IBM IntelliStation

**About Your Software
Windows NT Workstation 4.0,
Applications, and Support Software**

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IBM

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┌─ Note ──────────────────────────────────────────────────────────────────────┐
│                                                                              │
│  Before using this information and the product it supports, be sure to read  │
│  the information in Appendix A, "Viewing the license agreement" on page 33   │
│  and Appendix B, "Notices and trademarks" on page 35.                        │
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Contents

About this book

This book supplements the information in your computer publications. Keep it with those publications for future reference.

This book contains general information about the software provided with your computer.

This book is organized as follows:

- Chapter 1, "Overview of your software" on page 1, contains overview information about the preinstalled and ready-to-install software provided with your computer.

- Chapter 2, "Getting started" on page 5, contains information to help you get started using your computer and understand some of the software features.

- Chapter 3, "Additional software" on page 15, contains information on installing and using Norton AntiVirus for IBM, ConfigSafe, IBM System Management Tools, and the IBM Universal Management Agent program.

- Chapter 4, "Installing other operating systems" on page 23, contains information about installing other operating systems and support software.

- Chapter 5, "Reinstalling Windows NT" on page 25, contains information about reinstalling Windows NT Workstation 4.0 for recovery purposes.

- Chapter 6, "Using the Ready-to-Configure Utility Program CD" on page 29, contains information about installing or reinstalling software provided on the *Ready-to-Configure Utility Program* CD.

- Chapter 7, "Using your diagnostic programs" on page 31, contains information about the PC Doctor for Windows and PC Doctor for Windows NT diagnostic programs and the IBM Enhanced Diagnostic program.

- Appendix A, "Viewing the license agreement" on page 33, contains instructions for viewing the IBM International License Agreement for Non-Warranted Programs.

- Appendix B, "Notices and trademarks" on page 35, contains legal notices and trademark information.

Chapter 1. Overview of your software

Your computer comes with the Microsoft® Windows NT® Workstation 4.0 operating system[1] and a variety of software, including application programs, diagnostic tools, and device drivers. Some of the software is *preinstalled*, and some is *ready to install*. The software, other than Microsoft software, is licensed under the terms of the IBM International License Agreement for Non-Warranted Programs. Appendix A of this booklet contains instructions for viewing the license agreement.

Preinstalled software

In addition to Windows NT, your preinstalled software includes the following:

- The IBM Welcome Center, which is a central location from which you can set up hard disk partitions, install software provided by IBM, register your computer, set the time and date, set up your printer, view online books, start the *Ready-to-Configure Utility Program* CD, and obtain information about IBM products and technical support.

- Device drivers for factory-installed features.

- Service Pack 4, which is a Windows NT update made available to Windows users by Microsoft. IBM has installed Service Pack 4 on your hard disk as a convenience to you. For important information on this software, see page 8.

- Internet Explorer 4.0x, which is an updated version of the Internet Explorer program. See "Getting acquainted with desktop applications" on page 8 for a description.

Additional information about your preinstalled software is in Chapter 2, "Getting started" on page 5.

Important:

1. No backup diskettes for your preinstalled software are shipped with your computer. However, the *Ready-to-Configure Utility Program* CD contains most of your IBM-preinstalled programs and device drivers.

   In addition, your computer comes with either a *Microsoft Windows NT Workstation 4.0* CD (provided by Microsoft and not modified by IBM) or an IBM *Product Recovery* CD.

   The *Microsoft Windows NT Workstation 4.0* CD does not contain the updated device drivers and other software that are preinstalled in your computer. Use the

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[1] The Microsoft Certificate of Authenticity is your assurance that the Windows NT software in your computer is legally licensed from Microsoft Corporation.

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Microsoft Windows NT Workstation 4.0 CD (and the diskettes referred to in note 3c on page 2) in conjunction with the *Ready-to-Configure Utility Program* CD if you need to reinstall the operating system. (Diskettes for your Windows NT operating system and preinstalled software are not available from IBM.) For information about reinstalling Windows NT from the *Microsoft Windows NT Workstation 4.0* CD, see "Using the Microsoft Windows NT Workstation 4.0 CD" on page 25.

The IBM *Product Recovery* CD contains Windows NT 4.0 and all the preinstalled applications and device drivers. For information about reinstalling Windows NT and preinstalled software from the IBM *Product Recovery* CD, see "Using the IBM Product Recovery CD" on page 26.

2. The device drivers and some programs are also available on the World Wide Web at http://www.pc.ibm.com/us/files.html, or on the IBM PC Bulletin Board System (BBS). For the BBS numbers, see the "Getting Help, Service, and Information" chapter in the *IntelliStation User Guide*. Also, you might find updated device drivers and files on the World Wide Web or BBS.

3. At your earliest opportunity, create the following diskettes:

   a. The *Microsoft Windows NT Emergency Repair Disk*. This diskette can be used for some recovery purposes. For instructions on creating the diskette, see the Windows NT manual provided with your computer.

   b. An *IBM Enhanced Diagnostic* diskette. This self-starting diskette can be used to isolate problems with your computer. (For instructions on creating the diskette, see Chapter 7, "Using your diagnostic programs" on page 31.)

   c. The *Microsoft Windows NT Setup Boot Disks*. These diskettes must be used along with the Windows NT CD if you need to reinstall Windows NT. They are not necessary if your computer comes with an IBM *Product Recovery* CD. For instructions on creating these diskettes, see "Creating the Microsoft Windows NT Setup Boot Disks" on page 7.

Ready-to-install software

In addition to your IBM-preinstalled programs and device drivers, additional ready-to-install software is provided on the *Ready-to-Configure Utility Program* CD, on your hard disk, or on both the CD and the hard disk. You decide which programs to install based on your needs.

Notes:

1. Norton AntiVirus for IBM, ConfigSafe, and IBM System Management Tools or the IBM Universal Management Agent program ready-to-install software is on your hard disk and the *Ready-to-Configure Utility Program* CD. See "Using the software installation program" on page 10 for instructions on installing these products from your hard disk; see Chapter 3, "Additional software" on page 15 for descriptions.

