



Portable 40 GB USB 2.0 Hard Drive with Rescue and Recovery

User's Guide



Portable 40 GB USB 2.0 Hard Drive with Rescue and Recovery

User's Guide

Note: Before using this information and the product it supports, read the information in Appendix C, "Service and Support," on page 19 and Appendix D, "IBM Statement of Limited Warranty Z125-4753-08 04/2004," on page 23.

First Edition (May 2004)

© Copyright International Business Machines Corporation 2004. All rights reserved.

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

Preface	v	Installation troubleshooting information	9
Registering your option	v	Uninstalling the software	9
Before you begin	vii	Backup troubleshooting information	9
Online Help	vii	Backup operation is slow	9
Chapter 1. Hardware User's Guide	1	Scheduling dates on the 29th, 30th, or 31st	10
Product description	1	Unable to select Archive your backups	10
Hardware and software requirements	1	Restore troubleshooting information	10
Installing the drive	1	Restore operation is slow	10
Making your drive bootable	3	User cannot log on after a restore operation	10
Disconnecting the drive from your computer	3	Power management troubleshooting information	11
Maintaining the drive	3	Appendix B. Glossary	13
Chapter 2. Installing and using the Rescue and Recovery software.	5	Appendix C. Service and Support	19
Prerequisites	5	Online technical support	19
Before you install Rescue and Recovery	5	Telephone technical support	19
Application compatibility	5	Appendix D. IBM Statement of Limited Warranty Z125-4753-08 04/2004	23
Hard disk drive configuration	6	Part 1 - General Terms	23
Rescue and Recovery installation	6	Part 2 - Country-unique Terms	26
Creating Rescue and Recovery media	7	Part 3 - Warranty Information	36
Using the backup and restore features	7	Types of Warranty Service	36
Accessing the Rescue and Recovery workspace	8	Appendix E. Notices	41
Reinstalling Rescue and Recovery	8	Trademarks	42
Uninstalling Rescue and Recovery	8	Electronic emission notices	42
Appendix A. Troubleshooting	9	Federal Communications Commission (FCC) statement	42
General troubleshooting information	9		

Preface

This manual provides information on the IBM® 40 GB USB 2.0 Hard Drive with Rescue and Recovery™. This manual is written for the installer and user of this equipment and contains the following information:

- Chapter 1, "Hardware User's Guide" contains instructions for installing and using the IBM 40 GB Hard Disk Drive with Rescue and Recovery.
- Chapter 2, "Installing and using the Rescue and Recovery software," on page 5 contains installation prerequisites and instructions, a listing of Rescue and Recovery with Rapid Restore™ components and system requirements, and an overview of the Rescue and Recovery with Rapid Restore concepts.
- Appendix A, "Troubleshooting" contains information that might be helpful if you encounter trouble using Rescue and Recovery with Rapid Restore.
- Appendix B, "Glossary," on page 13 contains definitions of industry terms to assist you in understanding some of the concepts discussed in this guide.
- Appendix C, "Service and Support," on page 19 provides service and support information.
- Appendix D, "IBM Statement of Limited Warranty Z125-4753-08 04/2004," on page 23 provides warranty information.
- Appendix E, "Notices" contains trademarks and legal notices.

Registering your option

Thank you for purchasing this IBM® product. Please take a few moments to register your product and provide us with information that will help IBM to better serve you in the future. Your feedback is valuable to us in developing products and services that are important to you, as well as in developing better ways to communicate with you. Register your option on the IBM Web site at

<http://www.ibm.com/pc/register/>

IBM will send you information and updates on your registered product unless you indicate on the Web site questionnaire that you do not want to receive further information.

Before you begin

Be sure to review the following information before installing and using the IBM Portable 40 GB USB 2.0 Hard Drive with Rescue and Recovery.

Attention

Only use the cables that come with this option. You might damage the drive if you use a cable not included with the option package. Do not attach an ac adapter to this device.

- To avoid damaging your USB Hard Drive, handle with care. When transporting the drive or when it is not in use, place it in the carrying case that comes with the option. For more information on correctly handling your USB Hard Drive, see "Maintaining the drive" on page 3.
- The primary USB cable must be connected to a USB high power port. If you experience problems, try connecting the primary USB cable to another USB port.
- When using your USB Hard Drive on a mobile computer with a USB 2.0 PCMCIA card, the primary USB cable must be inserted into the PCMCIA card high power port. You must also connect the auxiliary power cable to the USB port to provide adequate power.

Attention

IBM does not support this product with a third party disk-utility that reorders or sorts the partition table.

Attention

Please keep the CD that came with your Portable 40 GB USB 2.0 Hard Drive and make a copy of this CD. IBM cannot replace this CD, nor can it be downloaded from the web.

Online Help

The Rescue and Recovery integrated Online Help system is an invaluable source of information. The help system contains information that dynamically updates as you access different Rescue and Recovery components.

To access the Rescue and Recovery online help system, perform the steps below:

1. Access the Rescue and Recovery main console.
2. Go to the Help menu.

Chapter 1. Hardware User's Guide

This chapter contains instructions for installing and using the IBM Portable 40 GB Hard Disk Drive with Rescue and Recovery.

Note: Before you install and use the IBM Portable 40GB USB 2.0 Hard Drive with Rescue and Recovery, be sure to read "Before you begin" on page vii.

Product description

The IBM Portable 40 GB Hard Disk Drive with Rescue and Recovery is a portable, lightweight, high-speed USB hard disk drive that is compatible with the USB 2.0 standard which enables data transfers that are up to 40 times faster than through USB 1.1 connections. The drive can be used with mobile or desktop computers and is also compatible with USB 1.0 and USB 1.1 connections. After you install the drive, it operates as a plug-and-play device and is hot-swappable; that is, you can connect and disconnect the drive while the computer is running. See "Disconnecting the drive from your computer" on page 3.

The option package includes:

- IBM Portable 40 GB Hard Disk Drive with Rescue and Recovery
- Primary USB cable (USB "A" to "mini B" connection)
- Auxiliary power cable
- *User's Guide and Software CD* that includes the Rapid Restore software and this online *User's Guide*

Note: Please keep this CD and make a copy of it. IBM cannot replace this CD, nor can it be downloaded from the Web.

- Warranty flyer
- Carrying case

Hardware and software requirements

You must have the following hardware installed on your computer:

- Minimum 200MHz Intel™ Pentium® microprocessor
- 64 MB Random Access Memory (RAM)
- CD-ROM or DVD-ROM drive to install the software on the included CD
- USB 1.1 or 2.0 ports

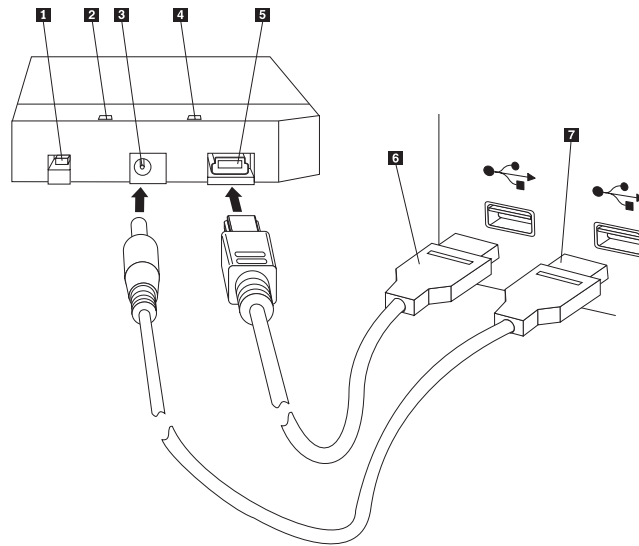
Your computer must have Microsoft® Windows® 2000 Professional or Microsoft Windows XP installed to use the IBM Portable 40 GB Hard Disk Drive with Rescue and Recovery.

Installing the drive

This section provides instructions for installing the drive.

To install the drive, complete the following procedure:

1. Attach the primary USB cable to the USB port **5**, as shown in Figure 1.



- 1** Power switch
- 2** Drive activity LED
- 3** Auxiliary power port
- 4** Power LED
- 5** USB port
- 6** Primary USB cable
- 7** Auxiliary power cable

Figure 1. Installing the drive

2. Connect the other end of the primary USB cable **6** to an available USB port on your computer.
3. Attach the auxiliary power cable to the auxiliary power port **3** on the drive.
4. Attach the other end of the auxiliary power cable **7** to an available USB port on your computer.
5. Turn the switch **1** to the on position.

