

IBM Personal Computer

**About Your Software
Windows 98, Applications,
and Support Software**

IBM Personal Computer

**About Your Software
Windows 98, Applications,
and Support Software**



Note

Before using this information and the product it supports, be sure to read the information in “Viewing the license agreement” on page 8 and Appendix A, “Notices and trademarks” on page 25.

Third Edition (May 1999)

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, 1999. 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
Software on the Software Selections CD	2
Chapter 2. Getting started	5
Starting your computer for the first time	5
What you need before you start	5
Running the Windows 98 Setup program	6
Using the IBM Welcome Center	7
Viewing the license agreement	8
Registering your IBM computer	8
What it means to register your computer	8
How to register	9
Accessing your complimentary screen savers	9
Viewing online books	10
Using ConfigSafe	10
Shutting down your computer	11
Chapter 3. Using the Software Selections CD	13
Features of the CD	13
Starting the CD	14
Chapter 4. Software Selections CD applications	15
ConfigSafe	15
Norton AntiVirus for IBM	15
IBM Enhanced Diagnostic	16
Management Software	16
IBM Universal Management Agent components	16
IBM Universal Management Agent Plus	17
Installing IBM Universal Management Agent	18
IBM System Management Tools	18
Components of IBM System Management Tools	19
Chapter 5. Using the IBM Product Recovery CD	21
Recovering the operating system and support software	21
Changing the startup sequence	22
Chapter 6. Installing other operating systems	23
Appendix A. Notices and trademarks	25
Notices	25
Trademarks	26

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 Software Selections CD” on page 13, contains information about installing or reinstalling software provided on the *Software Selections* CD.
- Chapter 4, “Software Selections CD applications” on page 15, contains information about the additional software provided with your computer.
- Chapter 5, “Using the IBM Product Recovery CD” on page 21, contains information about using the *Product Recovery* CD to restore your operating system and other preinstalled software.
- Chapter 6, “Installing other operating systems” on page 23, contains information about installing other operating systems and support software.
- Appendix A, “Notices and trademarks” on page 25, contains legal notices and trademark information.

Chapter 1. Overview of your software

Your computer comes with Microsoft® Windows® 98¹ and a variety of software, including application programs, diagnostic tools, and device drivers. Some of the software is *preinstalled* and other software is on the *Software Selections* CD.

Important:

The software, other than Microsoft Windows 98, 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 8 of this booklet for information on viewing the license agreement.

Preinstalled software

In addition to Windows 98, your preinstalled software includes the following:

- 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.
- The IBM Welcome Center, which is a central location from which you can register your computer, set the time and date, set up your printer, view online books, read the license agreement and online warranty, start the *Software Selections* CD to install software provided by IBM, and obtain information about IBM products and technical support.
- Microsoft Office Small Business Edition (SBE), which is preinstalled in some models.
- If your computer came with Microsoft Office SBE, you also will have been provided with Internet Explorer 4.0. Computers that have Microsoft Office 2000 will come with Internet Explorer 5.0a. You can use Internet Explorer to navigate and find information on your company intranet or on the World Wide Web.

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

¹ The Microsoft Certificate of Authenticity is your assurance that the Windows 98 software on your computer is legally licensed from Microsoft Corporation.

Important:

1. No backup diskettes for your preinstalled software are shipped with your computer. However, the *Software Selections* CD contains most of your IBM-preinstalled programs and device drivers.

In addition, the Microsoft Windows 98 operating system and preinstalled software are provided on the *Product Recovery* CD for backup purposes. Use the IBM *Product Recovery* CD and the *Software Selections* CD if you need to reinstall the operating system or additional software. (Diskettes for your Windows 98 operating system and preinstalled software are not available from IBM.) For more information about reinstalling Windows 98, see Chapter 5, “Using the IBM Product Recovery CD” on page 21.

2. The device drivers and some programs also are 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 the user guide for your computer. Also, you might find updated device drivers and files on the World Wide Web or BBS.
3. Your hard disk is divided file allocation table (FAT) partition (C:\FAT32). The C partition contains Windows 98 and the other preinstalled software.