2. The following is a list of some of the software for Windows NT 4.0 that is provided on the *Ready-to-Configure Utility Program* CD. Note that the software on the CD is subject to change and might be different from the following list. Similar software for other operating systems (operating systems referred to on page 23) is also provided on the CD. See Chapter 6, "Using the Ready-to-Configure Utility Program CD" on page 29 for further information about the CD.

CoSession Remote
A communication tool that an IBM technician or in-house administrator can use to diagnose and fix computer problems from a remote location. The connection can be made through a modem or over a LAN.

IBM Internet Connection
Software that you can use to dial into the Internet through the IBM Global Network. You can use this software with the Netscape Navigator browser, which is available on your *Ready-to-Configure Utility Program* CD.

IBM Netfinity Services
Software that you can use to view detailed information about your computer hardware and software, browse Desktop Management Interface (DMI) information, set up alerts, monitor a variety of system resources, and manage your asset security. If your computer is connected to a network that has Netfinity Manager installed, Netfinity Manager can gather information for asset management and can monitor the operation of your computer.

PC-Doctor for Windows and PC-Doctor for Windows NT
Diagnostic tools that you can use with Windows 95 and Windows NT 4.0, respectively. In addition to isolating hardware problems, these tools also provide information about your computer operating environment and some software components. Support documentation is built into the Help system. (See also Chapter 7, "Using your diagnostic programs" on page 31.)

Chapter 2. Getting started

This chapter contains the following information to help you get started using your computer:

- What you need before, and what happens after, you start your computer for the first time

- How to:

  - Create the Windows NT Setup Boot Disks

  - Access and use desktop applications

  - Access information and perform tasks from the IBM Welcome Center (**WELCOME** - **Click Here to Begin** icon on the Windows NT desktop)

  - Use the Ready-to-Configure Utility Program

  - Use the IBM Welcome Center to register your computer with IBM and then access complimentary screen savers

  - View online books

  - Safely shut down your computer

Starting your computer for the first time

You must complete the Windows NT Setup procedure before you can access Windows NT for the first time.

Important

Once you start your computer for the first time, you must complete the Setup procedure before you turn off your computer; otherwise, unexpected results might occur.

What you need before you start

Before you start the Windows NT setup procedure, you need the following:

- The Windows NT manual provided with your computer, in case you need more detailed information than is provided in this chapter

- Microsoft Certificate of Authenticity (attached to the front cover of your Windows NT manual) for the Product ID number

- Network information (if applicable) from your network administrator

- The printer model and port used by the printer, if a printer is attached directly to your computer

Running the Windows NT setup program

If the setup program has not already been run, it will appear when you start the computer. The program will prompt you to make choices or type information as required. If you need more detailed information than what is provided in the following notes, see your Windows NT manual.

Notes:

1. The setup program that appears when you start the computer is slightly different from the one described in your Windows NT manual. Some choices described in your Windows NT manual do not appear because they are preset.

2. During the setup procedure, you must indicate that you accept the Windows NT license agreement and, when prompted, type in the Product ID number from your Certificate of Authenticity. The Certificate of Authenticity is attached to the front cover of your Windows NT manual.

3. After the setup procedure is completed and the system is restarted, when prompted, press **Ctrl+Alt+Delete** to display the log-on window. After the log-on procedure is completed, the Windows NT desktop appears.

4. Your hard disk has a 2 GB partition (referred to as drive C). This partition contains Windows NT and the other preinstalled software. The remaining hard disk space has been left unformatted, so that you can format and partition it as you wish. (This remaining disk space cannot be used until you partition it.)

   A disk administrator tool is provided in the IBM Welcome Center. For instructions on accessing the Welcome Center, refer to "Using the IBM Welcome Center" on page 9. To access the tool for setting up your remaining disk space: In the IBM Welcome Center window, click **Getting Started** and then scroll to and click **Set up your hard disk partitions**.

   The hard disk can be divided (partitioned) into multiple logical drives (such as C, D, and E). If you want to install another operating system, it can be installed into a separate primary partition.

5. At your earliest opportunity, make the *Microsoft Windows NT Emergency Repair Disk*. It is important that you make this diskette, which can be used for recovery purposes. If you add features to your computer, make a new Emergency Repair Disk to ensure that the diskette reflects your current system configuration. Additional information about creating and using the diskette is in your Windows NT manual.

6. If your computer comes with a Windows NT CD, as soon as possible, create the *Microsoft Windows NT Setup Boot Disks* from the Windows NT CD. Instructions for this procedure are provided in the next section of this chapter.

Creating the Microsoft Windows NT Setup Boot Disks

Your computer comes with either a *Microsoft Windows NT Workstation 4.0* CD or an IBM *Product Recovery* CD. If you have an IBM *Product Recovery* CD, you do not need to create the setup boot disks.

If your computer comes with a *Microsoft Windows NT Workstation 4.0* CD, at your earliest convenience, create the *Microsoft Windows NT Setup Boot Disks* from the Windows NT CD. You will need these diskettes, along with the *Microsoft Windows NT Workstation 4.0* CD, if you need to reinstall Windows NT.

Note: The setup boot disks can also be used with the *Windows NT Emergency Repair Disk*, which can be used for some recovery purposes. (Instructions for creating the Emergency Repair Disk are in your Windows NT manual.)

Requirements

To create the setup boot disks, you will need:

- Three formatted, blank, high-density diskettes

- Your *Microsoft Windows NT Workstation 4.0* CD (included with your Windows NT manual)

You can create the disks from a computer running DOS, Windows 3.1, Windows for Workgroups, Windows 95, or Windows NT Workstation 4.0.

Creating the disks

To create the setup boot disks:

 1. Insert the *Microsoft Windows NT Workstation 4.0* CD into your CD-ROM drive.

 2. At a command prompt, switch to the CD-ROM drive letter. For example, type `e:` (where *e* is the CD-ROM drive letter) and press Enter.

 3. At the command prompt, switch to the folder that contains the files for your operating system on the CD. For example, type `cd \I386` (for x86-based computers) and press Enter.

