**IBM Personal Computer** 

About Your Software Windows 95, Applications, and Support Software



IBM Personal Computer

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

Before using this information and the product it supports, be sure to read the information in Appendix A, "License Information" on page 43 and Appendix B, "Notices and Trademarks" on page 47.

#### First Edition (March 1998)

The following paragraph does not apply to the United Kingdom or any country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This publication could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time.

This publication was developed for products and services offered in the United States of America. IBM may not offer the products, services, or features discussed in this document in other countries, and the information is subject to change without notice. Consult your local IBM representative for information on the products, services, and features available in your area.

Requests for technical information about IBM products should be made to your IBM reseller or IBM marketing representative.

#### © Copyright International Business Machines Corporation 1998. All rights reserved.

Note to U.S. Government Users — Documentation related to restricted rights — Use, duplication or disclosure is subject to restrictions set forth in GSA ADP Schedule Contract with IBM Corp.

## Contents

About This Book	v
Chapter 1. Overview of Your Software	1
Preinstalled Software	1
Ready-to-Install Software	3
Chapter 2. Getting Started	5
Starting Your Computer for the First Time	5
What You Need Before You Start	5
Running the Windows 95 Setup Program	6
Using the IBM Welcome Center	7
Using the Software Installation Program	8
Registering Your Computer	9
What It Means to Register	10
How to Register	10
Accessing Your Complimentary Screen Savers	11
Viewing Online Books	11
Using AntiVirus, ConfigSafe, System Management Tools, and	
Other Programs	12
IBM AntiVirus for Windows 95	13
ConfigSafe for Windows 95	14
IBM System Management Tools	16
Shutting Down Your Computer	20
	20
Chapter 3. Installing Other Operating Systems	21
Chanter 4 Reinstalling Windows 95	23
About the Windows 95 CD	~0 23
Requirements	24
The Recovery Process	25
Windows 05 Poinstallation	20
Installing Your CD POM Device Drivers onto the CD POM	20
Setup Boot Disk	32
Chanter 5. Using the Ready-to-Configure Utility Program CD	37
Features of the CD	37
Starting the CD	38
	50
Chapter 6. Using Your Diagnostic Programs	39
Enhanced Diagnostics	39

PC-Doctor for Windows	41
Appendix A. License Information	43
Program Name	43
Additional Terms and Conditions	43
Program Services	44
Warranty	44
U.S. Government Users Restricted Rights	44
Other Documentation	44
Other Additional Terms and Conditions	45
Appendix B. Notices and Trademarks	47
Notices	47
Trademarks	47

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, "Installing Other Operating Systems" on page 21, contains information about installing other operating systems and support software.
- Chapter 4, "Reinstalling Windows 95" on page 23, contains information about reinstalling Windows 95 for recovery purposes.
- Chapter 5, "Using the Ready-to-Configure Utility Program CD" on page 37, contains information about installing or reinstalling software provided on the *Ready-to-Configure Utility Program* CD.
- Chapter 6, "Using Your Diagnostic Programs" on page 39, contains information about the IBM Enhanced Diagnostic and the PC-Doctor for Windows diagnostic programs that come with your computer.
- Appendix A, "License Information" on page 43, contains information about your software licenses.
- Appendix B, "Notices and Trademarks" on page 47, contains legal notices and trademark information.

Your computer comes with a variety of software: Microsoft Windows 95<sup>1</sup>, application programs, diagnostic tools, and device drivers. Some of the software is *preinstalled* and some is *ready to install*. The software is licensed under the terms of the program license agreements provided with your computer and the license information in Appendix A of this booklet.

## **Preinstalled Software**

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

- Device drivers for factory-installed features
- 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, start the *Ready-to-Configure Utility Program* CD, and obtain information about IBM products and technical support.