Attention

Only use the cables that come with this option. You might damage the drive if you use a cable not included with the option package. Do not attach an ac adapter to this device.

6. Open **My Computer** and double-click the icon that is associated with the IBM USB Hard Drive.

Windows will automatically detect the drive. The first time you perform these steps, a welcome window will open with the option to install the Rescue and Recovery software.

If you intend to use the included Rescue and Recovery software, be sure to read the general introductory information in Chapter 2, "Installing and using the Rescue

and Recovery software,” on page 5. To install the Rescue and Recovery software, see “Rescue and Recovery installation” on page 6.

If you do not intend to use the included Rescue and Recovery software, then your drive is ready to use, no additional software install is required. To disable the autolaunch, click **Do not show this again** in the lower-left hand corner of the browser window, disconnect the drive, and then reconnect the drive.

Note: Depending on the amount of data that is being backed up, the Rescue and Recovery installation can require a substantial amount of time. This is especially true when backing up using a USB 1.1 connection. Interrupting a Rescue and Recovery installation may result in data loss.

Making your drive bootable

Your drive can be configured to be bootable on systems that have boot-to-USB BIOS support. Typically, the BIOS will detect the drive as “HDD-1” or “IBM-(USB).” To add the IBM Portable 40 GB Hard Disk Drive with Rescue and Recovery to your computer startup sequence, you will need to use your computer BIOS setup utility. For information on using the BIOS setup utility, refer to the documentation that came with your computer.

If you are having a problem, be sure to check that you have the latest BIOS installed on your computer. For a list of computers that support booting through BIOS to USB storage devices, refer to the <http://www.ibm.com/pc/support> IBM support Web site.

Note: Please make sure to read “Creating Rescue and Recovery media” on page 7 before trying to make your drive bootable.

Disconnecting the drive from your computer

To disconnect the drive in Windows 2000, complete the following procedure. If you are using Windows XP, only perform steps 3 and 4 below.

1. Click the **Safely Remove Hardware** icon in the system tray.
2. Click the **USB Mass Storage Device** icon to stop the device.
3. Turn the drive power switch to the off position.
4. Disconnect the cables.

Maintaining the drive

Use the following maintenance guidelines for your drive.

- Do not drop or shock the drive.
- Use the drive power switch to turn off the drive when you are not using it.
- Do not operate or store the drive near strong magnetic fields.
- Do not expose the drive to liquids, extreme temperatures, or humidity.
- Do not use any power cables or adapters that are not included in this option package.

Chapter 2. Installing and using the Rescue and Recovery software

The IBM Rescue and Recovery with Rapid Restore product (hereafter called the Rescue and Recovery program) provides a number of features that can help you recover from a problem, even if you cannot start the Windows operating system. Main features include:

- Full and incremental hard disk backup through the IBM Rescue and Recovery program. Backup files can be stored in a protected area of your computer hard disk, on recordable CD or DVD media, on a network drive, or on a USB device such as your USB hard disk drive.
- Full hard disk recovery using backup files created by the Rescue and Recovery program.
- Recovery and transfer of individual files stored on your local hard disk in Windows partitions, a network drive, or from a Rescue and Recovery backup file.
- The Rescue and Recovery workspace, which runs independently of the Windows operating system. Through the Rescue and Recovery workspace you can restore your hard disk to one of several saved states, recover files from your Windows partition or from a backup, communicate over the internet, and view useful information about the condition of your computer.

Prerequisites

To install this program, you must have the following:

- Windows XP or Windows 2000 with Service Pack 3. If you are installing this program on a harddisk that has a capacity of greater than 137 GB, Service Pack 1 is required for Windows XP.
- Internet Explorer 5.5 or later.
- 128 MB of memory of which no more than 8 MB can be designated as shared memory under the video setup in BIOS.
- 800 MB of free disk space.

Before you install Rescue and Recovery

Consider the following information when deciding to install Rescue and Recovery:

- **State of your system.** Is your system set up the way you would want it to be restored? Will you be adding any other important software?

Before you install Rescue and Recovery, make sure you have the following components. The following prerequisites are necessary for Rescue and Recovery to function properly:

- An IBM ThinkCentre™ or ThinkPad® computer
- Internet Explorer 5.5 or higher

Application compatibility

Some applications that have complex filter driver environments (such as anti-virus software) might not be compatible with IBM Rescue and Recovery with Rapid Restore software. For information regarding compatibility issues, refer to the README file that accompanies IBM Rescue and Recovery with Rapid Restore software on the Web: www.ibm.com/thinkvantage.

IBM Rescue and Recovery is not compatible with Norton AntiVirus 2002 and 2003. You must use Norton AntiVirus Corporate Edition or Norton AntiVirus 2004 for virus scanning to work properly.

Hard disk drive configuration

IBM Rescue and Recovery with Rapid Restore software is not supported on the factory preloads for original equipment manufacturer (OEM) computers. For OEM computers, the hard disk drive must be configured according to recommendations in the IBM Rescue and Recovery with Rapid Restore Customization and Deployment Guide (available on the IBM Web site at www.ibm.com/thinkvantage).

Rescue and Recovery installation

This section contains installation instructions for installing IBM Portable 40 GB USB 2.0 Hard Drive with Rescue and Recovery. There are two ways to install the Rescue and Recovery software:

- From the IBM Portable 40 GB USB 2.0 Hard Drive
- OR
- From the *User's Guide and Software CD*

After performing a product installation, see "Creating Rescue and Recovery media" on page 7 before backing up to the USB drive.

Installing from the IBM Portable 40 GB USB 2.0 Hard Drive

To install Rescue and Recovery from the IBM Portable 40 GB USB 2.0 Hard Drive, complete the following procedure:

1. Close all open applications.
2. Plug the drive into an available USB port.
3. Turn the power switch to the On (|) position. Windows will self-install the device driver.
4. Open **My Computer** and double-click the icon associated with the IBM USB Hard Drive.
5. Click **Software**.
6. Double-click **IBM Rapid Restore**.
7. Follow the onscreen instructions.

Installing from the CD

To install Rescue and Recovery from the *User's Guide and Software CD*, complete the following procedure:

1. Insert the *User's Guide and Software CD* into the CD or DVD drive.
2. If the CD does not start automatically, click **Start**, and then click **Run**.
 - a. Type `e:\launch.bat` where e is the drive letter of the CD or DVD.
 - b. Click **OK**. The CD browser window opens.
3. Select the language and click **Go**.
4. Click **Software**.
5. Double-click **IBM Rapid Restore**.
6. Follow the onscreen instructions.

Note: Depending on the amount of data that is being backed up, the Rapid Restore installation can require a substantial amount of time. This is especially true when backing up via USB 1.1. Interrupting a Rapid Restore installation may result in data loss.

Creating Rescue and Recovery media

If you have a drive capable of writing to CDs or DVDs, or if you have an external USB hard disk drive, you can create bootable media that you can use to help recover from failures that prevent you from gaining access to the Windows environment or the Rescue and Recovery workspace on your computer hard disk. Although such problems are rare, it is a good idea to be prepared and make your Rescue and Recovery media as soon as possible, before a problem occurs.

You can perform the following tasks using your Rescue and Recovery media:

- Recover files, folders, or your entire hard disk contents from a backup using the IBM Rescue and Recovery program
- View key information about your computer and an event history
- Transfer files from your computer or network to other media
- Access the Internet through a wired Ethernet connection

To create your Rescue and Recovery media, do the following:

Note: If you plan to use an external USB hard disk drive as your Rescue and Recovery media, connect it to one of USB connectors before you start this procedure. All data on the external USB hard disk will be erased during this procedure. If you have important files on your external USB hard disk, copy them to other media before you begin this procedure.

Attention

1. From the Windows desktop, click **Start**, click **Programs** (or **All Programs** if you are using Windows XP), click **Access IBM**, and then click **Create rescue media**.
2. Follow the instructions on the screen.

For information about using your Rescue and Recovery media, see “Accessing the Rescue and Recovery workspace” on page 8.