 4. At the command prompt:

      a. If the computer you are using is running Windows NT, type `winnt32 /ox` and press Enter.

      b. If the computer you are using is running DOS, Windows 3.1, Windows for Workgroups, or Windows 95, type `winnt /ox` and press Enter.

 5. When the Windows NT setup window appears indicating the path of the source files, press Enter.

6. When prompted, insert a diskette into drive A and press Enter.

   Note: *Windows NT Setup Boot Disk 3* will be created first; next, *...Disk 2*; and then *...Disk*, which does not include a number.

7. Follow the instructions that appear on the screen for removing and inserting diskettes. Ensure that you label each diskette as indicated on the screen; see the note in step 6.

Getting acquainted with desktop applications

In addition to standard Windows NT icons, your computer comes with extra Windows NT applications on the desktop that are provided by IBM as a convenience to you. These programs include:

- Service Pack 4, which is a Windows NT update made available to Windows NT users by Microsoft. IBM has installed Service Pack 4 on your hard disk.

  To install device drivers without affecting the Service Pack 4 installation, you must install the device drivers from the I386 directory on drive C. If you install device drivers from any directory or device other than the I386 directory on drive C, you will have to reinstall Service Pack 4.

  To reinstall Service Pack 4, double-click the **Service Pack 4** icon on the desktop. Then click the **OK** button.

  Your computer might come with a Windows NT Service Pack 4 CD, made available by Microsoft. Service Pack 4 is also available for download on the World Wide Web at http://www.pc.ibm.com/us/news/msinfo.html.

- Internet Explorer 4.0x, which is an updated version of the Internet Explorer program. Internet Explorer is a tool that you can use to navigate your company intranet or the World Wide Web.

  Note: You must be connected to your company intranet or to the World Wide Web (or both) to be able to use Internet Explorer. For information on connecting to the Internet, as well as further information on the Internet Explorer tool, see the Microsoft Windows NT manual provided with your computer.

- Set Up Your Network icon, which is a shortcut to the Microsoft Network Setup Wizard. To begin setting up Windows NT Networking, click the **Set Up Your Network** icon. The computer will ask if you wish to install Windows NT Networking now. To continue with the setup procedure, click the **Yes** button, and the Microsoft Network Setup Wizard will appear. For information about using the Microsoft Network Setup Wizard, see the Windows NT manual.

The desktop on your computer screen also includes the IBM Welcome Center program, which is discussed later in this chapter.

Using the IBM Welcome Center

The IBM Welcome Center provides a central location where you can:

- Set up your hard disk partitions
- Install the following ready-to-install software that is located on your hard disk:
  - Norton AntiVirus for IBM
  - ConfigSafe
  - IBM System Management Tools or the IBM Universal Management Agent program
- Register your IBM computer
- Perform some system setup tasks, such as:
  - Setting the time and date
  - Setting up your printer
  - Reading information about arranging your workspace
- View online books, such as:
  - *Installing Options in Your IntelliStation*
  - *Understanding Your IntelliStation*
  - *Netfinity Services User's Guide*
  - IBM International License Agreement for Non-Warranted Programs
- Start the *Ready-to-Configure Utility Program* CD to install additional software, such as that listed under "Ready-to-install software" on page 2.
- Access IBM Web pages on the World Wide Web (which contain information about IBM products and technical support), if your computer has a World Wide Web connection. If your computer does not have a World Wide Web connection, you can link to selected Web pages on your hard disk.

Accessing the IBM Welcome Center

To access the IBM Welcome Center:

1. Close the Welcome to Windows NT window if it is open.

2. Double-click the **WELCOME** - **Click Here to Begin** icon. The IBM Welcome Center appears.

3. In general, to perform tasks or obtain information using the IBM Welcome Center:

   a. Click one of the categories listed on the left side of the main window:

      Welcome
      Getting Started
      Online Library
      System Customization

News, Updates, and Service

Category-specific information will be displayed in the main window.

b. In the main window, you can scroll to and click a selectable topic. (Selectable topics are highlighted and underlined.) Where applicable, follow the instructions that appear on the screen.

The remainder of this chapter contains information about performing specific tasks from the IBM Welcome Center.

Note: For information about using the Microsoft Internet Explorer toolbar at the top of the IBM Welcome Center, see your Windows NT manual or online Help.

Using the software installation program

You can use the software installation (Ready-to-Configure) utility program that is preinstalled on your hard disk to:

- Install the Norton AntiVirus for IBM, ConfigSafe, IBM System Management Tools, or IBM Universal Management Agent programs

- Delete this Ready-to-Configure utility program from your hard disk

- Read information about the Norton AntiVirus for IBM, ConfigSafe, IBM System Management Tools, or IBM Universal Management Agent programs.

Note: A Ready-to-Configure utility program is also used on your *Ready-to-Configure Utility Program* CD. Information about using the *Ready-to-Configure Utility Program* CD is in Chapter 6, "Using the Ready-to-Configure Utility Program CD" on page 29.

To use the preinstalled utility program:

1. Close the Welcome to Windows NT window if it is open.

2. Double-click the **WELCOME** - **Click Here to Begin** icon.

3. In the IBM Welcome Center window, click **Getting Started**.

4. Scroll to and click **Start the software installation utility** in the Installing Additional Software section.

5. When the Ready-to-Configure utility menu appears, click the applicable button:

   a. **Install Applications** to install Norton AntiVirus for IBM, ConfigSafe, System Management Tools or the IBM Universal Management Agent program.

   Additional information about these applications is in Chapter 3, "Additional software" on page 15.

   b. **Delete this Utility Program from the Hard Disk** to delete the Ready-to-Configure utility program from your hard disk.

c. **Read the Overview** to read information about Norton AntiVirus for IBM, ConfigSafe, and IBM System Management Tools or the IBM Universal Management Agent program.

6. To complete a task, make the applicable selections and follow the instructions on the screen.

Registering your computer

Registering takes only a few minutes. After you complete the product registration procedure, you are given the option to install a complimentary suite of Windows screen savers.