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, 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 preinstalled in your computer. Use the *Microsoft Windows 95* CD (and the *CD-ROM Setup Boot Disk*) in conjunction with the *Ready-to-Configure Utility Program* CD if you need to reinstall the operating system. (Diskettes for

<sup>&</sup>lt;sup>1</sup> The Microsoft Certificate of Authenticity is your assurance that the Windows 95 software on your computer is legally licensed from Microsoft Corporation.

your Windows 95 operating system and preinstalled software are not available from IBM.) For information about reinstalling Windows 95, refer to Chapter 4, "Reinstalling Windows 95" on page 23.

- 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 *Using Your Personal Computer* booklet. Also, you might find updated device drivers and files on the World Wide Web or BBS.
- 3. Your hard disk is divided into multiple file allocation table (FAT) partitions. The C partition contains Windows 95 and the other preinstalled software. The other partitions are formatted but contain no files.
- 4. At your earliest opportunity, create the following diskettes:
  - a. 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 6, "Using Your Diagnostic Programs" on page 39.)
  - b. A backup copy of the *CD-ROM Setup Boot Disk* referred to in note 1 on page 1. 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.

## **Ready-to-Install Software**

Ready-to-install software is provided on your *Ready-to-Configure Utility Program* CD and your hard disk. In addition to some of your IBM-preinstalled programs and device drivers, your CD and hard disk also contain 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. Note 1 lists the ready-to-install software that is on your hard disk.

#### Notes:

- 1. **IBM AntiVirus, ConfigSafe, IBM System Management Tools**, and **Enhanced Diagnostic** 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 8 for instructions on installing the first three products from your hard disk; see "Using AntiVirus, ConfigSafe, System Management Tools, and Other Programs" on page 12 for descriptions. See Chapter 6, "Using Your Diagnostic Programs" on page 39 for instructions on creating and starting an enhanced diagnostic diskette.
- 2. Microsoft Internet Explorer 4.0x ready-to-install software is on your hard disk. Although your Windows 95 operating system comes standard with Microsoft Internet Explorer 3.02, IBM provides Version 4.0x on the desktop so that you can easily install this update if you want to do so. Refer to page 12 for a description of this product and for instructions on installing it from the desktop.
- 3. The actual software on the *Ready-to-Configure Utility Program* CD is subject to change and might be different from the following list. Some similar software for other operating systems (listed on page 21) is also on the CD. Additional information about the CD is in Chapter 5.

CoSession Remote	A communication tool that enables an IBM technician or in-house administrator to diagnose and fix computer problems from a remote location. The connection can be made through a modem or a LAN connection.
IBM Global Network Dialer	This software allows you to dial into the World Wide Web through the IBM Global Network. If you install this software, you will also be able to install the Netscape Navigator browser.
IBM Netfinity Services	Software that enables you to view detailed information about your computer hardware and software, browse 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 can be used 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 6, "Using Your Diagnostic Programs" on page 39.)

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 (WELCOME - Click Here to Begin icon on the Windows 95 desktop)
  - Install and access IBM AntiVirus, ConfigSafe, and IBM System Management Tools
  - Use the online program to register your computer with IBM and then access the complimentary screen savers
  - View online books
  - 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 into multiple file allocation table (FAT) partitions. The C partition contains Windows 95 and the other preinstalled software. The other partitions are formatted but contain no files.
- 4. At your earliest opportunity, create the *IBM Enhanced Diagnostic* diskette and backup *CD-ROM Setup Boot Disk* referred to in note 4 on page 2.

## Using the IBM Welcome Center

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

- Install the following software that is provided on your hard disk in a ready-to-install form:
  - IBM AntiVirus
  - ConfigSafe
  - IBM System Management Tools
- Create a self-starting diagnostic diskette
- 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 Personal Computer
  - Understanding Your Personal Computer
  - Netfinity Services User's Guide
- Start the *Ready-to-Configure Utility Program* CD to install additional software, such as that listed under "Ready-to-Install Software" on page 3
- 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.