Using the backup and restore features

The Rescue and Recovery program controls all backup, restore, and file recovery functions. To access the backup and restore features, do the following:

1. From the Windows desktop, click **Start**, click **Programs** (or **All Programs** if you are using Windows XP), click **Access IBM**, and then click **IBM Rapid Restore Ultra 4.0**.
2. When the main window is displayed, do one of the following:
 - To perform a backup operation, schedule backup operations, copy an existing backup to other media, or set preferences for backup operations, click **Backup**. Then, click the appropriate selection from the drop-down menu.
 - To restore your hard disk to a previously backed-up state, or rescue one or more files from a backup, click **Restore**. Then, click the appropriate selection from the drop-down menu.

For more information about using these functions, click Help.

Accessing the Rescue and Recovery workspace

To access the Rescue and Recovery workspace, do one of the following:

Method 1:

1. Shut down your computer.
2. Restart your computer and watch the screen carefully.
3. When you are prompted to press F11, press and release the F11 key. You must press and release the F11 key while the prompt is displayed.
4. After a short delay, the Rescue and Recovery workspace is displayed. For information about using the various features, click **Help**.

Method 2:

1. Insert the Rescue and Recovery CD you created into your CD or DVD drive, or if your rescue media is an external USB hard disk drive, attach the drive and turn it on now.
2. Shut down your computer.
3. Restart your computer.
4. After a short delay, the Rescue and Recovery workspace is displayed. For information about using the various features, click **Help**.

Note: If your rescue media fails to start, you might not have your rescue device (CD drive, DVD drive, or USB device) set correctly in your BIOS startup sequence. Refer to the documentation that came with your computer for information about gaining access to the BIOS configuration utility.

Reinstalling Rescue and Recovery

Consider archiving the current backup sets to CD-R before reinstalling the Rescue and Recovery software. To reinstall the Rescue and Recovery software, you might need to uninstall certain previous versions. This will remove your current backups. Then you can install the newer version of Rescue and Recovery.

Uninstalling Rescue and Recovery

To uninstall Rescue and Recovery, click:

- **Start**
- **Control Panel**
- **Add/Remove Programs**
- **Rescue and Recovery**

The uninstall process will remove the program and all backup sets.

Appendix A. Troubleshooting

The following information might be helpful if you encounter trouble using the IBM Rescue and Recovery with Rapid Restore application.

General troubleshooting information

The following information might be helpful if you encounter trouble using the Rescue and Recovery with Rapid Restore software.

- When new Windows users are created, the system must be rebooted before the new users can be backed up.
- Do not use Rescue and Recovery with Rapid Restore in conjunction with any other utility software that modifies the master boot record. Software that modifies the master boot record of your hard disk might render your backups inaccessible. Such software includes, but is not limited to Roxio GoBack, System Commander, and PowerQuest BootMagic.
- Norton Antivirus 5.0 might not be able to read the boot record of the hard drive.

Installation troubleshooting information

The following information might be helpful if you encounter trouble while attempting to install or uninstall the IBM Rescue and Recovery with Rapid Restore software.

Uninstalling the software

To uninstall Rescue and Recovery with Rapid Restore from a computer running Windows 2000 Professional or Windows XP, you must log onto the computer with administrator rights. For more information on user accounts, see the help system provided with the operating system.

Backup troubleshooting information

Rescue and Recovery with Rapid Restore notifies you if a valid base backup image does not exist. Then, it enables you to create a new base backup image.

The following information might be helpful if you encounter trouble while attempting a backup operation using IBM Rescue and Recovery with Rapid Restore software.

- User accounts are included in backup and restore operations. Therefore, if you restore your system to a time when a user did not exist or had a different password, that user will not be able to log in.
- If the Rapid Restore interface is closed while performing a Windows incremental backup, Rescue and Recovery with Rapid Restore will continue to backup files in the background.

Backup operation is slow

Backup performance depends upon the size and type of operation being performed. Backup operation performance can be optimized by performing frequent backups.

Running another program, such as an anti-virus program, while creating a backup image will adversely affect backup performance. Do not run any programs while creating a backup image.

Run anti-virus programs before or after performing a backup operation.

Notes:

1. Backups will take longer via USB 1.1.
2. To prevent possible database corruption, always close all applications and services before performing a backup operation.

Scheduling dates on the 29th, 30th, or 31st

Rescue and Recovery with Rapid Restore does not allow you to specify a scheduled backup on the 29th, 30th, or 31st day of the month, but you can schedule a backup for the end of the month.

Unable to select Archive your backups

If the CD-R Archive option is not available, the customer does not have an installed CD-R device.

CD-RW media are easily overwritten and degrade with each use. CD-RW media are not supported when creating a CD-R archive set.

To restore a backup set from a CD, your CD drive must be a supported boot option for the computer you are restoring.

In order to perform a CD-R Archive, the hard drive must have at least 700MB of free space.

Restore troubleshooting information

The following information might be helpful if you encounter trouble while attempting a restore operation using IBM Rescue and Recovery with Rapid Restore software.

To restore a backup set from a CD, your CD drive must be a supported boot option for the computer you are restoring.

Restore operation is slow

Restore operation performance depends upon the size and type of operation being performed. To prevent possible database corruption, always close all applications and services before performing a restore operation.

User cannot log on after a restore operation

This problem will occur on multi-user systems when a new user is added and a backup operation takes place before the new user logs on for the first time.

To remedy this problem, the IT administrator must add the new user again and either restart the computer, or have the new user log on before the next backup operation.

To prevent this problem, restart the computer after adding a new user, or ensure that the new user logs on before the next backup operation is performed.

Power management troubleshooting information

The following information might be helpful if you encounter trouble while using the Rescue and Recovery with Rapid Restore due to power management issues, such as standby, hibernate, and power loss.

Rescue and Recovery with Rapid Restore will respond to a system request in the following manner:

- **When a backup or CD-R Archive is in progress.** When a backup or CD-R Archive is in progress and the system requests to enter standby/hibernate, Rescue and Recovery with Rapid Restore will stop the backup in progress and allow the power request to proceed. Upon resume, it will record the backup as failed and query the user to run the backup again.
- **When a restore is in progress.** When a restore is in progress, the power request will be rejected and the restore will continue.

Appendix B. Glossary

Backup

Backup is the process of copying disk information so that it is preserved in case of equipment failures or software and operating system corruptions.

Base backup image

Original sector-based backup image of the primary hard disk created during the Rapid Restore installation process. This image is the foundation upon which cumulative and most recent backups are created.

Boot

Refers to the initial startup of a computer, such as when you power on or restart a computer.

Boot-time

The time during which a computer boots—when a computer starts up but the operating system has not yet taken over control of the computer. It is during this time that the OBRM's pre-operating system interface is accessible to the user.

Boot Manager

A software program stored in the master boot record that reads the boot sector record of the partition containing the operating system to be booted into RAM. In turn, that record contains a program that loads the rest of the operating system into RAM

Byte

A group of eight bits, which can represent a number from zero through 255, a letter of the alphabet, or a variety of other things.

CD-R

CD-R (for compact disc, recordable) is a type of write once, read many (worm) compact disc (CD) format that allows one-time recording on a disc.

CD-RW

CD-RW (for compact disc, re-writable) is a compact disc (CD) format that allows repeated recording on a disc.

CD-ROM

Compact Disk Read-Only Memory. An electronic media commonly used within the software industry to store information. As the name implies, the original contents of a CD-ROM cannot be modified.

Controller

A specialized electronic circuit that serves as an interface between a device, such as a hard disk, and a computer. IDE and SCSI are examples of hard disk controllers.

Cumulative backup

A compressed incremental backup. The cumulative backup stores differential, or incremental, information as it relates to the base image and most recent backup.

Data

Information processed by a computer. Examples of data include database files, word processing documents, and html pages.

Database

A collection of related information about a subject, organized in a useful manner that provides a base or foundation for procedures such as retrieving information, drawing conclusions, and making decisions.

Data Migration Manager

The Data Migration Manager (DMM) enables users to move their existing disk image to a new, larger hard drive. The most common reason for migrating to another hard drive is the need for additional storage space. The two main obstacles most people encounter when performing a disk migration include the lack of IT knowledge required to successfully complete the process and the decreased productivity resulting from the downtime directly related to the migration process.

