IBM Personal Computer

**About Your Software
Windows 95, Applications,
and Support Software**

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and Support Software**

IBM

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┌─ Note ──────────────────────────────────────────────────┐
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│  Before using this information and the product it supports, be sure to read the │
│  information in "Viewing the license agreement" on page 7 and Appendix A, │
│  "Notices and Trademarks" on page 37.                    │
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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 preinstalled and other 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 software provided with your computer.

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

- Chapter 3, "Using the IBM Software Selections CD" on page 13, contains information about installing or reinstalling software provided on the *IBM Software Selections* CD.

- Chapter 4, "IBM Software Selections CD applications" on page 15, contains information about the additional software provided with your computer.

- Chapter 5, "Reinstalling Windows 95" on page 21, contains information about reinstalling Windows 95 for recovery purposes.

- Chapter 6, "Using your diagnostic programs" on page 33, contains information about IBM Enhanced Diagnostics and the PC-Doctor for Windows programs that come with your computer.

- Chapter 7, "Installing other operating systems" on page 35, contains information about installing other operating systems and support software.

- Appendix A, "Notices and Trademarks" on page 37, contains legal notices and trademark information.

Chapter 1. Overview of your software

Your IBM® computer comes with Microsoft® Windows® 95[1] and a variety of software, including application programs, diagnostic tools, and device drivers. Some of the software is *preinstalled* and some can be found on the *IBM Software Selections* CD.

Important: The software, other than Microsoft Windows 95, is licensed under the terms of the IBM International License Agreement for Non-Warranted Programs. Use of your computer signifies acceptance of this license agreement. See "Viewing the license agreement" on page 7 of this booklet for information on viewing the license agreement.

Preinstalled software

In addition to Windows 95, your preinstalled software includes the following:

- The IBM Welcome Center, which is a central location from which you can install software provided by IBM, register your computer, set the time and date, set up your printer, view online books, read the license agreement and online warranty, start the *IBM Software Selections* CD, and obtain information about IBM products and technical support.

- Device drivers for factory-installed features

- ConfigSafe, a program that provides features that make it easier to restore your system if your desktop becomes damaged, unusable, or unstartable.

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 *IBM Software Selections* CD contains most of your IBM-preinstalled programs and device drivers.

    In addition, the Microsoft Windows 95 operating system (provided by Microsoft and not modified by IBM) is provided on a separate CD for backup purposes. This CD does not contain other software that is

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[1] The Microsoft Certificate of Authenticity is your assurance that the Windows 95 software on your computer is legally licensed from Microsoft Corporation.

preinstalled in your computer. Use the Microsoft Backup CD (and the *CD-ROM Setup Boot Disk*) in conjunction with the *IBM Software Selections* CD if you need to reinstall the operating system. (Diskettes for your Windows 95 operating system and preinstalled software are not available from IBM.) For information about reinstalling Windows 95, refer to Chapter 5, "Reinstalling Windows 95" on page 21.

2. The device drivers and some programs are also available on the World Wide Web at http://www.ibm.com/pc/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 your computer 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. An *IBM Enhanced Diagnostics* diskette. This self-starting diskette can be used to isolate problems with your computer. (For instructions on creating the diskette, see your your computer user guide.)

   b. A backup copy of the *CD-ROM Setup Boot Disk*. If you need to reinstall Windows 95, use the backup copy. Under some conditions, the installation process will destroy data on the *CD-ROM Setup Boot Disk*, making the diskette unusable.

IBM Software on the Software Selections CD

In addition to some of your IBM-preinstalled programs and device drivers, your *IBM Software Selections* CD also contains additional software. You decide which programs to install, based on your needs. This section describes some of the additional software that might be included on the CD.

The actual software on the *IBM Software Selections* CD is subject to change and might be different from the following list. Some similar software for other operating systems is also on the CD. Additional information about the CD is in Chapter 3, "Using the IBM Software Selections CD" on page 13.

IBM Internet Connection	Software that you can use to establish an internet account and dial into the Internet through the IBM Global Network. You can use this software with the Netscape Navigator browser, which is available on your *IBM Software Selections* CD.

Lotus SmartSuite	Lotus SmartSuite, a package of award-winning productivity applications, contains powerful applications and everything you need to access the Internet. Your computer comes with either a Lotus SmartSuite CD or a proof of entitlement to receive one free CD-ROM version of Lotus SmartSuite. For further details, see the Lotus SmartSuite brochure that comes with your computer.
Norton AntiVirus for IBM	This is a comprehensive product that protects your computer from harmful viruses. See Chapter 4, "IBM Software Selections CD applications" on page 15 for more information.
Enhanced Diagnostics	The Enhanced Diagnostics are programs that help identify hardware related problems. Refer to the your computer user guide for your computer for instructions on creating and starting an *IBM Enhanced Diagnostics* diskette.
ConfigSafe	The ConfigSafe program is a comprehensive configuration tracking and recovery tool. It provides features that make it easier for you (or support personnel) to restore your system if your desktop becomes damaged, unusable, or unstartable.
CoSession remote	Your administrator can use this communication tool to diagnose and fix computer problems from a remote location. The connection can be made through a modem or over a LAN.
IBM Netfinity Services	You can use IBM Netfinity Services 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 the Netfinity Manager program installed, Netfinity Manager can gather information for asset management and can monitor the operation of your computer.
Netscape Communicator	You can use Netscape Communicator to navigate your company intranet or the World Wide Web. Netscape Communicator provides a full suite of Internet functions, including e-mail, threaded discussion groups (newsgroups), and support for the latest features on the World Wide Web.