To access and use the IBM Welcome Center:

- 1. Close the Welcome to Windows 95 window if it is open.
- 2. Double-click on 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 on 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, scroll to and click on a selectable topic. (Selectable topics are highlighted and underlined.) When applicable, follow the instructions that appear on the screen.

#### Notes:

- 1. This chapter contains additional information about performing specific tasks from the IBM Welcome Center.
- 2. 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.

## 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 IBM AntiVirus, ConfigSafe, and IBM System Management Tools, and create a diagnostic diskette
- Delete this Ready-to-Configure utility program from your hard disk
- Read information about IBM AntiVirus, ConfigSafe, IBM System Management Tools, and the Enhanced Diagnostic program.
- *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 5.

To use the preinstalled utility program:

- 1. Close the Welcome to Windows 95 window if it is open.
- 2. Double-click on the WELCOME Click Here to Begin icon.
- 3. In the IBM Welcome Center window, click on **Getting Started**. The related information is displayed.
- 4. Scroll to and click on **Start the software installation utility** in the Installing Additional Software section.
- 5. When the Ready-to-Configure Utility menu appears, click on the applicable button:
  - a. **Install Applications** to install IBM AntiVirus, ConfigSafe, IBM System Management Tools, or create an Enhanced Diagnostic diskette.

Additional information about the first three applications is in "Using AntiVirus, ConfigSafe, System Management Tools, and Other Programs" on page 12. Additional information about creating and using the diagnostic diskette is in Chapter 6, "Using Your Diagnostic Programs" on page 39.

- 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 IBM AntiVirus, ConfigSafe, IBM System Management Tools, and the Enhanced Diagnostic 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 95 window if it is open.
- 2. Double-click on the WELCOME Click Here to Begin icon.
- 3. In the IBM Welcome Center window, click on **Getting Started**. The related information is displayed.
- 4. Scroll to and click on **Register your computer** in the IBM Product Registration section; then follow the instructions on the screen.

or

- 1. Click on the Windows Start button.
- 2. Select **Programs**, and click on **WELCOME Click Here to Begin**.
- 3. In the IBM Welcome Center window, click on **Getting Started**. The related information is displayed.

4. Scroll to and click on **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 on the Windows Start button.
- 2. Select Settings.
- 3. Click on **Control Panel**.
- 4. Double-click on Display.
- 5. Click on the Screen Saver tab.
- 6. Click on the Screen Saver pull-down menu in the Screen Saver section.
- 7. Click on 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 on OK.

## Viewing Online Books

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

- 1. Close the Welcome to Windows 95 window if it is open.
- 2. Double-click on the WELCOME Click Here to Begin icon.
- 3. In the IBM Welcome Center window, click on **Online Library**; then scroll to and click on the name of the book you want to read.

## Using AntiVirus, ConfigSafe, System Management Tools, and Other Programs

This section contains information about IBM AntiVirus for Windows 95, ConfigSafe for Windows 95, IBM System Management Tools, and other programs that come with your computer.

Your computer has standard desktop programs provided by Windows 95: My Computer, Inbox, Recycle Bin, The Internet, My Briefcase, Online Services, and The Microsoft Network. In addition, your computer comes with standard Windows 95 programs that you access through the Programs choice on the Windows Start menu: Accessories, StartUp, MS-DOS prompt, Windows Explorer, and so on. For information about the software in these groups, refer to your Windows 95 manual or online Help.

In addition, your computer comes with an extra application on the desktop that is provided by IBM as a convenience to you. Microsoft Internet Explorer 4.0x, is an updated, ready-to-install version of the Internet Explorer. This application makes it easy to navigate and find information on your company's intranet or on the World Wide Web. (Note that Microsoft provides Internet Explorer 3.02 with the Windows 95 operating system preinstalled in your computer; IBM provides Microsoft's Internet Explorer 4.0x in a ready-to-install form on the hard disk so that you can easily install it from the desktop if you want to.)