Software on the Software Selections CD

In addition to your IBM-preinstalled programs and device drivers, additional software is provided on the *Software Selections* CD. You decide which programs to install, based on your needs.

The following is a list of some of the software that is provided on the *Software Selections* CD. Note that the software on the CD is subject to change and might be different from the following list. Software on the *Software Selections* CD is supported for Windows NT Workstation 3.51 and 4.0, Windows 95, and Windows 98. See Chapter 3, “Using the Software Selections CD” on page 13 for further information about the *Software Selections* CD.

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, “Software Selections CD applications” on page 15 for more information.
Enhanced Diagnostic	Enhanced Diagnostic is a testing program that helps identify hardware related problems. Refer to the user guide for your computer for instructions on creating and starting an <i>Enhanced Diagnostic</i> 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 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.

i.Share

You can use i.Share Server to share a single Internet connection on a server across as many as ten client computers running i.Share Client.

RingCentral

You can use RingCentral to send and receive faxes.

Not all software is available for all operating systems. See the *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 98 Setup procedure before you can access Windows 98 for the first time.

What you need before you start

Before you start the Windows 98 Setup procedure, you need the following:

- The Windows 98 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 98 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 98 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 98 manual.

Notes:

1. During the Setup procedure, you must indicate that you accept the Windows 98 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 98 manual.
2. After the Setup procedure is completed and the computer is restarted, the Windows 98 desktop appears with the Welcome to Windows 98 window open. This window contains five options:
 - Register Now: Click this option if you want to register your Windows 98 software with Microsoft. (You must have a modem installed to do this.)
 - Connect to the Internet: Click this option if you want to set up an Internet connection.
 - Discover Windows 98: Click this option to access information on the following:
 - Computer Essentials
 - Windows 98 Overview
 - What's New
 - More Windows 98 Resources
 - Maintain Your Computer: Click this option if you want to adjust the settings of your computer for optimum performance or set up a maintenance schedule for your computer.
 - Start IBM Welcome: Click this option if you want to use the features of the IBM Welcome Center. For further information on the IBM Welcome Center, refer to “Using the IBM Welcome Center” on page 7.
3. At your earliest opportunity, create the *IBM Enhanced Diagnostic* diskette. (For instructions on creating the diskette, see the user guide for your computer.)

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
- Start the *Software Selections* CD to install additional software, such as that listed in “Software on the Software Selections CD” on page 2. Also, see Chapter 3, “Using the Software Selections CD” on page 13.
- Perform some system setup tasks, such as:
 - Setting the time and date
 - Reading information about arranging your workspace
- 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:
 - *Understanding Your Personal Computer*
 - *Netfinity Services User's Guide*

To access and use the IBM Welcome Center:

1. Double-click the **Start IBM Welcome** icon on the Windows 98 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 98 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, 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 *Software Selections* CD by selecting **Install IBM Utilities** from the list of applications to be installed. See Chapter 3, “Using the Software Selections CD” on page 13 for more information.

Registering your IBM computer

Registering your computer 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. (For information on registering your Windows 98 software with Microsoft, refer to page 6.)

What it means to register your computer

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. In the IBM Welcome Center window, click **Complete your hardware setup**. The related information is displayed. See page 7 for help accessing the IBM Welcome Center.
2. Scroll to and click **Register your computer** in the Register with IBM section; then follow the instructions on the screen.

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

Accessing your complimentary screen savers

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

1. Click the Windows **Start** button.
2. 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

To access and view online books, do the following:

1. In the IBM Welcome Center window, click **View Online Books**.
2. Scroll to and click the name of the book you want to read.

Some of the online books are created using Portable Document Format (PDF). You need to have Adobe Acrobat Reader installed to view these books. For help installing Adobe Acrobat Reader, follow step 1 above and then double-click **PDF Books**, and **Installing Adobe Acrobat Reader**.

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 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**; then click **OK** to confirm the request.