What it means to register: Registering your computer helps IBM provide better service to you. When your registration information is received, it is placed into a central database accessible by IBM technical support representatives. If you need technical assistance, the support representative will already have information about your computer, saving you time on the phone. In addition, your comments about your computer are reviewed by a team dedicated to customer satisfaction and are taken into consideration in making improvements to IBM computers.

How to register: Use the Product Registration program to register your IBM computer. The registration program gathers your name, address, voice and fax telephone numbers, e-mail address, machine type, and machine serial number. Then, forward the registration information to IBM using one of these methods:

• Print the information and then mail it to IBM.

• If your computer has a modem, transmit the information directly to IBM.

To register your computer:

1. Close the Welcome to Windows NT window if it is open.

2. Double-click the **WELCOME** - **Click Here to Begin** icon.

3. In the IBM Welcome Center window, click the **Getting Started** button.

4. Scroll to and click **Register your computer** in the IBM Product Registration section; then follow the instructions on the screen.

or

1. Click the Windows **Start** button.

2. Select **Programs**, and click **WELCOME** - **Click Here to Begin**.

3. In the IBM Welcome Center window, click **Getting Started**.

4. Scroll to and click **Register your computer** in the IBM Product Registration section; then follow the instructions on the screen.

You can also register your computer through the World Wide Web at http://www.pc.ibm.com/register/.

Accessing your complimentary screen savers

If you installed the optional screen savers during the product registration procedure, use the following steps to access the new screen savers.

1. Click the Windows **Start** button.
2. Click **Settings**.
3. Click **Control Panel**.
4. Double-click **Display**.
5. Click the **Screen Saver** tab.
6. Click the Screen Saver pull-down menu in the Screen Saver section.
7. Click one of the screen savers to select it.
8. Locate the **Wait** field scroll bar and set the minutes of inactivity that you want to elapse before the screen saver appears.
9. Click **OK**.

Viewing online books

You can access online books, such as *Installing Options in Your IntelliStation*, from the IBM Welcome Center. To view books:

1. In the IBM Welcome Center window, click **Online Library**.
2. In the new window, double-click the icon for the book you wish to view.

Shutting down your computer

To help prevent the loss of unsaved data or damage to your programs, always use the shutdown procedure before turning off your computer.

To shut down your computer:

1. Save any data you are working on.
2. Close all open applications.
3. Click the Windows **Start** button.
4. Click **Shut Down**; then click **Shut Down** to confirm the request.

or

1. Save any data you are working on.

2. Close all open applications.

3. Press **Ctrl+Alt+Delete** to display the Windows NT Security menu.

4. Click **Shut Down**; then click **OK** to confirm the request.

Chapter 3. Additional software

This section contains information about the Norton AntiVirus for IBM, ConfigSafe for Windows NT, IBM System Management Tools, and IBM Universal Management Agent programs.

Additional software is provided on your *Ready-to-Configure Utility Program* CD. See Chapter 6, "Using the Ready-to-Configure Utility Program CD" on page 29 for additional information. Diagnostic software is described in Chapter 7, "Using your diagnostic programs" on page 31.

Norton AntiVirus for IBM

The Norton AntiVirus for IBM program is a comprehensive product that detects and removes viruses from your computer. To install the Norton AntiVirus for IBM program:

1. In the IBM Welcome Center window, click the **Getting Started** button. The related information is displayed.

2. Scroll to and click the **Start the software installation utility** button in the Installing Additional Software section.

3. When the Ready-to-Configure Utility menu appears, click the **Install Applications** button. In the Installation Choices window, click the **Norton AntiVirus for IBM** button to highlight it.

4. Click the **Add** button to move the title to the panel on the right; then click the **Install** button.

If you want to customize or review the current settings of the program after it is installed:

1. Click the Windows **Start** button.

2. Select **Programs**, **Norton AntiVirus**, and then click **Norton AntiVirus**.

3. In the Norton AntiVirus window, click the **Options** button.

4. Click the tabs at the top of the screen to review and make any desired changes to the settings. To save changes, click the **OK** button in each window in which you make changes.

5. Go back to the Norton AntiVirus main window and click the **Scheduler** button. If you want to change a Norton AntiVirus setting, double-click the setting (event) you want to change in the window, make any desired changes, and then click **OK**.

6. A new window appears. Click **OK** in this window if you have made any changes and want to save them.

To access online support documentation, click the Windows **Start** button. Then select **Programs, Norton AntiVirus, Norton AntiVirus Guides**. Select **Reference Guide** or **User's Guide**. (Adobe Acrobat Reader might need to be installed first.)

ConfigSafe for Windows NT

The ConfigSafe program is a comprehensive configuration tracking and recovery tool for Windows NT. It provides features that you or support personnel can use to restore your system if your desktop becomes damaged or unusable.

Highlights of the ConfigSafe program include:

- Menu-driven, graphical interface.
- Snapshot feature that automatically captures and saves your system configuration information on a regular schedule. The captured and saved information includes system files, hardware configuration, file versions, network connections, and registry information.
- Configuration restoration feature that you can use to quickly restore your system to a previous (or the factory-installed) configuration.
- UNDO feature that you can use to undo the last restored changes and return to the previous configuration.
- Automatic tracking of changes made (knowingly or unknowingly) to your basic system configuration.
- Report feature that you can use to generate (and then view or print) instant reports about system configuration changes. The reports can provide key information, such as a list of changes that occurred within the last week or since the factory-installed configuration. These reports can be helpful to you in troubleshooting your system, or they can be viewed by or faxed to support personnel for help in resolving problems.
- Ability to work in conjunction with other programs, such as CoSession Remote, for remote assistance. (For information on CoSession Remote, see page 3.)
- Automatic performance of time-consuming tasks, such as backing up configuration information and gathering data.
- A simple point and click way to capture current system settings prior to making hardware or software changes. This provides a quick recovery method if problems occur when the changes are made.
- Customizable features to meet specific needs.

ConfigSafe can be a valuable troubleshooting tool, especially if problems develop after you install a new application or adapter. Before you make any changes to your system configuration, use ConfigSafe to take a snapshot of your current, working

configuration. Then you can easily return to that configuration if your computer becomes disabled by changes in the configuration files.