If you want to install Internet Explorer 4.0x, double-click on the **IE4 Setup** icon on the desktop. Follow the instructions on the screen. When you install Version 4.0x, a channel bar appears to the right of the desktop screen.

*Note:* You must be connected to your company's intranet or to the World Wide Web (or both) to be able to use Internet Explorer. For information on connecting to the World Wide Web, as well as further information on the Internet Explorer tool, refer to the Microsoft Windows 95 manual provided with your computer.

Additional software is provided on the *Ready-to-Configure Utility Program* CD. See Chapter 5, "Using the Ready-to-Configure Utility Program CD" on page 37 for additional information. Diagnostic software is described in Chapter 6, "Using Your Diagnostic Programs" on page 39.

#### IBM AntiVirus for Windows 95

The IBM AntiVirus for Windows 95 program is a comprehensive antivirus product that detects and removes viruses from your computer. To install the IBM AntiVirus program:

- 1. Close the Welcome to Windows 95 window if it is open.
- 2. Double-click on the WELCOME Click Here to Begin icon.
- 3. In the IBM Welcome Center window, click on **Getting Started**. The related information is displayed.
- 4. Scroll to and click on **Start the software installation utility** in the Installing Additional Software section.
- 5. When the Ready-to-Configure Utility menu appears, click on the **Install Applications** button. In the Installation Choices window, click on **IBM AntiVirus** to highlight it.
- 6. Click on the **Add** button to move the title to the panel on the right; then click on the **Install** button.

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

- 1. Click on the Windows Start button.
- 2. Select Programs, AntiVirus, and then click on IBM AntiVirus.
- 3. In the IBM AntiVirus for Windows 95 window, click on **Setup** on the menu bar; then click on **Automated check** in the pull-down menu.
- 4. Review or make any desired changes to the settings.
- 5. Click on the **Check options** button to specify how the virus checking is to be done (such as checking specific devices and directories). When you are finished, click on **OK** to return to the Automated Check window.

6. If you have made any changes and want to save them, click on the **Save Settings** button.

Support documentation is provided online. To access this documentation, click on the Windows **Start** button. Then select **Programs, AntiVirus**.

## ConfigSafe for Windows 95

The ConfigSafe for Windows program is a comprehensive configuration tracking and recovery tool for Windows 95. 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 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 95 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.

To install the ConfigSafe program:

- 1. Close the Welcome to Windows 95 window if it is open.
- 2. Double-click on the WELCOME Click Here to Begin icon.
- 3. In the IBM Welcome Center window, click on **Getting Started**. The related information is displayed.
- 4. Scroll to and click on **Start the software installation utility** in the Installing Additional Software section.

- 5. When the Ready-to-Configure Utility menu appears, click on the **Install Applications** button. In the Installation Choices window, click on **ConfigSafe** to highlight it.
- 6. Click on the **Add** button to move the title to the panel on the right; then click on the **Install** button.

To access the program after it is installed:

- 1. Click on the Start button.
- 2. Select Programs, ConfigSafe, and then click on CONFIGSAFE.

Support documentation is built into the online Help system. To access online Help, click on the Windows **Start** button. Then select **Programs, ConfigSafe**.

#### **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<sup>®</sup> LANDesk<sup>®</sup> 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.pc.ibm.com/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.pc.ibm.com/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.pc.ibm.com/us/cdt/ on the World Wide Web.

## Installing IBM System Management Tools

To install IBM System Management Tools:

- 1. Close the Welcome to Windows 95 window if it is open.
- 2. Double-click on the WELCOME Click Here to Begin icon.
- 3. In the IBM Welcome Center window, click on **Getting Started**. The related information is displayed.
- 4. Scroll to and click on **Start the software installation utility** in the Installing Additional Software section.
- 5. When the Ready-to-Configure Utility menu appears, click on the **Install Applications** button. In the Installation Choices window, click on **IBM ClientCare Setup** to highlight it.
- 6. Click on the **Add** button to move the title to the panel on the right; then click on the **Install** button.