PC-Doctor for Windows and PC-Doctor for Windows NT	You can use these diagnostic tools with Windows 95, Windows 98, and Windows NT Workstation 4.0. 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.
Tivoli Lightweight Client Framework	You can use Tivoli Lightweight Client Framework to discover software, distribute software, and retrieve a software inventory from a client system.
ViaVoice 98	You can use ViaVoice 98 to control your computer using your voice and quickly create text for memos, e-mail, and reports. (Some models might include this program on a separate CD.)

Some computer models come with additional support software, including the i.Share and Ring Central programs.

Not all software is available for all operating systems. See the *IBM Software Selections* CD to find out which programs are available for your operating system.

Chapter 2. Getting started

This chapter contains information to help you get started using your computer; it explains:

- What you need before, and what happens after, you start your computer for the first time
- How to:
  - Access information and perform tasks from the IBM Welcome Center
  - View the license agreement
  - Use the online program to register your computer with IBM and then access the complimentary screen savers
  - View online books
  - Use ConfigSafe
  - Safely shut down your computer

Starting your computer for the first time

You must complete the Windows 95 setup procedure before you can access Windows 95 for the first time.

What you need before you start

Before you start the Windows 95 setup procedure, you need the following:

- The Windows 95 manual provided with your computer, in case you need more detailed information than what is provided in this chapter
- Microsoft Certificate of Authenticity (attached to the front cover of your Windows 95 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 95 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 that which is provided in the following notes, refer to your Windows 95 manual.

Notes:

1. During the setup procedure, you must indicate that you accept the Windows 95 license agreement and, when prompted, type the Product ID number from your Certificate of Authenticity. The Certificate of Authenticity is attached to the front cover of your Windows 95 manual.

2. After the setup procedure is completed and the system is restarted, the Windows 95 desktop appears with the Welcome to Windows 95 window open. From the Welcome to Windows 95 window, you can:

   - Preview a short Windows 95 tutorial

   - Find out what is new in this release of Windows 95

   - Obtain information about using your operating system

   - Register your Windows 95 software with Microsoft (if you have a modem installed)

3. Your hard disk is divided by multiple file allocation table (FAT) partitions. The C partition (C:\FAT32) contains Windows 95 and the other preinstalled software.

4. At your earliest opportunity, create the *IBM Enhanced Diagnostics* diskette and a backup copy of the *CD-ROM Setup Boot Disk*.

Using the IBM Welcome Center

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

- View the IBM International License Agreement for Non-Warranted Programs

- Register your IBM computer

- Perform some system setup tasks, such as:

   – Setting the time and date
   – Reading information about arranging your workspace

- Start the *IBM Software Selections* CD to install additional software, such as that listed in "IBM Software on the Software Selections CD" on page 2. Also, see Chapter 4, "IBM Software Selections CD applications" on page 15.

- Access IBM Web pages on the World Wide Web, which contain information about IBM products and technical support. Your computer must have an Internet connection with a browser installed to use this option. If your computer does not have an Internet connection, you can link to selected Web pages on your hard disk.

- View online books, such as:
  - Your computer user guide
  - *Netfinity Services User's Guide*

To access and use the IBM Welcome Center:

1. Double-click **Start IBM Welcome** on the Windows 95 desktop.

2. 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
      Complete your hardware setup
      Customize your system software
      Access news, updates, and service information
      View online books

      Category-specific information is displayed in the main window.

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

This chapter contains additional information about performing specific tasks from the IBM Welcome Center. For information about using the Microsoft Internet Explorer toolbar at the top of the IBM Welcome Center, refer to your Windows 95 manual or online Help.

Viewing the license agreement

The IBM International License Agreement for Non-Warranted Programs is viewable in the IBM Welcome Center in your preinstalled software. Use of your computer signifies acceptance of this license agreement. To view the license agreement, do the following:

1. From the Desktop, double-click **Start IBM Welcome**.

2. Double-click **IBM International License Agreement for Non-Warranted Programs**.

If your preinstalled software is no longer installed in your computer, you can reinstall the IBM Welcome Center from the *IBM Software Selections* CD by selecting **Install IBM Utilities** from the list of applications to be installed. See Chapter 4, "IBM Software Selections CD applications" on page 15 for more information.

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 95 window if it is open.

2. Double-click **Start IBM Welcome**.

3. In the IBM Welcome Center window, click **Complete Your Hardware Setup**. The related information is displayed.

4. Scroll to and click **Register with IBM** 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 **Start IBM Welcome**.

3. In the IBM Welcome Center window, click **Complete your hardware setup**. The related information is displayed.

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

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

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. Select **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 your computer user guide, from the IBM Welcome Center. To view books:

1. Close the Welcome to Windows 95 window if it is open.
2. Double-click **Start IBM Welcome**.
3. In the IBM Welcome Center window, click **View Online Books**; then scroll to and click the name of the book you want to read.