If you are unable to solve a problem yourself and you need assistance from an IBM technical support representative, use ConfigSafe to generate a report about recent changes in your configuration before you call the PC HelpCenter. The IBM technical support representative will be able to use the information in this report to help you solve the problem.

To install the ConfigSafe program:

1. Follow steps 1 through 4 in the "Using the Software Installation Program" section on page 10.

2. When you reach step 5, click the **Install Applications** button. In the Installation Choices window, click the **ConfigSafe** button to highlight it.

3. Click the **Add** button to move the title to the panel on the right; then click the **Install** button.

To access the program after it is installed:

1. Click the Windows **Start** button.

2. Select **Programs**, **ConfigSafe**, and then click **CONFIGSAFE**.

Support documentation is built into the online Help system. To access online Help, click the Windows **Start** button. Then select **Programs, ConfigSafe**. The online Help files will appear in the pull-down menu on the right side of the screen.

IBM System Management Tools

Your computer comes with either IBM System Management Tools or the IBM Universal Management Agent program.

IBM System Management Tools includes the following components:

- Desktop Management Interface (DMI) Service Provider 2.0
- Desktop Management (DM) BIOS 2.0 Instrumentation
- IBM PC System Monitor Instrumentation
- IBM AssetCare
- IBM Alert on LAN
- IBM SMART Reaction Client
- Intel® LANDesk® Client Manager 3.1

When you install IBM System Management Tools, all of the components are installed, optionally including or excluding Intel LANDesk Client Manager and IBM SMART Reaction Client.

Note: IBM Alert on LAN requires hardware support. This support is provided with some computer models only.

IBM System Management Tools Components

A description of each of the IBM System Management Tools components follows.

DMI Service Provider 2.0 is a program that collects and manages information from software and hardware products on desktop computers, whether they are stand-alone or linked to a network. Each DMI-compliant component registers its information with the DMI Service Provider, and this information is stored in a Management Information Format (MIF) database. The DMI Service Provider handles requests and miscellaneous commands from management applications (such as Intel LANDesk Client Manager), retrieving the requested information from the MIF database, or passing requests on to DMI-compliant products, as needed. Support documentation is built into the DMI Browser Help system.

DM BIOS 2.0 Instrumentation gathers hardware information that would otherwise be hard to access once a computer is up and running. DM BIOS Instrumentation retrieves information from the computer BIOS and allows this information to be viewed through the DMI Browser. The hardware information reported includes memory configuration, cache size, USB support, product number, system serial number, BIOS version, processor information, system slot information, and more.

IBM PC System Monitor Instrumentation monitors system-board temperatures, system voltages, and fan speeds. It also detects removal of the computer cover. Data is reported to the DMI Service Provider and can be accessed through the DMI Browser or through DMI-compliant system management software. System management software, such as IBM Netfinity Services or Intel LANDesk Client Manager can be used to send an alert to the user or to the system administrator if a problem occurs.

IBM AssetCare is an application that configures and retrieves data from the Enhanced Asset Information Area in your computer. The Enhanced Asset Information Area is an EEPROM that provides component tracking and theft detection capabilities. IBM AssetCare makes it possible to track leasing, warranty, and user and system information, as well as serial numbers for major system components. You can also use IBM AssetCare to create personalized data fields that, with the use of DMI-compliant network management software, provide you with space for customized information. IBM Asset Care can issue a DMI-compliant alert when it detects configuration changes.

IBM Alert on LAN configures and monitors the Alert on LAN hardware that comes with some computer models. IBM Alert on LAN can be used to notify a LAN administrator of power-on self-test (POST) failures, operating system problems, environmental problems (such as high system temperatures and system voltage fluctuations), and some security breaches (such as chassis intrusion). Like Wake on LAN, IBM Alert on LAN can function when the computer power switch is turned off.

Administrators can monitor IBM Alert on LAN using system management software, such as IBM Netfinity Manager 5.2 or Intel LANDesk Client Manager Administrator 3.3. For further information on IBM Alert on LAN, refer to http://www.pc.ibm.com/us/desktop/alertonlan/.

IBM SMART Reaction Client is a program designed to protect data on computers that have Self-Monitoring, Analysis, and Reporting Technology (SMART) hard disk drives. SMART monitors the status of a hard disk drive and generates Predictive Failure Analysis (PFA) alerts if a potential failure exists within the drive. IBM SMART Reaction Client intercepts these alerts and converts them to useful responses (such as displaying screen messages at the client workstation or alerting additional parties that a specific workstation has a potential hard disk failure). IBM SMART Reaction Client has a full-function backup and restoration program, as well as a mirroring program, which can be used to dynamically "mirror" the contents of up to 64 folders to another hard disk. As source files are saved, the mirror files are automatically updated to contain the same data. IBM SMART Reaction Client also has a built-in scheduler for scheduling backup, restore, and mirror operations. The IBM SMART Reaction Manager program must be installed and running on at least one network computer before IBM SMART Reaction Client can be installed on any client workstation. IBM SMART Reaction Manager, as well as complete documentation on the IBM SMART Reaction program (Client and Manager), is available at http://www.pc.ibm.com/us/desktop/sr/.

Intel LANDesk Client Manager 3.1 is an application that provides a graphical user interface for accessing all the components of IBM System Management Tools. LANDesk Client Manager also provides self-help diagnostic tools, including a PC health meter and a process for issuing alerts about potential problems. The application automatically polls memory and other hardware to detect potential failure conditions, and it takes periodic snapshots of critical configuration files for change management and restoration. You can use LANDesk Client Manager to manage your own computer, or the program can be used in conjunction with Intel LANDesk Client Manager Administrator to enable a network administrator to remotely monitor your computer. Further information on LANDesk Client Manager Administrator is available at http://www.pc.ibm.com/us/desktop/.

Installing IBM System Management Tools

To install the IBM System Management Tools package:

1. Follow steps 1 through 4 in the "Using the Software Installation Program" section on page 10.

2. When you reach step 5, click on the **Install Applications** button. In the Installation Choices window, click **IBM System Management Tools Setup** to highlight it.