To access IBM System Management Tools after they are installed:

- 1. Click on the Windows Start button.
- 2. Select **Programs**, **IBM ClientCare Setup**, and then click on the desired choice.

For online Help, click on the Windows **Start** button. Then select **Programs, IBM ClientCare Setup**. The pull-down menu to the right

of the screen has support documentation built into the DMI MIF Browser menu items.

## **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 on the Windows Start button.
- 4. Click on Shut Down; then click on Yes 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.

If you install or reinstall Microsoft Windows NT Workstation 3.51 or 4.0, Microsoft Windows 95, or OS/2, 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 from the World Wide Web at http://www.pc.ibm.com/us/files.html, or on the IBM PC Bulletin Board System.) You can obtain SCO Unix device driver support at http://www.adaptec.com on the World Wide Web.

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 5, "Using the Ready-to-Configure Utility Program CD" on page 37 to install the support software.

Instructions for reinstalling Windows 95 from the *Microsoft Windows* 95 CD provided with your computer are in Chapter 4, "Reinstalling Windows 95" on page 23.

#### 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://www3.pc.ibm.com/support?page=IBM+PC. Click on Hints and tips, and then click on IBM PC 300PL and PC 300GL – Installing retail Windows 95 (Type 6862, 6892, 6275, and 6285).

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 Windows 95* 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 Windows 95* 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 Windows* 95 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 *Ready-to-Configure Utility Program* CD to install applications and device drivers if necessary. Refer to Chapter 5, "Using the Ready-to-Configure Utility Program CD" on page 37 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 (BBS).

## **Requirements**

To use the Windows 95 CD 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 Windows 95 CD
- The backup copy of the *CD-ROM Setup Boot Disk* (see the note on page 23)

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 29). 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 34.
- 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 33.

## **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 26.

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** 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.
- Proceed to the following section ("Windows 95 Reinstallation"). When you reach step 5 on page 27, "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 33.

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 33. 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 Windows 95* 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:

• 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 *XXXXMB*. 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 Windows 95* 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 Windows 95 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 on page 30 and go to step 6g on page 30.

- 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):
  - **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 Windows* 95 CD.
    - *Note:* 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*.

Skip step 6g and go to step 6h on page 31.

- g. If you selected **1**. **Partition and format the hard disk** from the Partitioning and Formatting screen (see page 28), 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 Windows 95* 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  $\mathbf{R}$  (Retry) until the drive recognizes the CD.

- 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.
- A Windows 95 Setup screen appears. If you want to install Internet Explorer 4.0x and its active desktop, click on Next. If you do not want to install Internet Explorer 4.0x, click on the Windows Start button. Then click on Shutdown, Restart the Computer, and Yes.
- m. Remove the CD from the CD-ROM drive.
- n. If necessary, install relevant device drivers or other software from the *Ready-to-Configure Utility Program* CD. (See Chapter 5, "Using the Ready-to-Configure Utility Program CD" on page 37 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 *Ready-to-Configure Utility Program* CD; other device drivers might require that you first make a diskette.

- o. Install the Universal Serial Bus (USB) support software from your *Ready-to-Configure Utility Program* CD. Select Windows 95 USB Setup Utility from the software installation choices on the *Ready-to-Configure Utility Program* CD. (For instructions on starting the CD, see page 38.)
  - *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 29). 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 33 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 34 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:

DEVICEHIGH=A:\XXXXXXX.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 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.

- From the CD-ROM Configuration Selections screen, select
  Select a CD-ROM driver from the list.
- 6. From the CD-ROM Driver List screen, select **3. User-added CD-ROM driver**.
- You can now continue the recovery process at step 5 on page 27. (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.)