Using ConfigSafe

This preinstalled program is a comprehensive configuration tracking and recovery tool. It provides features that make it easier for you (or support personnel) to restore your system if your desktop becomes damaged, unusable, or unstartable.

Highlights of the ConfigSafe program include:

- Menu-driven, graphical interface.
- Snapshot feature that automatically captures and saves your system configuration information the first time your computer is started and there after on a regular schedule. The information includes system files, hardware configuration, file versions, network connections, and registry information.
- Configuration restoration feature that you can use to restore, in just seconds, 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.
- SOS (DOS restoration utility) feature that you can use to restore your system if you are unable to access your Windows 98 desktop.
- 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.
- Automatic performance of time-consuming tasks, such as backing up configuration information and gathering data.
- A simple way (point and click) 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 IBM PC HelpCenter. The IBM technical-support representative will be able to use the information in this report to help you solve the problem.

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**
 5. In the pop-up window, click **Shut Down**; then click **OK** to confirm the request.

The next time you turn on your computer, Windows 95 restores any windows that were open the last time you shut down your computer.

Chapter 3. Using the IBM Software Selections CD

Use the information in this chapter if you want to install or reinstall device drivers and other software from the *IBM Software Selections* CD.

Features of the CD

The *IBM Software Selections* CD contains device drivers, diagnostic programs, and other support software for Windows 95, Windows 98, and Windows NT Workstation 3.51 and 4.0.

Note: Not all software is available for all operating systems. See the *IBM Software Selections* CD to find out which programs are available for your operating system.

Important

The *IBM Software Selections* 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 software products directly from the *IBM Software Selections* CD on models equipped with a CD-ROM drive.

*   Create an image of the *IBM Software Selections* CD on a local area network (LAN) disk and install the software products from that LAN disk.

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

The *IBM Software Selections* CD has an easy-to-use, graphical interface and automated installation procedures for most products. It also has a help system that describes the features of the CD.

The products on the *IBM Software Selections* CD are licensed according to the terms and conditions of the IBM International License Agreement for Non-Warranted Programs, which is available through the IBM Welcome Center. (See "Viewing the license agreement" on page 7.)

Starting the CD

To use the *IBM Software Selections* CD, insert the CD into your CD-ROM drive. The *Software Selections* program starts automatically.

If the auto-run feature is disabled in your computer:

- From the Windows 95 desktop, double-click

  Start IBM Welcome → **Customize your system software**

  or

- Click the Windows **Start** button, click **Run**, and then type

      e:\swselect.exe

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

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, you can find help support in the online Help system on your desktop; for some programs, help is also provided within the particular product folder.

Chapter 4. IBM Software Selections CD applications

This section contains information about some important applications available on your *IBM Software Selections* CD, such as Norton AntiVirus for IBM, IBM Enhanced Diagnostics, and on some models the IBM Universal Management Agent program. Instructions on installing these applications is included within.

ConfigSafe

This program is preinstalled. However, it is included on the *IBM Software Selections* CD and can be reinstalled if necessary. Refer to "Using ConfigSafe" on page 10, for more information.

Norton AntiVirus for IBM

The Norton AntiVirus for IBM program is a comprehensive antivirus product that detects and removes viruses from your computer.

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** → **Norton AntiVirus**.

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

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

5. Go back to the Norton AntiVirus main window and click the **Scheduler**. 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.

Support documentation is provided online. To access this 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.)

IBM Enhanced Diagnostics

An *IBM Enhanced Diagnostics* diskette image is provided on the *IBM Software Selections* CD. This diagnostic program runs independently of the operating system. The user interface for running the diagnostics and utility programs is provided by Watergate Software's PC-Doctor. (This program is separate from the PC-Doctor plug-in that is part of the Universal Management Agent Plus program.)

You can use this program to test the hardware (and some software) components of your computer. 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. For instructions on creating and using the *Enhanced Diagnostics* diskette, see your computer user guide.

Management Software

Your computer comes with either System Management Tools or the Universal Management Agent Program (UMA). Both Programs are described in this chapter. Read the section relevant to your program.

UMA 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.

IBM Universal Management Agent components

The IBM Universal Management Agent program components include the following:

System Monitors contains Events, Alarms, and Responses (EAR); PC Health; BIOS Error Logging; 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 Desktop Management Interface (DMI) information.

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 User Manager, which is used to configure security features associated with the Universal Management Agent program.

IBM Universal Management Agent Plus

Universal Management Agent Plus is a plug-in program that expands the functions of the Universal Management Agent program. The Universal Management Agent program must be installed before you install Universal Management Agent Plus. Universal Management Agent Plus adds the following plug-ins to your Universal Management Agent setup:

SMART Reaction 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.

System Updates provides direct access to the latest information available for your IBM PC 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 plug-in 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. (CoSession Remote is also available on the *IBM Software Selections* CD as a separately installable program.)