The Data Migration Manager's "One Button Migration" feature eliminates these barriers so users can effectively and efficiently migrate their disk image and data without compromising their uptime or data integrity. In addition, Rapid Restore's built-in migration technology handles all the complex decision-making so users don't need to be IT experts to properly migrate their disk image and data to a new hard disk.

Disk drive

A type of storage device used by computers.

Diskette

Removable storage medium.

Disk Image

A disk image is a file containing an exact and complete sector-based image of your hard disk. The image contains everything on your hard disk including disk format and structure (for example, FAT), boot sector, directories, operating system, software, registry settings, network settings, and data. The benefit of creating disk images is that users can quickly restore their entire system without needing to reinstall their operating system, applications, etc.

Drive letter

In Windows and MS-DOS operating systems, the naming convention for hard disks, consisting of a letter, followed by a colon (for example, C: or D:).

Extended partition

A type of partition that overcomes the limitation of four partitions per disk drive as one or more logical drives may be created within an extended partition.

FAT file system

The file system used by MS-DOS and adapted for Windows to store information on hard disks, which makes use of a file allocation table. There are three types of FAT file systems including FAT12, FAT16, and FAT32.

File Allocation Table (FAT)

A table or list maintained by certain operating systems to keep track of how files are stored on a hard disk.

File system

The method used by an operating system to name, access, and organize files and directories on a disk (for example, FAT32 or NTFS).

Graphical user interface (GUI)

A user interface, as used in the Windows operating systems, which uses a mouse and graphic displays to interact with the user. The goal of a GUI is to make the program easier to use than a text-based application or operating system such as MS-DOS.

Hard Disk

A specific type of disk drive comprised of one or more rigid metal platters.

IDE (Integrated Device Electronics)

A interface technology used to integrate a disk drive and a computer. Hard disks using IDE technology have their controller built directly into the disk drive eliminating the need for a separate controller card in the computer.

Interface

The connection and interaction between hardware, software, or the user.

Locked File

Files currently in use by your system and traditionally unavailable to other applications, including backup operations. Examples of applications that create locked files include Oracle databases, SQL servers, Lotus Notes[®], and e-mail servers.

Logical drive

A portion of a hard disk that is considered to be a single unit. In this context, logical means “conceptual” because there is no direct relationship between the name and a physical object.

Master Boot Record

The information in the first sector of any hard disk or diskette that identifies how and where an operating system is located so that it can be booted (loaded) into the computer's main storage or random access memory. The master boot record is also sometimes called the "partition sector" or the "master partition table" because it includes a table that locates the hard disk's partitions. In addition to this table, the master boot record also includes a program, known as the boot manager, that reads the boot sector record of the partition containing the operating system to be booted into RAM. In turn, that record contains a program that loads the rest of the operating system into RAM.

Master file table (MFT)

On an NTFS volume, the master file table is a file containing information about all other files in that volume. This includes the name of each file, its physical location on the disk, and other information.

MFT

See "Master file table (MFT)" on page 16.

Most Recent backup

A compressed incremental backup file reflecting the state of a hard disk at the time the backup is performed. Only files not matching those in the cumulative backup are stored in the most recent backup file. Most recent backups can be automated using Rapid Restore's Schedule feature or performed manually.

One-Button Restore Manager (OBRM)

The One-Button Restore Manager is the backbone of Rapid Restore's image and backup management capabilities. The OBRM is extremely powerful and integrates with several other Rapid Restore components so that users can easily restore the contents of their hard disk to a previously known state. The One-Button Restore Manager is easily accessible from several entry points including:

- Before Windows Runs (Pre-Operating System Mode)
- Windows Graphical User Interface (Windows Mode)
- Over the Network (Remote Management Mode)

Partition

A subdivision of the space on a disk drive that is treated as though it were a separate physical unit. A computer with only one hard disk drive can have a single partition, often called drive C:, or it can have several partitions, such as drive C:, drive D:, and drive E.

Peripheral device

A device located on the outside of a computer (for example a tape drive or a USB hard disk).

Permission

The ability of a user to access or modify files, especially those not created by that user. Permissions exist for security reasons including the prevention of unauthorized access to sensitive information.

Pre-operating system mode

The time between when a computer boots (starts up) and the operating system has not yet taken over control of the computer.

Primary partition

In Windows and MS-DOS operating systems, a hard disk can be divided into a maximum of four primary partitions; or three primary partitions plus an extended partition, which in turn can contain one or more logical drives.

RAID

See “Redundant Array of Independent Disks (RAID)” on page 17.

Redundant Array of Independent Disks (RAID)

A method of combining several hard disks to make one large volume. RAID configurations are typically used on a network file server to achieve faster access, greater protection against disk failure, or both.

Restore

The process of using an image or backup to revert to a previous hard disk state.

SCSI (Small Computer System Interface)

An interface technology used to integrate a disk drive and a computer.

Service partition

A hidden, locked partition on the local hard disk used for backup and restore operation. Service partitions are tightly compressed to save disk space and comprise the base image, cumulative backup, and most recent backup.

Site License Key

IT Administrators looking to access Rapid Restore’s enterprise-level functionality can do so by registering for a Site License Key. A Site License Key enables IT Administrators to efficiently configure, deploy, and manage Rapid Restore in an enterprise environment.

Snapshot

A snapshot backup replaces your existing cumulative backup with optimized cumulative backup data. This optimized backup consolidates all incremental backup data (cumulative and most recent) into one cumulative backup. In addition, the snapshot process deletes the most recent backup.

Snapshot backups should be performed at significant checkpoints such as after the installation of a new application, creation of a new database, etc.

USB Drive

USB (Universal Serial Bus) drive is a plug-and-play hard drive that connects to your computer through a USB interface.

Utility

A program that provides basic services or functions.

Volume

A subdivision of the space on a hard disk that is treated as though it were a separate physical unit, or a combination of physical disks treated as a single unit. A computer with only one hard disk can have a single volume, often called drive C:, or it can have several volumes, such as drive C:, drive D:, and drive E:.

Volume set

A single logical drive composed of up to 32 areas of free space on one or more hard disks. Volume sets can be used to combine small areas of free space on one or more hard disks into a larger logical drive.

Appendix C. Service and Support

The following information describes the technical support that is available for your product, during the warranty period or throughout the life of the product. Refer to your IBM Statement of Limited Warranty for a full explanation of IBM warranty terms.

Online technical support

Online technical support is available during the life of your product through the Personal Computing Support Web site at <http://www.ibm.com/pc/support>.

During the warranty period, assistance for replacement or exchange of defective components is available. In addition, if your IBM option is installed in an IBM computer, you might be entitled to service at your location. Your technical support representative can help you determine the best alternative.

Telephone technical support

Installation and configuration support through the IBM Support Center will be withdrawn or made available for a fee, at IBM's discretion, 90 days after the option has been withdrawn from marketing. Additional support offerings, including step-by-step installation assistance, are available for a nominal fee.

To assist the technical support representative, have available as much of the following information as possible:

- Option name
- Option number
- Proof of purchase
- Computer manufacturer, model, serial number (if IBM), and manual
- Exact wording of the error message (if any)
- Description of the problem
- Hardware and software configuration information for your system

If possible, be at your computer. Your technical support representative might want to walk you through the problem during the call.

For the support telephone number and support hours by country, refer to the following table. If the number for your country or region is not listed, contact your IBM reseller or IBM marketing representative. Response time may vary depending on the number and nature of the calls received.

Phone numbers are subject to change without notice. For the latest phone number list, go to <http://www.ibm.com/pc/support> and click **Support Phone List**.

