimedia areas:

Overall shows your systems overall multimedia performance rating compared to a standard MPC2 system.

Video benchmarks video performance. It is based on measuring your system's MPEG video decompression and AVI video maximum frame rates.

3-D tests the geometry processing capabilities of your system.

Audio measures your system's audio mixing and MPEG audio performance. MPEG audio is CD-quality sound. It is the sound used with MPEG video and is used to provide CD-quality music used as background for some computer games.

CD-ROM measures the speed of your CD-ROM drive's maximum seek and transfer rates.

Imaging tests how your system handles image processing manipulations typically used by multimedia applications.

To fully test the multimedia capabilities of your system requires that you have certain audio, video, and graphics drivers installed. If any of these are missing, the multimedia benchmark will skip the associated test and tell you why. In this case, the multimedia benchmark cannot give your system an overall performance rating.

Click here {button ,AL("SI32_I0160;SI32_I0130;SI32_I0180;SI32_I0050;SI32_T0020;SI32_T0027")} for related information.

Notes for network administrators

System Information can be a valuable tool that helps you support networks and their users. Here are some of the features you might find particularly useful:

Network tab

Provides a graphical representation of your network resources and users.

∜ Internet tak

🔐 Can give you valuable information about your intranet, if you are using the Internet network protocols (TCP/IP).

😯 Drive tab

*Helps you monitor the free and used space on any network drive, analyze disk usage, and plan backup and archiving strategies. In addition, you can see volume, logical, physical, and partition information about any drive.

🎖 <u>Printer tak</u>

Provides general and technical information about any printer on the network (as well as about any locally attached printer).

🕅 🗎 All tabs

Finable you to quickly gather detailed hardware and software information about any PC.

Report feature

 \Re Lets you create hardware and software reports that you can print, save to a file, or <u>e-mail</u> to another user.

To monitor real-time network throughput and other operations, use <u>Norton System Doctor</u>.

Click here {button ,AL("SI32_I0130;SI32_I0180;SI32_I0120;SI32_T0120;SI32_T0180;SYSDOC32_I0010")} for related information.

About System Information reports

You can create System Information reports and print them, save them to a file on disk, or send them to other users on your $\underline{\text{e-mail}}$ system. You determine the content of the reports by choosing from among four options:

😯 Current tab

includes the information from the currently displayed System Information tab only.

Typical

lncludes basic information from all System Information tabs.

Technical Support

 \Re Includes information from all tabs plus a listing of the Windows registry and key system files.

Custon

Lets you choose the tabs for which you want reports. For the System, Memory, Drive, Network, and Internet tabs, you have additional report options, such as whether you want a summary or detail report.

You can e-mail reports only if your e-mail software uses one of the following specifications:

<u> МА</u>

Example: Microsoft Mail

🏋 VII

Example: cc: Mail, Lotus Notes

Click here {button ,AL("SI32_I0130;SI32_T0040;SI32_T0070;SI32_T0080")} for related information.

Command-line options for System Information

You can run System Information from the command line by clicking RUN from the Start menu. Use the following syntax:

SI32 [/TAB:tabname[(driveid)]]

/TAB Open System Information directly to a specified tab.

tabname The name of the tab on which you want System Information to open. The tab name must

be entered as lowercase letters.

driveid The letter of the disk drive for which System Information will display information. The

driveid argument is relevant only if you open System Information to the drive tab.

For example, to run System Information from the command line such that it opens to the Drive tab and gives information for the E: drive, you would enter:

SI32 /TAB:drive(e)