3. Click the **Add** button to move the title to the panel on the right; then click the **Install** button.

To access IBM System Management Tools after it is installed:

1. Click the Windows **Start** button.

2. Select **Programs**, **IBM System Management Tools**, and then click the desired choice.

For online Help, click the Windows **Start** button. Then click **Programs, IBM System Management Tools**. The pull-down menu to the right of the screen has support documentation built into the DMI and MIF Browser menu items.

IBM Universal Management Agent

Your computer comes with either the IBM Universal Management Agent program or IBM System Management Tools.

The IBM Universal Management Agent program includes the following components:

- System Monitors
- Resource Utilization
- Advanced Management Tools
- Inventory Data
- Configuration and Diagnostics

The IBM Universal Management Agent program is a collection of tools designed to manage computers in a network environment. The Universal Management Browser launches and manages each tool from a central interface using ActiveX controls in an Internet or intranet environment. You can use the tools locally on the computer where the Universal Management Agent program is installed or remotely by using the Internet or intranet to access the computer where the Universal Management Agent program is installed.

Components of the IBM Universal Management Agent program

A description of each of the components of the IBM Universal Management Agent program follows. Some of the features of the IBM Universal Management Agent program are hardware-dependent and might not be available on some computer models.

System Monitors contains Events, Alarms, and Responses (EAR); PC Health; BIOS Error Logging; Enterprise SNMP Automation; and the Event Log Viewer. You can use these programs to monitor computer hardware status, set up automatic responses to system alerts, schedule events (such as backup operations), and view a history of errors, alerts, and events.

Resource Utilization gathers information about audio, drives, input/output ports, memory, network, system resources, video, battery (mobile computers only), keyboard, and mouse.

Advanced Management Tools provides access to DMI information, Alert on LAN information, and System Updates (your gateway to the latest information and files available from IBM).

Inventory Data contains viewable information about the basic hardware, a computer summary report, a software inventory, information about the operating system and associated device drivers, and AssetCare information.

Configuration and Diagnostics contains the Memory-Scrubbing program (to correct latent errors in ECC memory), the User Manager (used to configure security features associated with the Universal Management Agent program), and SNMP Trap Configuration (to add, modify, or delete SNMP community names and destinations).

The UMA program can also integrate into a number of server-based management programs such as IBM Netfinity Manager; enterprise-management systems such as Tivoli TME 10, Tivoli NetView, and Microsoft System Management Server (SMS); and Microsoft Management Console (MMC). Additionally, you can configure the UMA program to forward simple network management protocol (SNMP) traps to workgroup- and enterprise-level network management applications such as Microsoft SMS, Tivoli NetView, and Computer Associates Unicenter.

For information about installing the Universal Management Agent program see the *Universal Management Agent 1.1 Installation Guide*. This guide is available as an online book. See "Viewing online books" on page 12 for information about viewing these online books.

For more information, visit the Universal Management Agent Web site at http://www.ibm.com/pc/us/desktop/uma/.

IBM Universal Management Agent Plus

Universal Management Agent Plus is a program that contains a set of additional functions that plug into the UMA program. The Universal Management Agent program must be installed before you install Universal Management Agent Plus. Universal Management Agent Plus adds the following functions to your Universal Management Agent setup:

SMART Reaction Client is a full-function backup, restore, and mirror program. You can use the program to perform routine, scheduled backup and mirror operations or perform emergency backup or mirror operations triggered by Predictive Failure Analysis alerts from SMART hard disk drives. SMART Reaction Manager must be installed for SMART Reaction Client to work properly. SMART Reaction Manager is available on the World Wide Web at http://www.pc.ibm.com/us/desktop/sr/.

System Updates provides direct access to the latest information available for your IBM computer by automatically linking to the IBM support Web site for device-driver updates and new system information.

EZ Admin reduces the administrative overhead associated with user-induced problems by hiding or disabling operating system features or limiting user access to specific programs.

CoSession Remote for UMA is a tool that network administrators and other user-support personnel can use to access and control a second computer through the UMA interface, using an Internet or intranet connection through either a modem or network. CoSession Remote gives the ability to run programs, reconfigure the computer, and remotely update software.

PC-Doctor for UMA is a diagnostic tool you can use to run diagnostic tests against major computer components. You can use the UMA implementation of PC-Doctor to run these tests locally or remotely through the Internet or an intranet.

For information about installing Universal Management Agent Plus, see the *Installation Guide for Universal Management Agent Plus.* This guide is available as an online book. See "Viewing online books" on page 12 for information about viewing these online books.

For more information, visit the Universal Management Agent Plus Web site at http://www.ibm.com/pc/us/desktop/umaplus/.

Chapter 4. Installing other operating systems

If you install (or reinstall) Microsoft Windows 95, Microsoft Windows 98, or Microsoft Windows NT Workstation 3.51 or 4.0, you might need software or device drivers. Hardware-specific support software is available on the *Ready-to-Configure Utility Program* CD. If you experience problems with device drivers installed from the *Ready-to-Configure Utility Program* CD, you can obtain updated device drivers on the World Wide Web at http://www.pc.ibm.com/us/files.html, or on the IBM PC Bulletin Board System.

Before installing any operating system, be sure you obtain the latest updates. Contact the operating system manufacturer or, if applicable, check the manufacturer's World Wide Web site to obtain the updates.

To install an operating system, follow the instructions in the documentation provided with the operating system and any updates. Then, follow the instructions in Chapter 6, "Using the Ready-to-Configure Utility Program CD" on page 29 to install the support software.

Important information about reinstalling Windows NT Workstation 4.0 is in Chapter 5, "Reinstalling Windows NT" on page 25.

Important Information
Installing a Windows 95 Retail Package

If you install Windows 95 onto this computer from a separately purchased retail package, you must follow the configuration instructions provided by IBM on the World Wide Web in addition to the installation instructions provided with the Windows 95 retail package. The special configuration process required by this computer helps avoid resource conflicts in the Windows 95 Device Manager. To view the configuration instructions, go to the following address: http://www.pc.ibm.com/support/. Click the IBM IntelliStation Support link. Click the **Hints and tips** link, click the **Windows 95** link, and then click **IBM IntelliStation M Pro – Installation of Windows 95 retail version fixes with SCSI/IDE drives (6889)** or **IBM IntelliStation Z Pro – Installing Windows 95 retail version**.