Country or Region	Telephone Number	Country or Region	Telephone Number
Africa	+44 (0) 1475 555 055	Japan	Desktop: 0120-887-870 • Overseas calls: 81-46-266-1084 ThinkPad: 0120-887-874 • Overseas calls: 81-46-266-1084 IntelliStation and xSeries: 81-46-266-1358 PC Software: 0120-558-695 • Overseas calls: 81-44-200-8666
Argentina	0800-666-0011	Luxembourg	298-977-5063
Australia	131-426	Malaysia	(60) 3-7727-7800
Austria	01-24592-5901	Mexico	001-866-434-2080
Bolivia	0800-0189	Middle East	+44 (0) 1475 555 055
Belgium	Dutch: 02-210 9820 French: 02-210 9800	Netherlands	020-514 5770
Brazil	55-11-3889-8986	New Zealand	0800-446-149
Canada	English: 1-800-565-3344 French: 1-800-565-3344 In Toronto: 416-383-3344	Nicaragua	255-6658
Chile	800-224-488	Norway	66 81 11 00
China	800-810-1818	Panama	206-6047
China (Hong Kong and S.A.R.)	Home PC: 852-2825-7799 Commercial PC: 852-8205-0333	Peru	0-800-50-866
Colombia	980-912-3021	Philippines	(63) 2-995-2225
Costa Rica	284-3911	Portugal	21-892-7147
Denmark	45 20 82 00	Russia	095-940-2000
Dominican Republic	566-4755 or 566-5161 ext. 8201 Toll Free within the Dominican Republic: 1-200-1929	Singapore	(65) 1-800-840-9911
Ecuador	1-800-426911 (option #4)	Spain	91-714-7983

Country or Region	Telephone Number	Country or Region	Telephone Number
El Salvador	250-5696	Sweden	08-477 4420
Finland	09-459 69 60	Switzerland	058-333-0900
France	02 38 55 74 50	Taiwan	886-2-8723-9799
Germany	07032-1549 201	Thailand	(66) 2-273-4000
Guatemala	335-8490	Turkey	00-800-446-32-041
Honduras	Tegucigalpa & Sand Pedro Sula: 232-4222 San Pedro Sula: 552-2234	United Kingdom	0-1475-555 055
India	1600-44-6666	United States	1-800-IBM-SERV (1-800-426-7378)
Indonesia	(62) 21-523-8535	Uruguay	000-411-005-6649
Ireland	01-815-9202	Venezuela	0-800-100-2011
Italy	01-815-9202	Vietnam	Ho Chi Minh: (84) 8-829-5160 Hanoi: (84) 4-843-6675

Appendix D. IBM Statement of Limited Warranty Z125-4753-08 04/2004

Part 1 - General Terms

This Statement of Limited Warranty includes Part 1 - General Terms, Part 2 - Country-unique Terms, and Part 3 - Warranty Information. The terms of Part 2 replace or modify those of Part 1. The warranties provided by IBM in this Statement of Limited Warranty apply only to Machines you purchase for your use, and not for resale. The term "Machine" means an IBM machine, its features, conversions, upgrades, elements, or accessories, or any combination of them. The term "Machine" does not include any software programs, whether pre-loaded with the Machine, installed subsequently or otherwise.
Nothing in this Statement of Limited Warranty affects any statutory rights of consumers that cannot be waived or limited by contract.

What this Warranty Covers

IBM warrants that each Machine 1) is free from defects in materials and workmanship and 2) conforms to IBM's Official Published Specifications ("Specifications") which are available on request. The warranty period for the Machine starts on the original Date of Installation and is specified in Part 3 - Warranty Information. The date on your invoice or sales receipt is the Date of Installation unless IBM or your reseller informs you otherwise. Many features, conversions, or upgrades involve the removal of parts and their return to IBM. A part that replaces a removed part will assume the warranty service status of the removed part. Unless IBM specifies otherwise, these warranties apply only in the country or region in which you purchased the Machine.
THESE WARRANTIES ARE YOUR EXCLUSIVE WARRANTIES AND REPLACE ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. SOME STATES OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF EXPRESS OR IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. IN THAT EVENT, SUCH WARRANTIES ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. NO WARRANTIES APPLY AFTER THAT PERIOD. SOME STATES OR JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

What this Warranty Does not Cover

This warranty does not cover the following:

- any software programs, whether pre-loaded or shipped with the Machine, or installed subsequently;
- failure resulting from misuse (including but not limited to use of any Machine capacity or capability, other than that authorized by IBM in writing), accident, modification, unsuitable physical or operating environment, or improper maintenance by you;
- failure caused by a product for which IBM is not responsible; and
- any non-IBM products, including those that IBM may procure and provide with or integrate into an IBM Machine at your request.

The warranty is voided by removal or alteration of identification labels on the Machine or its parts.

IBM does not warrant uninterrupted or error-free operation of a Machine.

Any technical or other support provided for a Machine under warranty, such as

assistance with "how-to" questions and those regarding Machine set-up and installation, is provided **WITHOUT WARRANTIES OF ANY KIND**.

How to Obtain Warranty Service

If the Machine does not function as warranted during the warranty period, contact IBM or your reseller to obtain warranty service. If you do not register the Machine with IBM, you may be required to present proof of purchase as evidence of your entitlement to warranty service.

What IBM Will Do to Correct Problems

When you contact IBM for service, you must follow the problem determination and resolution procedures that IBM specifies. An initial diagnosis of your problem can be made either by a technician over the telephone or electronically by access to an IBM website. The type of warranty service applicable to your Machine is specified in Part 3 - Warranty Information. You are responsible for downloading and installing designated Machine Code (microcode, basic input/output system code (called "BIOS"), utility programs, device drivers, and diagnostics delivered with an IBM Machine) and other software updates from an IBM Internet Web site or from other electronic media, and following the instructions that IBM provides. If your problem can be resolved with a Customer Replaceable Unit ("CRU") (e.g., keyboard, mouse, speaker, memory, hard disk drive), IBM will ship the CRU to you for you to install. If the Machine does not function as warranted during the warranty period and your problem cannot be resolved over the telephone or electronically, through your application of Machine Code or software updates, or with a CRU, IBM or your reseller, if approved by IBM to provide warranty service, will either, at its discretion, 1) repair it to make it function as warranted, or 2) replace it with one that is at least functionally equivalent. If IBM is unable to do either, you may return the Machine to your place of purchase and your money will be refunded. IBM or your reseller will also manage and install selected engineering changes that apply to the Machine.

Exchange of a Machine or Part

When the warranty service involves the exchange of a Machine or part, the item IBM or your reseller replaces becomes its property and the replacement becomes yours. You represent that all removed items are genuine and unaltered. The replacement may not be new, but will be in good working order and at least functionally equivalent to the item replaced. The replacement assumes the warranty service status of the replaced item.

Your Additional Responsibilities

Before IBM or your reseller exchanges a Machine or part, you agree to remove all features, parts, options, alterations, and attachments not under warranty service.

You also agree to:

1. ensure that the Machine is free of any legal obligations or restrictions that prevent its exchange;
2. obtain authorization from the owner to have IBM or your reseller service a Machine that you do not own; and
3. where applicable, before service is provided:
 - a. follow the service request procedures that IBM or your reseller provides;
 - b. backup or secure all programs, data, and funds contained in the Machine;
 - c. provide IBM or your reseller with sufficient, free, and safe access to your facilities to permit IBM to fulfill its obligations; and
 - d. inform IBM or your reseller of changes in the Machine's location.
4. (a) ensure all information about identified or identifiable individuals (Personal Data) is deleted from the Machine (to the extent technically possible), (b) allow

IBM, your reseller or an IBM supplier to process on your behalf any remaining Personal Data as IBM or your reseller considers necessary to fulfill its obligations under this Statement of Limited Warranty (which may include shipping the Machine for such processing to other IBM service locations around the world), and (c) ensure that such processing complies with any laws applicable to such Personal Data.

Limitation of Liability

IBM is responsible for loss of, or damage to, your Machine only while it is 1) in IBM's possession or 2) in transit in those cases where IBM is responsible for the transportation charges.

Neither IBM nor your reseller are responsible for any of your confidential, proprietary or personal information contained in a Machine which you return to IBM for any reason. You should remove all such information from the Machine prior to its return.

Circumstances may arise where, because of a default on IBM's part or other liability, you are entitled to recover damages from IBM. In each such instance, regardless of the basis on which you are entitled to claim damages from IBM (including fundamental breach, negligence, misrepresentation, or other contract or tort claim), except for any liability that cannot be waived or limited by applicable laws, IBM is liable for no more than

1. damages for bodily injury (including death) and damage to real property and tangible personal property; and
2. the amount of any other actual direct damages, up to the charges (if recurring, 12 months' charges apply) for the Machine that is subject of the claim. For purposes of this item, the term "Machine" includes Machine Code and Licensed Internal Code ("LIC").

This limit also applies to IBM's suppliers and your reseller. It is the maximum for which IBM, its suppliers, and your reseller are collectively responsible.