The next time you turn on your computer, Windows 98 restores any windows that were open the last time you shut down your computer.

Chapter 3. Using the Software Selections CD

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

Features of the CD

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

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

Important

The *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 CD on models equipped with a CD-ROM drive.
- Create an image of the *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 *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 *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 8.)

Starting the CD

To use the *Software Selections* CD, insert the *Software Selections* 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 98 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. Software Selections CD applications

This section contains information about some important applications available on your Software selections CD, such as Norton AntiVirus for IBM, IBM Enhanced Diagnostic, and on some models the IBM Universal Management Agent program. To install these applications, refer to Chapter 3, “Using the Software Selections CD” on page 13.

ConfigSafe

This program is preinstalled. However, it is included on the 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 Diagnostic

An *IBM Enhanced Diagnostic* diskette image is provided on the *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 Diagnostic* diskette, see the user guide for your computer.

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 *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 *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 *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 10 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. Using the IBM Product Recovery CD

The IBM *Product Recovery* CD is provided with your computer so that you can reinstall Windows 98 and preinstalled applications and device drivers in case of a hard disk failure or other damage to your Windows 98 files.

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

Your hard disk is divided by multiple file allocation table (FAT) partition. The C partition (C:\FAT32) contains Windows 98 and the other preinstalled software. The *Product Recovery* CD for Windows 98 will work correctly if your primary partition is FAT16 or FAT32. If your primary partition is not FAT16 or FAT32, you will see a message about an invalid partition that needs to be repartitioned with the FDISK command.

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

Note: Some computers come with Microsoft Office SBE. If you need to reinstall your Microsoft Office SBE files, you must use the Microsoft Office CD packaged with your computer. These files are not available on the IBM *Product Recovery* CD.

Recovering the operating system and support software

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

1. Make backup copies of configuration files and any files you created. Any files not backed up will be lost.
2. Insert the IBM *Product Recovery* CD into your CD-ROM drive.
3. Restart your computer and follow the instructions on the screen. If your computer does not start from the CD, you need to change your startup sequence. (See "Changing the startup sequence" on page 22.)
4. When the recovery is complete, remove the IBM *Product Recovery* CD and restart your computer.
5. If you changed your startup sequence, make sure you change it back immediately.

Changing the startup sequence

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

1. Restart your computer.
2. When the Configuration/Setup Utility program prompt appears, press **F1**. (The Configuration/Setup Utility program prompt appears on the screen for only a few seconds. You must press **F1** quickly.)
3. Select **Start Options** from the Configuration/Setup Utility program menu.
4. Select **Startup Sequence** from the Start Options menu.
5. Write down the startup sequence that is shown on the screen. You will need this information to restore your original startup sequence after you complete the recovery process.
6. Change your **First Startup Device** to the CD-ROM drive.
7. Press **Esc** until you return to the Configuration/Setup Utility program menu.
8. Before you exit from the program, select **Save Settings** from the Configuration/Setup Utility program menu and press **Enter**.
9. To exit from the Configuration/Setup Utility program, press **Esc** and follow the instructions on the screen.

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

Chapter 6. Installing other operating systems

If you install or reinstall Microsoft Windows NT Workstation 4.0 or 3.51, or Microsoft Windows 98 or Windows 95, you might need software or device drivers. Hardware-specific support software is available on the *Software Selections* CD. (If you experience problems with device drivers installed from the *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 Software Selections CD" on page 13 to install the support software.

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

Note: Not all software is available for all operating systems. See the *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.

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.

Any references in this publication to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

Trademarks

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

Alert on LAN	PC 300
HelpCenter	Predictive Failure Analysis
IBM	SMART Reaction
IBM Global Network	ViaVoice
Netfinity	Wake on LAN
Netfinity Manager	

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

Lotus SmartSuite is a trademark of Lotus Development Corporation in the United States and/or other countries.

Tivoli and TME 10 are trademarks of Tivoli Systems, Inc. in the United States and/or other countries.

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: 00N5981

Printed in U.S.A.

May 1999

00N5981