PC-Doctor for UMA is a diagnostic tool you can use to run diagnostic tests against major computer components. The UMA implementation of PC-Doctor allows you to run these tests locally or remotely through the Internet or an intranet. (PC-Doctor is also available on the *IBM Software Selections* CD as a separately installable program.)

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

Installing IBM Universal Management Agent

You can install the Universal Management Agent and Universal Management Agent Plus programs from the *IBM Software Selections* CD, or the World Wide Web.

For information about installing the Universal Management Agent and the Universal Management Agent Plus programs, see the *Universal Management Agent Installation Guide* and the *Installation Guide for Universal Management Agent Plus.* These guides are available as online books. See "Viewing Online Books" on page 9 to view these online books.

IBM System Management Tools

IBM System Management Tools consist of 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.

Components of IBM System Management Tools

A description of each of the components of IBM System Management Tools 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's 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, microprocessor 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 AssetCare can issue a DMI-compliant alert when it detects configuration changes. In addition, you can use a wireless radio frequency reader to access information about your computer provided by IBM AssetCare.

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.ibm.com/pc/us/desktop/alertonlan on the World Wide Web.

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.ibm.com/pc/us/desktop/sr/ on the World
Wide Web.

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 mechanism 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.ibm.com/pc/us/desktop/ on the World Wide Web.

Chapter 5. Reinstalling Windows 95

Use the information in this chapter if a problem occurs and you have to reinstall Windows 95.

About the Windows 95 CD

> **Attention**
>
> The software contained on the *Microsoft Backup* CD-ROM (the "Recovery Program") is to be used *only* for reinstalling Windows 95 on an IBM computer that was originally shipped with Windows 95 preinstalled.

The *Microsoft Backup* CD and *CD-ROM Setup Boot Disk* are provided with your computer so that you can reinstall Windows 95 in case of a hard disk failure or other damage to your Windows 95 files.

Note: If you have not already done so, make a backup copy of the *CD-ROM Setup Boot Disk* (included with your Windows 95 documentation) and use the backup copy to prevent damage to the original diskette. Under some conditions, the installation process will destroy data on the *CD-ROM Setup Boot Disk*, making the diskette unusable.

If you reinstall Windows 95 from the *Microsoft Backup* CD, the content will differ slightly from the preinstalled Windows 95 software that was originally shipped with your computer.

After you have reinstalled Windows 95, you can use the *IBM Software Selections* CD to install applications and device drivers if necessary. If you experience problems with device drivers installed from the *IBM Software Selections* CD, you can obtain updated device drivers from the World Wide Web at http://www.ibm.com/pc/us/files.html or from the IBM PC Bulletin Board System (BBS).

Requirements

To reinstall Windows 95 on a hard disk, you must have:

- A CD-ROM drive
- Diskette drive A of the computer as the startup drive
- The *Microsoft Backup* CD

- The backup copy of the *CD-ROM Setup Boot Disk* (see the note on page 21)

In addition, the correct device driver for your CD-ROM drive must be permanently on, or copied to, the *CD-ROM Setup Boot Disk* when the installation of Windows 95 begins (step 6 on page 26). It can be:

- A device driver that is provided on the *CD-ROM Setup Boot Disk*. Device drivers for an IBM internal IDE CD-ROM drive, an IBM SCSI CD-ROM drive with an Adaptec 2940 or 3940 PCI SCSI adapter, and an external Disctec Roadrunner parallel port CD-ROM drive (U.S. CD only) are included on the *CD-ROM Setup Boot Disk*.

- A device driver that the recovery program finds listed in the CONFIG.SYS file on the hard disk and copies from the hard disk to the *CD-ROM Setup Boot Disk*. If the device driver is not already listed in the CONFIG.SYS file and installed on your hard disk, you can install it using the procedure in "Method 2—Installing Your CD-ROM Device Driver onto the Hard Disk" on page 31.

- A device driver that you permanently add to the *CD-ROM Setup Boot Disk*, using the procedure in "Method 1—Adding Your CD-ROM Device Driver to the CD-ROM Setup Boot Disk" on page 29.

The Recovery Process

> **Important**
>
> If the recovery program is stopped or canceled for any reason before it is completed, before you restart the recovery program, type `CLEAN` at an A: prompt to reset the *CD-ROM Setup Boot Disk*. Then you can restart the program.

If you want to enable FAT 32 file system support, complete the following steps before beginning the Windows 95 reinstallation procedure. If you do not want to enable FAT 32 support, skip the the following steps and proceed to the next section, "Windows 95 Reinstallation" on page 24.

If you enable FAT 32 file system support, the entire hard disk will be partitioned and formatted, and any software and data on the hard disk will be deleted. If possible, back up all your software and data before partitioning and formatting the hard disk and reinstalling Windows 95. After you have reinstalled Windows 95, you must reinstall any application programs and device drivers that were previously installed. (Select **Start**, **Settings**, **Control Panel**, and **System**. Then select the **Device Manager** tab and **Other** to see what did not install.)

To enable FAT 32 support:

1. Insert the *CD-ROM Setup Boot Disk* into drive A.

2. Turn on or restart the computer. The recovery program starts automatically.

3. At the first screen, press Shift+F5. This takes you to an A: prompt.

4. Type `CLS` and press Enter to clear the screen.

5. At the A: prompt, type `FDISK`; then type `Y` and press Enter to enable large disk support. An FDISK Options screen appears. To enable FAT 32 support, all logical drives and DOS partitions must be deleted and new ones created. Select the appropriate option.