UNDER NO CIRCUMSTANCES IS IBM, ITS SUPPLIERS OR RESELLERS LIABLE FOR ANY OF THE FOLLOWING EVEN IF INFORMED OF THEIR POSSIBILITY: 1) THIRD PARTY CLAIMS AGAINST YOU FOR DAMAGES (OTHER THAN THOSE UNDER THE FIRST ITEM LISTED ABOVE); 2) LOSS OF, OR DAMAGE TO, DATA; 3) SPECIAL, INCIDENTAL, OR INDIRECT DAMAGES OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES; OR 4) LOST PROFITS, BUSINESS REVENUE, GOODWILL OR ANTICIPATED SAVINGS. SOME STATES OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. SOME STATES OR JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

Governing Law

Both you and IBM consent to the application of the laws of the country in which you acquired the Machine to govern, interpret, and enforce all of your and IBM's rights, duties, and obligations arising from, or relating in any manner to, the subject matter of this Statement of Limited Warranty, without regard to conflict of law principles.

THESE WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE OR JURISDICTION TO JURISDICTION.

Jurisdiction

All of our rights, duties, and obligations are subject to the courts of the country in which you acquired the Machine.

Part 2 - Country-unique Terms

AMERICAS

ARGENTINA

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the Ordinary Commercial Court of the city of Buenos Aires.

BOLIVIA

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the courts of the city of La Paz.

BRAZIL

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Agreement will be settled exclusively by the court of Rio de Janeiro, RJ.

CHILE

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the Civil Courts of Justice of Santiago.

COLOMBIA

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the Judges of the Republic of Colombia.

EQUADOR

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the Judges of Quito.

MEXICO

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the Federal Courts of Mexico City, Federal District.

PARAGUAY

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the courts of the city of Asuncion.

PERU

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the Judges and Tribunals of the Judicial District of Lima, Cercado.

Limitation of Liability: *The following is added at the end of this section:* In accordance with Article 1328 of the Peruvian Civil Code the limitations and exclusions specified in this section will not apply to damages caused by IBM's willful misconduct ("dolo") or gross negligence ("culpa inexcusable").

URUGUAY

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the City of Montevideo Court's Jurisdiction.

VENEZUELA

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the Courts of the Metropolitan Area Of the City of Caracas.

NORTH AMERICA

How to Obtain Warranty Service: *The following is added to this Section:*

To obtain warranty service from IBM in Canada or the United States, call 1-800-IBM-SERV (426-7378).

CANADA

Limitation of Liability: *The following replaces item 1 of this section:*

1. damages for bodily injury (including death) or physical harm to real property and tangible personal property caused by IBM's negligence; and

Governing Law: *The following replaces "laws of the country in which you acquired the Machine" in the first sentence:*

laws in the Province of Ontario.

UNITED STATES

Governing Law: *The following replaces "laws of the country in which you acquired the Machine" in the first sentence:*

laws of the State of New York.

ASIA PACIFIC

AUSTRALIA

What this Warranty Covers: *The following paragraph is added to this Section:*

The warranties specified in this Section are in addition to any rights you may have under the Trade Practices Act 1974 or other similar legislation and are only limited to the extent permitted by the applicable legislation.

Limitation of Liability: *The following is added to this Section:*

Where IBM is in breach of a condition or warranty implied by the Trade Practices Act 1974 or other similar legislation, IBM's liability is limited to the repair or replacement of the goods or the supply of equivalent goods. Where that condition or warranty relates to right to sell, quiet possession or clear title, or the goods are of a kind ordinarily acquired for personal, domestic or household use or consumption, then none of the limitations in this paragraph apply.

Governing Law: *The following replaces "laws of the country in which you acquired the Machine" in the first sentence:*

laws of the State or Territory.

CAMBODIA AND LAOS

Governing Law: *The following replaces "laws of the country in which you acquired the Machine" in the first sentence:*

laws of the State of New York, United States of America.

CAMBODIA, INDONESIA, AND LAOS

Arbitration: *The following is added under this heading:*

Disputes arising out of or in connection with this Statement of Limited Warranty

shall be finally settled by arbitration which shall be held in Singapore in accordance with the Arbitration Rules of Singapore International Arbitration Center ("SIAC Rules") then in effect. The arbitration award shall be final and binding for the parties without appeal and shall be in writing and set forth the findings of fact and the conclusions of law. The number of arbitrators shall be three, with each side to the dispute being entitled to appoint one arbitrator. The two arbitrators appointed by the parties shall appoint a third arbitrator who shall act as chairman of the proceedings. Vacancies in the post of chairman shall be filled by the president of the SIAC. Other vacancies shall be filled by the respective nominating party. Proceedings shall continue from the stage they were at when the vacancy occurred. If one of the parties refuses or otherwise fails to appoint an arbitrator within 30 days of the date the other party appoints its, the first appointed arbitrator shall be the sole arbitrator, provided that the arbitrator was validly and properly appointed. All proceedings shall be conducted, including all documents presented in such proceedings, in the English language. The English language version of this Statement of Limited Warranty prevails over any other language version.

HONG KONG S.A.R. OF CHINA AND MACAU S.A.R. OF CHINA

Governing Law: *The following replaces "laws of the country in which you acquired the Machine" in the first sentence:*
laws of Hong Kong Special Administrative Region of China.

INDIA

Limitation of Liability: *The following replaces items 1 and 2 of this Section:*

1. liability for bodily injury (including death) or damage to real property and tangible personal property will be limited to that caused by IBM's negligence; and
2. as to any other actual damage arising in any situation involving nonperformance by IBM pursuant to, or in any way related to the subject of this Statement of Limited Warranty, the charge paid by you for the individual Machine that is the subject of the claim. For purposes of this item, the term "Machine" includes Machine Code and Licensed Internal Code ("LIC").

Arbitration: *The following is added under this heading*

Disputes arising out of or in connection with this Statement of Limited Warranty shall be finally settled by arbitration which shall be held in Bangalore, India in accordance with the laws of India then in effect. The arbitration award shall be final and binding for the parties without appeal and shall be in writing and set forth the findings of fact and the conclusions of law. The number of arbitrators shall be three, with each side to the dispute being entitled to appoint one arbitrator. The two arbitrators appointed by the parties shall appoint a third arbitrator who shall act as chairman of the proceedings. Vacancies in the post of chairman shall be filled by the president of the Bar Council of India. Other vacancies shall be filled by the respective nominating party. Proceedings shall continue from the stage they were at when the vacancy occurred. If one of the parties refuses or otherwise fails to appoint an arbitrator within 30 days of the date the other party appoints its, the first appointed arbitrator shall be the sole arbitrator, provided that the arbitrator was validly and properly appointed. All proceedings shall be conducted, including all documents presented in such proceedings, in the English language. The English language version of this Statement of Limited Warranty prevails over any other language version.

JAPAN

Governing Law: *The following sentence is added to this Section:*

Any doubts concerning this Statement of Limited Warranty will be initially resolved between us in good faith and in accordance with the principle of mutual trust.

MALAYSIA

Limitation of Liability: The word "*SPECIAL*" in item 3 of the fifth paragraph is deleted.

NEW ZEALAND

What this Warranty Covers: *The following paragraph is added to this Section:*

The warranties specified in this section are in addition to any rights you may have under the Consumer Guarantees Act 1993 or other legislation which cannot be excluded or limited. The Consumer Guarantees Act 1993 will not apply in respect of any goods which IBM provides, if you require the goods for the purposes of a business as defined in that Act.

Limitation of Liability: *The following is added to this Section:*

Where Machines are not acquired for the purposes of a business as defined in the Consumer Guarantees Act 1993, the limitations in this Section are subject to the limitations in that Act.

PEOPLE'S REPUBLIC OF CHINA (PRC)

Governing Law: *The following replaces "laws of the country in which you acquired the Machine" in the first sentence:*

laws of the State of New York, United States of America (except when local law requires otherwise).