Chapter 5. Reinstalling Windows NT

Use the information in this section if a problem occurs and you have to reinstall the
Windows NT operating system provided with your computer.

Your computer comes with either a *Microsoft Windows NT Workstation 4.0* CD or an
IBM *Product Recovery* CD. If your computer comes with an IBM *Product Recovery* CD,
go to "Using the IBM Product Recovery CD" on page 26. If your computer comes
with a *Microsoft Windows NT Workstation 4.0* CD, continue here.

Using the Microsoft Windows NT Workstation 4.0 CD

 Attention

The software contained on the *Microsoft Windows NT Workstation 4.0* CD is to be
used *only* for reinstalling Windows NT Workstation 4.0 on an IBM computer that
was originally shipped with Windows NT Workstation 4.0 preinstalled.

The Windows NT CD is provided with your computer so that you can reinstall
Windows NT in case of a hard disk failure or other damage to your Windows NT files.
This CD must be used in conjunction with the Windows NT Setup Boot Disks, created
from the Windows NT CD. (See "Creating the Microsoft Windows NT Setup Boot
Disks" on page 7.)

Note: The backup Windows NT CD contains an earlier version of Windows NT
Workstation 4.0 than the preinstalled version that comes with your computer.
Also, if you reinstall Windows NT from the backup CD, you must also install
an updated version of the Windows NT Internet Explorer; otherwise, the IBM
Welcome Center will not run correctly. Internet Explorer updates are available
on the World Wide Web, as further explained in this section. (In some cases,
an updated version of the Internet Explorer might also be provided on a CD
and packaged with your Microsoft documentation.)

If a problem occurs and you need to reinstall Windows NT:

 1. Insert the first Windows NT Setup Boot Disk (created using the steps on page 7)
    into drive A and insert the Windows NT CD into the CD-ROM drive.

 2. Turn on or restart the computer and follow the instructions as they appear on the
    screen.

 3. Install the following updates:

    • Internet Explorer 4.01 or higher

    • Windows NT Workstation 4.0 Service Pack 4 or higher

Some computers come with a Windows NT Service Pack 4 CD containing the Service Pack 4 update. If you do not have this CD, you can obtain this update on the World Wide Web.

These updates are available on the World Wide Web at http://www.pc.ibm.com/us/news/msinfo.html. One way to access this Web address is to select **Microsoft Technical Support** from the Favorites choice on the Windows NT Internet Explorer toolbar.

After you have reinstalled Windows NT, you can use the *Ready-to-Configure Utility Program* CD to install applications and device drivers if necessary. See Chapter 6, "Using the Ready-to-Configure Utility Program CD" on page 29 and the CD overview on the *Ready-to-Configure Utility Program* CD for more information. If you experience problems with device drivers installed from the *Ready-to-Configure Utility Program* CD, you can obtain updated device drivers from the World Wide Web at http://www.pc.ibm.com/us/files.html, or on the IBM PC Bulletin Board System.

Using the IBM Product Recovery CD

Your computer comes with either a *Microsoft Windows NT Workstation 4.0* CD or an IBM *Product Recovery* CD. Use this information if your computer comes with an IBM *Product Recovery* CD.

The IBM *Product Recovery* CD is provided with your computer so that you can reinstall Windows NT and preinstalled applications and device drivers in case of a hard disk failure or other damage to your Windows NT files. The IBM *Product Recovery* CD also includes an additional Windows NT 4.0 directory called msextra. This directory includes application updates provided by Microsoft for your convenience. Later updates of these files might be available on the Microsoft Web site.

Warning: The recovery process deletes all the information stored on the primary partition (drive C). If possible, back up your data before starting this process.

The IBM *Product Recovery* CD contains a Windows 98 startable CD image that copies files from the CD to the hard disk. Although the CD initially runs Windows 98 DOS, it installs Windows NT Workstation 4.0.

Your computer was shipped from the factory with a FAT16 primary partition. The IBM *Product Recovery* CD for Windows NT will work correctly only if your primary partition is FAT16. If your primary partition is not FAT16, you will see a message about an invalid partition that needs to be repartitioned with the FDISK command.

To run the FDISK command from the IBM *Product Recovery* CD, with the IBM *Product Recovery* CD in the CD-ROM drive, type FDISK at the command prompt. Delete the primary partition, leave the IBM *Product Recovery* CD in the CD-ROM drive, and restart the computer. The IBM *Product Recovery* CD partitions your hard disk correctly.

Recovering the operating system and support software

Use the following steps to recover the factory-installed operating system and software:

1. Make backup copies of configuration files and any files you created. Any files not backed up will be lost.

2. Insert the IBM *Product Recovery* CD into your CD-ROM drive.

3. Restart your computer and follow the instructions on the screen. If your computer does not start from the CD, you need to change your startup sequence. (See "Changing the startup sequence.")

4. When the recovery is complete, remove the IBM *Product Recovery* CD and restart your computer.

5. If you changed your startup sequence, make sure you change it back immediately.

Changing the startup sequence

If your computer does not start from the CD on the first try, you need to change your startup sequence in the Configuration/Setup Utility program. Follow these steps to change the startup sequence:

1. Restart your computer.

2. When the Configuration/Setup Utility program prompt appears, press the F1 key. (The Configuration/Setup Utility program prompt appears on the screen for only a few seconds. You must press F1 quickly.)

3. Select **Start Options** from the Configuration/Setup Utility program menu.

4. Select **Startup Sequence** from the Start Options menu.

5. Write down the startup sequence that is shown on the screen. You will need this information to restore your original startup sequence after you complete the recovery process.

6. Change your **First Startup Device** to the CD-ROM drive.

7. Press the Esc key until you return to the Configuration/Setup Utility program menu.

8. Before you exit from the program, select **Save Settings** from the Configuration/Setup Utility program menu and press the Enter key.