6. After completing this procedure, restart the diskette by pressing Ctrl+Alt+Delete, or shut down and restart the computer.

7. The recovery program starts automatically.

8. At the first screen, press Shift+F5. This takes you to an A: prompt.

9. Type `CLS` and press Enter to clear the screen.

10. At the A: prompt, type `FORMAT C:` and press Enter to format the hard drive and type `Y` and press Enter to proceed. (For information about the parameters for each program, type `FDISK /?` or `FORMAT /?`.)

11. After formatting has been completed press Ctrl+Alt+Delete to restart your computer.

12. Proceed to the following section ("Windows 95 Reinstallation"). When you reach step 5 on page 25, "Specify partitioning and formatting of the hard disk," select **2.Do not partition the hard disk**.

Windows 95 Reinstallation

Use the following procedure to reinstall Windows 95:

1. Insert the *CD-ROM Setup Boot Disk* into drive A.

2. Turn on or restart the computer. The recovery program starts automatically.

3. From the first screen, select the language of the *Microsoft Windows 95* CD you are using to reinstall Windows 95. In some cases, the instructions and messages for reinstalling Windows 95 will be displayed in that language; otherwise, they will be displayed in U.S. English. Select **More languages** for a screen of additional languages.

   Note: Make sure that the language you select is the same as the language of the *Microsoft Windows 95* CD. If you select a different language, the recovery program might not be able to find the necessary files on the CD.

4. From the CD-ROM Configuration Selections screen, select one of the following options:

   • **1. Let the recovery program find the CD-ROM driver**

   For this option to work, your hard disk must be partitioned and formatted, the CD-ROM device driver must be installed on the hard disk, and the CD-ROM device driver must be listed in the CONFIG.SYS file on the hard disk. The recovery program attempts to find a CD-ROM device driver (for example, IBMCDROM.SYS or IBMIDECD.SYS) listed in the CONFIG.SYS file on the hard disk.

   If the recovery program finds a CD-ROM device driver listed in the CONFIG.SYS file, it locates that device driver on the hard disk, copies it to the *CD-ROM Setup Boot Disk*, and names the device driver LOADSOFT.SYS.

   Note: If your CD-ROM drive requires more than one device driver (for example, device drivers associated with parallel ports or SCSI chains), do not use this option. In this case, you must add the device drivers to the *CD-ROM Setup Boot Disk* by using the procedure in "Method 1—Adding Your CD-ROM Device Driver to the CD-ROM Setup Boot Disk" on page 29.

If the recovery program cannot find a CD-ROM device driver listed in the CONFIG.SYS file, you are prompted to press any key to continue; then the CD-ROM Driver List screen is displayed (this screen is also displayed when you select **2. Select a CD-ROM driver from the list**).

- **2. Select a CD-ROM driver from the list**

  This screen lists the CD-ROM device drivers that come on the *CD-ROM Setup Boot Disk*. The screen also has a user-added CD-ROM driver selection.

  If you have an IBM internal IDE CD-ROM drive, an IBM SCSI CD-ROM drive with an Adaptec 2940 or 3940 PCI SCSI adapter, or an external Disctec Roadrunner parallel port CD-ROM drive (only if you are using a U.S. CD), you can select one of these CD-ROM device drivers.

  If none of the device drivers in this list will work with your CD-ROM drive and you cannot use option 1, you must permanently add the appropriate device driver to the *CD-ROM Setup Boot Disk*, using the procedure in "Method 1—Adding Your CD-ROM Device Driver to the CD-ROM Setup Boot Disk" on page 29. After you have added the device driver to the diskette, you must select **3. User-added CD-ROM driver** from the CD-ROM Driver List screen.

5. Specify partitioning and formatting of the hard disk.

   You can reinstall Windows 95 in any of the following ways:

   - Partition (or repartition) and format the entire hard disk, and then install Windows 95 on drive C.

   - Format drive C (partition C) only and then install Windows 95 on drive C.

   - Install Windows 95 on drive C without formatting any of the hard disk.

     Note: You can reinstall Windows 95 without reformatting drive C *only* if the release level of Windows 95 that is currently installed is the same as the release level of Windows 95 that is being reinstalled from the *Microsoft Backup* CD. Do not attempt to install Windows 95 over the preinstalled software. You must format partition C first.

   At the Partitioning and Formatting screen, select one of the following options:

   Note: If you enabled FAT 32 select: **2. Do not partition the hard disk** and go to step 6 N.

   - **1. Partition and format the hard disk**

If you choose this option, the entire hard disk is partitioned and formatted, and any software and data on the hard disk is deleted. If possible, back up all your software and data before partitioning and formatting the hard disk and reinstalling Windows 95. After you have reinstalled Windows 95, you must reinstall any application programs and device drivers that were previously installed. (Select **Start**, **Settings**, **Control Panel**, and **System**. Then select the **Device Manager** tab and **Other** to see what was not installed.)