PHILIPPINES

Limitation of Liability: *Item 3 in the fifth paragraph is replaced by the following:*

SPECIAL (INCLUDING NOMINAL AND EXEMPLARY DAMAGES), MORAL, INCIDENTAL, OR INDIRECT DAMAGES FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES; OR

Arbitration: The following is added: under this heading

Disputes arising out of or in connection with this Statement of Limited Warranty shall be finally settled by arbitration which shall be held in Metro Manila, Philippines in accordance with the laws of the Philippines then in effect. The arbitration award shall be final and binding for the parties without appeal and shall be in writing and set forth the findings of fact and the conclusions of law. The number of arbitrators shall be three, with each side to the dispute being entitled to appoint one arbitrator. The two arbitrators appointed by the parties shall appoint a third arbitrator who shall act as chairman of the proceedings. Vacancies in the post of chairman shall be filled by the president of the Philippine Dispute Resolution Center, Inc. Other vacancies shall be filled by the respective nominating party. Proceedings shall continue from the stage they were at when the vacancy occurred. If one of the parties refuses or otherwise fails to appoint an arbitrator within 30 days of the date the other party appoints its, the first appointed arbitrator shall be the sole arbitrator, provided that the arbitrator was validly and properly appointed. All proceedings shall be conducted, including all documents presented in such proceedings, in the English language. The English language version of this Statement of Limited Warranty prevails over any other language version.

SINGAPORE

Limitation of Liability: *The words "*SPECIAL*" and "*ECONOMIC*" in item 3 in the fifth paragraph are deleted.*

EUROPE, MIDDLE EAST, AFRICA (EMEA)

THE FOLLOWING TERMS APPLY TO ALL EMEA COUNTRIES:

The terms of this Statement of Limited Warranty apply to Machines purchased from IBM or an IBM reseller.

How to Obtain Warranty Service:

Add the following paragraph in **Western Europe** (Andorra, Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Netherlands, Norway, Poland, Portugal, San Marino, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom, Vatican State, and any country subsequently added to the European Union, as from the date of accession): The warranty for Machines acquired in Western Europe shall be valid and applicable in all Western Europe countries provided the Machines have been announced and made available in such countries. If you purchase a Machine in one of the Western European countries, as defined above, you may obtain warranty service for that Machine in any of those countries from either (1) an IBM reseller approved to perform warranty service or (2) from IBM, provided the Machine has been announced and made available by IBM in the country in which you wish to obtain service. If you purchased a Personal Computer Machine in Albania, Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Federal Republic of Yugoslavia, Former Yugoslav Republic of Macedonia (FYROM), Moldova, Poland, Romania, Russia, Slovak Republic, Slovenia, or Ukraine, you may obtain warranty service for that Machine in any of those countries from either (1) an IBM reseller approved to perform warranty service or (2) from IBM. If you purchase a Machine in a Middle Eastern or African country, you may obtain warranty service for that Machine from the IBM entity within the country of purchase, if that IBM entity provides warranty service in that country, or from an IBM reseller, approved by IBM to perform warranty service on that Machine in that country. Warranty service in Africa is available within 50 kilometers of an IBM approved service provider. You are responsible for transportation costs for Machines located outside 50 kilometers of an IBM approved service provider.

Governing Law:

The phrase "the laws of the country in which you acquired the Machine" is replaced by:

1) "the laws of Austria" in **Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, FYR Macedonia, Moldova, Poland, Romania, Russia, Slovakia, Slovenia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan, and FR Yugoslavia;** 2) "the laws of France" in **Algeria, Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo Republic, Djibouti, Democratic Republic of Congo, Equatorial Guinea, French Guiana, French Polynesia, Gabon, Gambia, Guinea, Guinea-Bissau, Ivory Coast, Lebanon, Madagascar, Mali, Mauritania, Mauritius, Mayotte, Morocco, New Caledonia, Niger, Reunion, Senegal, Seychelles, Togo, Tunisia, Vanuatu, and Wallis & Futuna;** 3) "the laws of Finland" in **Estonia, Latvia, and Lithuania;** 4) "the laws of England" in **Angola, Bahrain, Botswana, Burundi, Egypt, Eritrea, Ethiopia, Ghana, Jordan, Kenya, Kuwait, Liberia, Malawi, Malta, Mozambique, Nigeria, Oman, Pakistan, Qatar, Rwanda, Sao Tome, Saudi Arabia, Sierra Leone, Somalia, Tanzania, Uganda, United Arab Emirates, the United Kingdom, West Bank/Gaza, Yemen, Zambia, and Zimbabwe;** and 5) "the laws of South Africa" in **South Africa, Namibia, Lesotho and Swaziland.**

Jurisdiction: *The following exceptions are added to this section:*

1) **In Austria** the choice of jurisdiction for all disputes arising out of this Statement of Limited Warranty and relating thereto, including its existence, will be the

competent court of law in Vienna, Austria (Inner-City); 2) in **Angola, Bahrain, Botswana, Burundi, Egypt, Eritrea, Ethiopia, Ghana, Jordan, Kenya, Kuwait, Liberia, Malawi, Malta, Mozambique, Nigeria, Oman, Pakistan, Qatar, Rwanda, Sao Tome, Saudi Arabia, Sierra Leone, Somalia, Tanzania, Uganda, United Arab Emirates, West Bank/Gaza, Yemen, Zambia, and Zimbabwe** all disputes arising out of this Statement of Limited Warranty or related to its execution, including summary proceedings, will be submitted to the exclusive jurisdiction of the English courts; 3) in **Belgium and Luxembourg**, all disputes arising out of this Statement of Limited Warranty or related to its interpretation or its execution, the law, and the courts of the capital city, of the country of your registered office and/or commercial site location only are competent; 4) in **France, Algeria, Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo Republic, Djibouti, Democratic Republic of Congo, Equatorial Guinea, French Guiana, French Polynesia, Gabon, Gambia, Guinea, Guinea-Bissau, Ivory Coast, Lebanon, Madagascar, Mali, Mauritania, Mauritius, Mayotte, Morocco, New Caledonia, Niger, Reunion, Senegal, Seychelles, Togo, Tunisia, Vanuatu, and Wallis & Futuna** all disputes arising out of this Statement of Limited Warranty or related to its violation or execution, including summary proceedings, will be settled exclusively by the Commercial Court of Paris; 5) in **Russia**, all disputes arising out of or in relation to the interpretation, the violation, the termination, the nullity of the execution of this Statement of Limited Warranty shall be settled by Arbitration Court of Moscow; 6) in **South Africa, Namibia, Lesotho and Swaziland**, both of us agree to submit all disputes relating to this Statement of Limited Warranty to the jurisdiction of the High Court in Johannesburg; 7) in **Turkey** all disputes arising out of or in connection with this Statement of Limited Warranty shall be resolved by the Istanbul Central (Sultanahmet) Courts and Execution Directorates of Istanbul, the Republic of Turkey; 8) in each of the following specified countries, any legal claim arising out of this Statement of Limited Warranty will be brought before, and settled exclusively by, the competent court of a) Athens for **Greece**, b) Tel Aviv-Jaffa for **Israel**, c) Milan for **Italy**, d) Lisbon for **Portugal**, and e) Madrid for **Spain**; and 9) in **the United Kingdom**, both of us agree to submit all disputes relating to this Statement of Limited Warranty to the jurisdiction of the English courts.

Arbitration: *The following is added under this heading:*

In Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, FYR Macedonia, Moldova, Poland, Romania, Russia, Slovakia, Slovenia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan, and FR Yugoslavia all disputes arising out of this Statement of Limited Warranty or related to its violation, termination or nullity will be finally settled under the Rules of Arbitration and Conciliation of the International Arbitral Center of the Federal Economic Chamber in Vienna (Vienna Rules) by three arbitrators appointed in accordance with these rules. The arbitration will be held in Vienna, Austria, and the official language of the proceedings will be English. The decision of the arbitrators will be final and binding upon both parties. Therefore, pursuant to paragraph 598 (2) of the Austrian Code of Civil Procedure, the parties expressly waive the application of paragraph 595 (1) figure 7 of the Code. IBM may, however, institute proceedings in a competent court in the country of installation. **In Estonia, Latvia and Lithuania** all disputes arising in connection with this Statement of Limited Warranty will be finally settled in arbitration that will be held in Helsinki, Finland in accordance with the arbitration laws of Finland then in effect. Each party will appoint one arbitrator. The arbitrators will then jointly appoint the chairman. If arbitrators cannot agree on the chairman, then the Central Chamber of Commerce in Helsinki will appoint the chairman.

EUROPEAN UNION (EU)

THE FOLLOWING TERMS APPLY TO ALL EU COUNTRIES:

The warranty for Machines acquired in EU countries is valid and applicable in all EU countries provided the Machines have been announced and made available in such countries.