## 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 33.

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 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.
- 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:\xxxxxxx.sys

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

 You can now continue the recovery process at step 5 on page 27. (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.) 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 a variety of 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 on 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 Program License Agreement and the License Information contained in the CD overview. The license information in Appendix A of this booklet is for the preinstalled software; the license information in the CD overview is for the CD software.

## Starting the CD

To install *Ready-to-Configure Utility Program* CD software or view overview information about the related device drivers and programs:

- 1. Insert the *Ready-to-Configure Utility Program* CD into your CD-ROM drive.
- 2. Start the CD: From the Windows 95 or Windows NT 4.0 desktop, double-click on WELCOME Click Here to Begin, click on System Customization, and click on Run the Ready-to-Configure utility.

or

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

• For Windows 95 or Windows NT 4.0: Click on the Windows **Start** button, click on **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 on **File** on the menu bar, click on **Run**, and then type

e:\ibmsetup

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

• For OS/2: At an OS/2 command prompt, type

start /win 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 documents are also provided. 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 the *Using Your Personal Computer* booklet.

## **Enhanced Diagnostics**

An *IBM Enhanced Diagnostic* diskette image is provided on your hard disk and the *Ready-to-Configure Utility Program* CD. This diagnostic program runs independently of the operating system. The user interface for running the diagnostics and utilities is provided by Watergate Software's 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.

This section contains instructions for:

- Creating an *IBM Enhanced Diagnostic* diskette from the image on your hard disk.
  - *Note:* For information about creating a diskette (from the Diskette Factory) on the *Ready-to-Configure Utility Program* CD, see page 37.
- Starting the program from diskette.

To create an IBM Enhanced Diagnostic diskette:

- 1. Close the Welcome to Windows 95 window if it is open.
- 2. Double-click on the WELCOME Click Here to Begin icon.
- 3. In the IBM Welcome Center window, click on **Getting Started**. The related information is displayed.
- 4. Scroll to and click on **Start the software installation utility** in the Installing Additional Software section.

- 5. When the Ready-to-Configure Utility menu appears, click on the **Install Applications** button.
- 6. In the Installation Choices window, click on **IBM Enhanced Diagnostic** to highlight it.
- 7. Click on the **Add** button to move the title to the panel on the right; then click on the **Install** button.
- 8. Press **Enter** to continue and read the license information. Follow the instructions that appear at the bottom of the window.
- 9. When prompted, insert a blank, high-density diskette into the diskette drive and press **Enter**.
- 10. When the process is complete, remove the diskette and label it.

To start the enhanced diagnostic program:

- 1. Shut down Windows 95 and turn off the computer. (For instructions, see "Shutting Down Your Computer" on page 20.)
- 2. Turn off any attached devices.
- 3. Insert the IBM Enhanced Diagnostic diskette into drive A.
- 4. Turn on all attached devices; then turn on your computer.
- 5. Follow the instructions that appear on the screen. For help, press **F1**.

## **PC-Doctor for Windows**

The PC-Doctor for Windows program is provided on the *Ready-to-Configure Utility Program* 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 *Ready-to-Configure Utility Program* CD is in Chapter 5.)
- 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 4.0 is also available on the *Ready-to-Configure Utility Program* CD. See Chapter 5, "Using the Ready-to-Configure Utility Program CD" on page 37 for instructions on starting the CD to view information about the additional software contained on the CD.

The license information in this booklet is for IBM and non-IBM logo programs covered by the IBM International Program License Agreement. IBM may provide programs with this computer which come with their own license agreements. Unless otherwise expressly provided by IBM, IBM provides these programs to you "AS IS" WITHOUT WARRANTIES OF ANY KIND, INCLUDING, BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Some programs referred to in this booklet might not be available in all languages or in all countries. Some programs might be different from the retail versions and might be customized to work only with the product with which they are shipped. These programs might not include all documentation or functions. Not all programs are sold separately.