You can partition your hard disk into multiple partitions not larger than 2000 MB each (drive C, drive D, and so on through drive L). If your hard disk is not larger than 2000 MB, you can partition your entire hard disk as one partition (drive C only).

When you select this option, the Partition Size screen is displayed, prompting you to specify the size of each partition. In this screen, the hard-disk space available for partitioning is displayed as *XXXX* MB. To properly install Windows 95, you must specify a minimum of 1000 MB for drive C. If you press **Enter** without specifying an amount, the entire disk is partitioned and formatted as drive C, provided the total capacity of the hard disk does not exceed 2000 MB.

You can specify any size for each of the partitions other than C; however, no partition can exceed 2000 MB. Any unspecified capacity is used for the final partition, provided the amount of space left does not exceed 2000 MB.

- **2. Do not partition the hard disk**

  With this option, you can reinstall Windows 95 without changing the partitioning of the hard disk. If you select this option, later in the recovery process you will specify whether drive C is to be formatted before Windows 95 is reinstalled. If your hard disk has more than one partition, only drive C (partition C) is affected.

  Note: You can reinstall Windows 95 without reformatting drive C *only* if the release level of Windows 95 that is currently installed is the same as the release level of Windows 95 that is being reinstalled from the *Microsoft Backup* CD. Do not attempt to install Windows 95 over the preinstalled software. You must format partition C first.

6. Reinstall Windows 95.

   After you have made the selections, the following message is displayed:

   ```
   Restart the computer to install Windows 95.
   ```

   To begin reinstalling Windows 95, do the following:

   a. Leave the *CD-ROM Setup Boot Disk* in drive A.

b. Insert the *Microsoft Backup* CD into the CD-ROM drive.

c. Press **Ctrl+Alt+Delete** to restart the computer.

d. Press **Y** to accept the IBM license agreement, or press **N** to exit from the recovery program (do *not* press **Enter** after making your selection).

e. If you selected **1. Partition and format the hard disk** from the Partitioning and Formatting screen, skip step 6f and go to step 6g.

f. If you selected **2. Do not partition the hard disk** from the Partitioning and Formatting screen, make one of the following selections from the Format screen (do *not* press **Enter** after making your selection): If you enabled FAT 32 select **N** to not format drive C.

   C   If you press **C** at the Format screen, all software and data on drive C (partition C) is deleted, and drive C is formatted.

   N   If you press **N** at the Format screen, drive C is not formatted, and Windows 95 is reinstalled in place of the currently installed Windows 95. Software and data that are not part of the Windows 95 installation on the hard disk are not affected. This option works *only* if the release level of Windows 95 that is currently installed is the same as the release level of Windows 95 that is being reinstalled from the *Microsoft Backup* CD.

           If you select this option, the installation process will destroy data on the *CD-ROM Setup Boot Disk*, making the diskette unusable. Before continuing, ensure that you are using a backup copy of the *CD-ROM Setup Boot Disk*. Press **C** to continue or **N** to exit and make a copy of the diskette.

Skip step 6g and go to step 6h on page 28.

g. If you selected **1. Partition and format the hard disk** from the Partitioning and Formatting screen (see page 25), make one of the following selections (do *not* press **Enter** after making your selection):

   C   If you press **C**, the hard disk is partitioned and formatted as you specified.

   N   If you press **N**, the hard disk is not partitioned or formatted, and the recovery program ends and returns to an A: prompt.

h. Verify that the *Microsoft Backup* CD is in the CD-ROM drive, and
    press **Y** to continue.

    Note: If you open the CD-ROM drive in this step, after you close
             the drive, you must wait for the drive to recognize that
             there is a CD in the drive before you press **Y.** If the
             message

    ```
    CDR101: Not ready reading drive X
    ```

    is displayed, press **R** (Retry) until the drive recognizes the
    CD.

i. Click on **Continue**. In each of the Windows 95 Setup windows,
    make your selection or type the requested information, and follow
    the prompts. Accept the Microsoft license agreement, and type the
    Product ID number from the Microsoft Certificate of Authenticity
    when you are prompted to do so. (The Certificate of Authenticity
    is attached to the front cover of your Windows 95 manual.)

j. When you are prompted to do so, remove the *CD-ROM Setup Boot
    Disk* from drive A; click on **Finish** to restart the computer and
    begin the hardware setup. Follow the prompts to complete the
    hardware setup.

k. When the hardware setup is completed, click on **OK** to restart
    Windows 95.

    Installing Internet Explorer 3.02

    Internet Explorer 3.02 is provided on some language versions
    of the *Microsoft Backup* CD, but it is not installed during the
    Windows 95 installation. You can install it after the windows
    95 installation is complete.