9. To exit from the Configuration/Setup Utility program, press the Esc key and follow the instructions on the screen.

Note: Remember to restore your original startup sequence when you have finished using the IBM *Product Recovery* CD.

Chapter 6. Using the Ready-to-Configure Utility Program CD

Use the information in this chapter if you want to install or reinstall device drivers and other software from the *Ready-to-Configure Utility Program* CD.

Features of the CD

The *Ready-to-Configure Utility Program* CD contains device drivers, diagnostic programs, and other support software for several operating system environments.

> **Important**
>
> The *Ready-to-Configure Utility Program* CD does not contain operating systems. Before you can use the CD, your operating system must already be installed in your computer.

You can use the CD to:

- Install some products directly from the CD on models equipped with a CD-ROM drive.

- Create a local area network (LAN) image of the software products on the *Ready-to-Configure Utility Program* CD and install the products from a LAN disk.

- Create diskettes for software products that cannot be installed from the CD and install the products from diskette.

The utility program on the CD has an easy-to-use graphical interface and automated installation procedures for most products. The utility program also has a help system and a comprehensive overview that describes the features of the utility program, the software products that can be installed from the CD, and the operating environments that are supported by those products.

The products on the *Ready-to-Configure Utility Program* CD are licensed according to the terms and conditions of the IBM International License Agreement for Non-Warranted Programs, which is available as an online book. For more information, see Appendix A, "Viewing the license agreement" on page 33.

Starting the CD

To use the *Ready-to-Configure Utility Program* CD:

1. Insert the *Ready-to-Configure Utility Program* CD into your CD-ROM drive.

2. Start the CD.

   From the Windows NT Workstation 4.0 desktop, double-click the **WELCOME** - **Click Here to Begin** icon, click the **System Customization** button, and click **Run the Ready-to-Configure utility**.

   or

   Start the CD as follows, depending on your operating system.

   - For Windows NT Workstation 4.0 or Windows 95: Click the Windows **Start** button, click **Run**, and then type

         e:\ibmsetup

     where *e* is the CD-ROM drive letter. Press Enter.

   - For Windows NT 3.51 or Windows 3.1: From the Windows Program Manager window, click the **File** menu, click **Run**, and then type

         e:\ibmsetup

     where *e* is the CD-ROM drive letter. Press Enter.

3. When the main menu appears, select the desired option; then follow the instructions on the screen.

After a program is installed, you can access it through the Programs choice on the Windows Start menu. For most programs, support documentation is built into the online Help system; for some, online documentation is also provided.

Chapter 7. Using your diagnostic programs

IBM provides diagnostic programs that you can run to detect hardware and some software problems. Additional diagnostic information, such as troubleshooting charts and corrective measures for power-on self-test (POST) error messages, is provided in the *IntelliStation User Guide*.

IBM Enhanced Diagnostic

IBM Enhanced Diagnostic will isolate your computer hardware from software that was preinstalled (or that you have installed) on your hard disk. The program runs independently of the operating system, and *must be run either from CD or diskette.* This method of testing is generally used when other methods are not accessible or have not been successful in isolating a problem suspected to be hardware related.

IBM Enhanced Diagnostic comes on a Diagnostic CD. You can also download the latest image of the diagnostic programs from the IBM Web site. For further information about the IBM Enhanced Diagnostic program, see the *IntelliStation User Guide*.

PC-Doctor for Windows NT

The PC-Doctor for Windows NT program is provided on the *Ready-to-Configure Utility Program* CD. This diagnostic program is designed specifically for the Windows NT operating environment and can be used only when Windows NT is active. This program tests the hardware and analyzes certain software components of your computer. The program is especially useful for isolating problems related to the operating system and device drivers.

To use the PC-Doctor for Windows NT program:

1. If you have not already done so, install the program onto your hard disk. For information about installing software from the *Ready-to-Configure Utility Program* CD, see Chapter 6, "Using the Ready-to-Configure Utility Program CD" on page 29.

2. To run the program after it is installed, select it from the Programs choice on the Windows Start menu and follow the instructions on the screen. Help is available online.

Note: PC-Doctor for Windows (for use with Windows 95) is also available on the *Ready-to-Configure Utility Program* CD. See Chapter 6, "Using the Ready-to-Configure Utility Program CD" on page 29 for instructions on starting the CD to view information about the additional software on the CD.

Appendix A. Viewing the license agreement

The IBM International License Agreement for Non-Warranted Programs is viewable as an online book in your preinstalled software. To view the license agreement, do the following:

1. In the IBM Welcome Center window, click **Online Library**.
2. Double-click the **IBM International...** icon.

If your preinstalled software is no longer installed in your computer, you can reinstall the online books from the *Ready-to-Configure Utility Program* CD by selecting **Install Online Books** from the list of applications to be installed. See Chapter 6, "Using the Ready-to-Configure Utility Program CD" on page 29 for more information.

Appendix B. Notices and trademarks

This appendix gives legal notice of IBM product availability, patents, and patents pending, as well as trademark information.

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This is a Year 2000 Readiness Disclosure.

A product is Year 2000 Ready if the product, when used in accordance with its associated documentation, is capable of correctly processing, providing and/or receiving date data within and between the 20th and 21st centuries, provided all other products (for example, software, hardware, and firmware) used with the product properly exchange date data with it.

This IBM PC hardware product has been designed to process four-digit date information correctly within and between the 20th and 21st centuries. If your IBM computer is on when the century changes, you should turn it off and then back on

again once, or restart the operating system, to ensure that the internal clock resets itself for the new century.

This IBM PC product cannot prevent errors that might occur if software you use or exchange data with is not ready for the Year 2000. IBM software that comes with this product is Year 2000 Ready. However, software from other companies might come with this IBM PC product. IBM cannot take responsibility for the readiness of that software. You should contact the software developers directly if you wish to verify readiness, understand limitations, or look for any software updates.

To learn more about IBM PC products and the Year 2000, visit our Web site at http://www.pc.ibm.com/year2000. The information and tools there can help you with your Year 2000 transition plan, especially if you have multiple IBM PCs. IBM encourages you to check periodically for updated information.

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