## **Program Name**

- Preinstalled Software Package (excluding Windows 95)
- CD-ROM Setup Boot Disk (provided with the Windows 95 CD)

## **Additional Terms and Conditions**

Authorization for Copy and Use on Home/Portable Computer: Not applicable for these programs.

**Transfer of Program:** Programs are transferable with written consent from the party (IBM or its reseller) from whom you acquired the program.

**Proof of Entitlement:** The Proof of Purchase for the computer that contains these programs should be retained in order to support eligibility provided by IBM or its authorized reseller for future upgrade program prices (if announced), potential special or promotional opportunities (if any), and as evidence of the end user's authorized use of these IBM-licensed programs.

Technical support for programs provided with your system is available on a limited basis. See the publications provided with your system for details.

## **Program Services**

**Availability/Duration of Program Services:** No program services are available for these programs.

**Statement of Service:** No program services are available. These licensed programs are provided "AS IS."

## Warranty

- Preinstalled Software Package No.
- CD-ROM Setup Boot Disk No.

PROGRAMS DESIGNATED AS "NO" ARE PROVIDED WITHOUT A PROGRAM WARRANTY. THEY ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. IBM DISCLAIMS ALL WARRANTIES FOR THESE PROGRAMS, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

## **U.S. Government Users Restricted Rights**

U.S. Government Users Restricted Rights—Use, duplication, or disclosure restricted by the GSA ADP Schedule Contract with IBM Corporation.

## **Other Documentation**

Any other documentation with respect to its licensed program, including any such documentation referenced herein, is provided for information purposes only and does not extend or modify the material contained in the License information.

## **Other Additional Terms and Conditions**

These additional terms and conditions apply to device drivers, utility programs, and flash BIOS code ("System Programs") shipped with an IBM system ("System") on diskette or CD-ROM, preinstalled on a System, created on diskette from a CD-ROM, System, or Local Area Network (LAN) using a diskette-creation program provided by IBM, or placed on a LAN. A System includes IBM computers, features, conversions, upgrades, and options, either separately or in any combination.

If you are the rightful possessor of a System, or if you have obtained the System Programs for the sole purpose of maintaining a System, IBM or the applicable IBM country organization grants you a license to use the System Programs as part of or in conjunction with a System, or to restore and maintain the System Programs. You can make copies of the System Programs and distribute them to the rightful possessor of a System and install the System Programs for a rightful possessor (but only to the extent necessary to restore or maintain the System), provided that you supply such party a copy of this Agreement. Initial use of the System Programs by such party shall indicate acceptance of this agreement.

YOU MUST REPRODUCE THE COPYRIGHT NOTICE AND ANY OTHER LEGEND OF OWNERSHIP ON EACH COPY, OR PARTIAL COPY, OF A PROGRAM YOU CREATE ON DISKETTE OR OTHER PORTABLE MEDIUM. This appendix gives legal notice of IBM product availability, patents, and patents pending, as well as trademark information.

## Notices

References in this publication to IBM products, programs, or services do not imply that IBM intends to make these available in all countries in which IBM operates. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Subject to IBM's valid intellectual property or other legally protectable rights, any functionally equivalent product, program, or service may be used instead of the IBM product, program, or service. The evaluation and verification of operation in conjunction with other products, except those expressly designated by IBM, are the responsibility of the user.

IBM may have patents or pending patent applications covering subject matter in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing IBM Corporation 500 Columbus Avenue Thornwood, NY 10594 U.S.A.

## Trademarks

The following terms are trademarks of the IBM Corporation in the United States or other countries or both:

Alert on LAN	Netfinity
Global Network	OS/2
HelpCenter	PC 300
IBM	SMART Reaction
IBM Global Network	Wake on LAN

Microsoft, MS-DOS, Windows, and Windows NT are trademarks or registered trademarks of Microsoft Corporation.

Intel and LANDesk are registered trademarks of Intel Corporation.

Other company, product, and service names may be trademarks or service marks of others.



Part Number: 06J0850

Printed in U.S.A.

June 1999