    ---

l. To install Internet explorer 3.02, go to the OTHER directory on the
    Microsoft Backup CD and then go to the IE302 directory; then run
    MSIE302.EXE under Windows 95. (To install Internet Explorer 4.0x
    go to www.microsoft.com and search for the appropriate
    download.)

m. Remove the CD from the CD-ROM drive.

n. If necessary, install relevant device drivers or other software from
    the *IBM Software Selections* CD. (See Chapter 3, "Using the IBM
    Software Selections CD" on page 13 for additional information.)
    For a list of devices for which device drivers were not installed,
    click on the Windows **Start** button. Then click on **Settings** and
    Control Panel. On the Control Panel, click on **System** and the
    Device Manager tab. Then click on the + symbol next to the
    Other Devices listing. A list of devices for which device drivers
    have not been installed appears. Some of these device drivers can

be installed directly from the *IBM Software Selections* CD; other
device drivers might require that you first make a diskette.

o. Install the Universal Serial Bus (USB) support software from your
IBM Software Selections CD. Select **Windows 95 USB Setup Utility**
from the software installation choices on the *IBM Software Selections*
CD. (For instructions on starting the CD, see page 14.)

Note: Do not install USB support software from the *Microsoft
Windows 95* CD.

Installing Your CD-ROM Device Drivers onto the CD-ROM Setup Boot Disk

Use the information in this section if:

• The recovery program cannot locate the device driver for the CD-ROM
drive you are using, either on the *CD-ROM Setup Boot Disk* or on the
hard disk.

• Your CD-ROM drive requires more than one device driver.

The correct device driver for your CD-ROM drive must be on the *CD-ROM
Setup Boot Disk* when the installation of Windows 95 begins (step 6 on
page 26). This section provides two methods of making the device driver
available to the recovery program. To use either method, you must have
the device driver diskette for your CD-ROM drive.

Method 1 on page 29 provides instructions to add the device drivers to the
CD-ROM Setup Boot Disk by manually copying the device driver onto the
CD-ROM Setup Boot Disk and editing the CONFIG.USE file in one of the
language directories.

Method 2 on page 31 is an alternative method that creates and formats a
small partition on the hard disk, if necessary, and installs the CD-ROM
device driver onto the hard disk. This method allows the recovery program
on the *CD-ROM Setup Boot Disk* to locate the device driver on the hard disk
and copy it to the *CD-ROM Setup Boot Disk*.

Method 1—Adding Your CD-ROM Device Driver to the CD-ROM Setup Boot Disk

The following procedure describes how to add your CD-ROM device driver
(located on your CD-ROM device driver installation diskette) to the
CD-ROM Setup Boot Disk. You must use this procedure if your CD-ROM
drive requires more than one device driver.

To add your CD-ROM device driver to the *CD-ROM Setup Boot Disk*, do the following:

1. Copy your CD-ROM device driver (or drivers) to the root directory of the *CD-ROM Setup Boot Disk*.

2. On the *CD-ROM Setup Boot Disk*, locate the directory for the language you are using. Edit the CONFIG.USE file in that directory, and locate line 9 (do not use a word processing program to edit this file):

   ```
   DEVICEHIGH=A:\XXXXXXXX.SYS /D:IBMCD001
   ```

   Replace *XXXXXXXX.SYS* in line 9 with the name of your CD-ROM device driver.

   Do not change anything else in the line. If your CD-ROM drive requires more than one device driver, you must add another line for each additional device driver.

3. Leave the *CD-ROM Setup Boot Disk* in drive A, and restart the computer. The recovery program starts automatically.

4. From the first screen, select the language of the *Microsoft Backup* CD you are using to reinstall Windows 95. In some cases, the instructions and messages for reinstalling Windows 95 will be displayed in that language; otherwise, they will be displayed in U.S. English. Select **More languages** for a screen of additional languages.

   Note: Make sure that the language you select is the same as the language of the *Microsoft Backup* CD. If you select a different language, the recovery program might not be able to find the necessary files on the CD.

5. From the CD-ROM Configuration Selections screen, select **2. Select a CD-ROM driver from the list**.

6. From the CD-ROM Driver List screen, select **3. User-added CD-ROM driver**.

7. You can now continue the recovery process at step 5 on page 25. (If the hard disk has not yet been partitioned and formatted, you must select **1. Partition and format the hard disk** from the Partitioning and Formatting screen.)

   Note: If you prefer FAT 32 support skip step 7 above and go to 5 on page 25 and follow the instructions for FAT 32 partitioning.

Method 2—Installing Your CD-ROM Device Driver onto the Hard Disk

Note: If your CD-ROM drive requires more than one device driver, you must add the device drivers to the *CD-ROM Setup Boot Disk* using the procedure in "Method 1—Adding Your CD-ROM Device Driver to the CD-ROM Setup Boot Disk" on page 29.

The following procedure describes how to install your CD-ROM device driver from a CD-ROM device driver diskette to your hard disk. Before you can perform this procedure, the hard disk must be partitioned and formatted. If the hard disk is usable and is already partitioned and formatted, you do not have to repartition and reformat it for this procedure. If you are using a new, unformatted hard disk, you must use the FDISK program to partition the disk and then use the FORMAT program to format the disk.

You can partition and format the disk temporarily for the purpose of installing the CD-ROM device driver and then specify permanent partitions when you reinstall Windows 95. In this case, create a small (10 MB) C partition only. Do not create any partition larger than 2000 MB.

Note: If you have not already done so, attempt to back up any data on your hard disk before using this procedure. The FDISK and FORMAT commands used in this procedure will make any data currently on your hard disk unusable.

To partition and format your hard disk, do the following:

1. Insert the *CD-ROM Setup Boot Disk* into drive A.

2. Turn on or restart the computer. The recovery program starts automatically.

3. At the first screen, press **Shift+F5**. This takes you to an A: prompt.

4. Type **CLS** and press **Enter** to clear the screen.

5. At the A: prompt, type **FDISK** to partition or **FORMAT** to format. (For information about the parameters for each program, type **FDISK /?** or **FORMAT /?**.)

The following procedure describes how to install your CD-ROM device driver from a CD-ROM device driver installation diskette. If the CONFIG.SYS file is already on the hard disk, the installation program edits the file to list the CD-ROM device driver. If the CONFIG.SYS file is not already on the hard disk, most installation programs create the file and then edit it to list the CD-ROM device driver.

To install your CD-ROM device driver from a CD-ROM device driver installation diskette, do the following:

1. Insert the *CD-ROM Setup Boot Disk* into drive A.

2. Turn on or restart the computer. The recovery program starts automatically.

3. At the first screen, press **Shift+F5**. This takes you to an A: prompt.

4. Type **CLS** and press **Enter** to clear the screen.

5. Remove the *CD-ROM Setup Boot Disk* from drive A, and insert your CD-ROM device driver installation diskette.

6. Follow the instructions for your device driver installation diskette to install the device driver for your CD-ROM drive.

7. Remove the CD-ROM device driver installation diskette from drive A, and insert the *CD-ROM Setup Boot Disk*.

8. Press **Ctrl+Alt+Delete** to restart the computer. The recovery program starts automatically.

9. From the first screen, select the language of the *Microsoft Backup* CD you are using to reinstall Windows 95. In some cases, the instructions and messages for reinstalling Windows 95 will be displayed in that language; otherwise, they will be displayed in U.S. English. Select **More languages** for a screen of additional languages.

   Note: Make sure that the language you select is the same as the language of the *Microsoft Backup* CD. If you select a different language, the recovery program might not be able to find the necessary files on the CD.

10. From the CD-ROM Configuration Selections screen, select **1. Let the recovery program find the CD-ROM driver**.

11. A message such as

    ```
    The current driver was found at path:
    c:\xxxxxxxx.sys
    ```

    is displayed, indicating that the CD-ROM device driver was found on the hard disk. Press any key to continue.

12. You can now continue the recovery process at step 5 on page 25. (If you need to repartition the hard disk before installing Windows 95, you must select **1. Partition and format the hard disk** from the Partitioning and Formatting screen.)

    Note: If you prefer FAT 32 support skip step 7 above and go to 5 on page 25 and follow the instructions for FAT 32 partitioning.

Chapter 6. Using your diagnostic programs

IBM provides diagnostic programs that you can run to diagnose hardware
and some software problems. Several utility programs that provide
information about your computer are also included.

Note: Additional diagnostic information, such as troubleshooting charts
and corrective measures for power-on self-test (POST) error
messages, is provided in your computer guide.

Enhanced Diagnostics

An *IBM Enhanced Diagnostics* diskette image is provided on your hard disk
and the *IBM Software Selections* CD. This diagnostic program runs
independently of the operating system. The user interface for running the
diagnostics and utility programs is provided by Watergate Software
PC-Doctor.

You can use this program to test the hardware (and some software)
components of your computer. 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. For instructions on
creating and using the *IBM Enhanced Diagnostics* diskette, see your computer
user guide.

PC-Doctor for Windows

The PC-Doctor for Windows program is provided on the *IBM Software
Selections* CD. This diagnostic program is designed specifically for the
Windows operating environment and can be used only when Windows 95
is active. This program not only tests the hardware, but also analyzes
certain software components of your computer. The program is especially
useful in isolating problems related to the operating system and device
drivers.

To use the PC-Doctor for Windows program:

1. If you have not already done so, install the program onto your hard
   disk. (Information about installing software from the *IBM Software
   Selections* CD is in Chapter 4.)

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 NT Workstation 4.0 is also available on the
IBM Software Selections CD. See Chapter 3, "Using the IBM Software
Selections CD" on page 13 for instructions on starting the CD to
view information about the additional software contained on the CD.

Chapter 7. Installing other operating systems

If you install or reinstall Microsoft Windows NT Workstation 3.51 or 4.0, Microsoft Windows 95, or Microsoft Windows 98, you might need software or device drivers. Hardware-specific support software is available on the *IBM Software Selections* CD. If you experience problems with device drivers installed from the *IBM Software Selections* CD, you can obtain updated device drivers from the World Wide Web at http://www.ibm.com/pc/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 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 3, "Using the IBM Software Selections CD" on page 13 to install the support software.

Instructions for reinstalling Windows 95 from the Microsoft Backup CD provided with your computer are in Chapter 5, "Reinstalling Windows 95" on page 21.

Additional instructions for installing operating systems might be available at http:/www/ibm.com/pc/support/ on the World Wide Web.

Note: Not all software is available for all operating systems. See the *IBM Software Selections* CD to find out which programs are available for your operating system.

Appendix A. Notices and Trademarks

This appendix includes notices and trademark information.

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