How to Obtain Warranty Service: *The following is added to this section:*

To obtain warranty service from IBM in EU countries, see the telephone listing in Part 3 - Warranty Information.

You may contact IBM at the following address:

IBM Warranty & Service Quality Dept.

PO Box 30

Spango Valley

Greenock

Scotland PA16 0AH

CONSUMERS

Consumers have legal rights under applicable national legislation governing the sale of consumer goods. Such rights are not affected by the warranties provided in this Statement of Limited Warranty.

AUSTRIA, DENMARK, FINLAND, GREECE, ITALY, NETHERLANDS, NORWAY, PORTUGAL, SPAIN, SWEDEN AND SWITZERLAND

Limitation of Liability: *The following replaces the terms of this section in its entirety:*

Except as otherwise provided by mandatory law:

1. IBM's liability for any damages and losses that may arise as a consequence of the fulfillment of its obligations under or in connection with this Statement of Limited Warranty or due to any other cause related to this Statement of Limited Warranty is limited to the compensation of only those damages and losses proved and actually arising as an immediate and direct consequence of the non-fulfillment of such obligations (if IBM is at fault) or of such cause, for a maximum amount equal to the charges you paid for the Machine. For purposes of this item, the term "Machine" includes Machine Code and Licensed Internal Code ("LIC").

The above limitation shall not apply to damages for bodily injuries (including death) and damages to real property and tangible personal property for which IBM is legally liable.

2. **UNDER NO CIRCUMSTANCES IS IBM, ITS SUPPLIERS OR RESELLERS LIABLE FOR ANY OF THE FOLLOWING, EVEN IF INFORMED OF THEIR POSSIBILITY: 1) LOSS OF, OR DAMAGE TO, DATA; 2) INCIDENTAL OR INDIRECT DAMAGES, OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES; 3) LOST PROFITS, EVEN IF THEY ARISE AS AN IMMEDIATE CONSEQUENCE OF THE EVENT THAT GENERATED THE DAMAGES; OR 4) LOSS OF BUSINESS, REVENUE, GOODWILL, OR ANTICIPATED SAVINGS.**

FRANCE AND BELGIUM

Limitation of Liability: *The following replaces the terms of this section in its entirety:*

Except as otherwise provided by mandatory law:

1. IBM's liability for any damages and losses that may arise as a consequence of the fulfillment of its obligations under or in connection with this Statement of Limited Warranty is limited to the compensation of only those damages and losses proved and actually arising as an immediate and direct consequence of the non-fulfillment of such obligations (if IBM is at fault), for a maximum amount equal to the charges you paid for the Machine that has caused the damages. For purposes of this item, the term "Machine" includes Machine Code

and Licensed Internal Code ("LIC").

The above limitation shall not apply to damages for bodily injuries (including death) and damages to real property and tangible personal property for which IBM is legally liable.

2. **UNDER NO CIRCUMSTANCES IS IBM, ITS SUPPLIERS OR RESELLERS LIABLE FOR ANY OF THE FOLLOWING, EVEN IF INFORMED OF THEIR POSSIBILITY: 1) LOSS OF, OR DAMAGE TO, DATA; 2) INCIDENTAL OR INDIRECT DAMAGES, OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES; 3) LOST PROFITS, EVEN IF THEY ARISE AS AN IMMEDIATE CONSEQUENCE OF THE EVENT THAT GENERATED THE DAMAGES; OR 4) LOSS OF BUSINESS, REVENUE, GOODWILL, OR ANTICIPATED SAVINGS.**

THE FOLLOWING TERMS APPLY TO THE COUNTRY SPECIFIED:

AUSTRIA

The provisions of this Statement of Limited Warranty replace any applicable statutory warranties.

What this Warranty Covers: *The following replaces the first sentence of the first paragraph of this section:*

The warranty for an IBM Machine covers the functionality of the Machine for its normal use and the Machine's conformity to its Specifications.

The following paragraphs are added to this section:

The limitation period for consumers in action for breach of warranty is the statutory period as a minimum. In case IBM or your reseller is unable to repair an IBM Machine, you can alternatively ask for a partial refund as far as justified by the reduced value of the unrepaired Machine or ask for a cancellation of the respective agreement for such Machine and get your money refunded.

The second paragraph does not apply.

What IBM Will Do to Correct Problems: *The following is added to this section:*

During the warranty period, IBM will reimburse you for the transportation charges for the delivery of the failing Machine to IBM.

Limitation of Liability: *The following paragraph is added to this section:*

The limitations and exclusions specified in the Statement of Limited Warranty will not apply to damages caused by IBM with fraud or gross negligence and for express warranty.

The following sentence is added to the end of item 2:

IBM's liability under this item is limited to the violation of essential contractual terms in cases of ordinary negligence.

EGYPT

Limitation of Liability: *The following replaces item 2 in this section:*

as to any other actual direct damages, IBM's liability will be limited to the total amount you paid for the Machine that is the subject of the claim. For purposes of this item, the term "Machine" includes Machine Code and Licensed Internal Code ("LIC").

Applicability of suppliers and resellers (unchanged).

FRANCE

Limitation of Liability: *The following replaces the second sentence of the first paragraph of this section:*

In such instances, regardless of the basis on which you are entitled to claim damages from IBM, IBM is liable for no more than: (items 1 and 2 unchanged).

GERMANY

What this Warranty Covers: *The following replaces the first sentence of the first paragraph of this section:*

The warranty for an IBM Machine covers the functionality of the Machine for its normal use and the Machine's conformity to its Specifications.

The following paragraphs are added to this section:

The minimum warranty period for Machines is twelve months. In case IBM or your reseller is unable to repair an IBM Machine, you can alternatively ask for a partial refund as far as justified by the reduced value of the unrepaired Machine or ask for a cancellation of the respective agreement for such Machine and get your money refunded.

The second paragraph does not apply.

What IBM Will Do to Correct Problems: *The following is added to this section:*

During the warranty period, transportation for delivery of the failing Machine to IBM will be at IBM's expense.

Limitation of Liability: *The following paragraph is added to this section:*

The limitations and exclusions specified in the Statement of Limited Warranty will not apply to damages caused by IBM with fraud or gross negligence and for express warranty.

The following sentence is added to the end of item 2:

IBM's liability under this item is limited to the violation of essential contractual terms in cases of ordinary negligence.

HUNGARY

Limitation of Liability: *The following is added at the end of this section:*

The limitation and exclusion specified herein shall not apply to liability for a breach of contract damaging life, physical well-being, or health that has been caused intentionally, by gross negligence, or by a criminal act. The parties accept the limitations of liability as valid provisions and state that the Section 314.(2) of the Hungarian Civil Code applies as the acquisition price as well as other advantages arising out of the present Statement of Limited Warranty balance this limitation of liability.

IRELAND

What this Warranty Covers: *The following is added to this section:*

Except as expressly provided in these terms and conditions, all statutory conditions, including all warranties implied, but without prejudice to the generality of the foregoing all warranties implied by the Sale of Goods Act 1893 or the Sale of Goods and Supply of Services Act 1980 are hereby excluded.

Limitation of Liability: *The following replaces the terms of section in its entirety:*

For the purposes of this section, a "Default" means any act, statement, omission, or negligence on the part of IBM in connection with, or in relation to, the subject matter of this Statement of Limited Warranty in respect of which IBM is legally liable to you, whether in contract or tort. A number of Defaults which together result in, or contribute to, substantially the same loss or damage will be treated as one Default occurring on the date of occurrence of the last such Default.

Circumstances may arise where, because of a Default, you are entitled to recover damages from IBM. This section sets out the extent of IBM's liability and your sole remedy.

1. IBM will accept unlimited liability for death or personal injury caused by the negligence of IBM
2. Subject always to the **Items for Which IBM is Not Liable** below, IBM will accept unlimited liability for physical damage to your tangible property resulting from the negligence of IBM.

3. Except as provided in items 1 and 2 above, IBM's entire liability for actual damages for any one Default will not in any event exceed the greater of 1) EUR 125,000, or 2) 125% of the amount you paid for the Machine directly relating to the Default.

Items for Which IBM is Not Liable

Save with respect to any liability referred to in item 1 above, under no circumstances is IBM, its suppliers or resellers liable for any of the following, even if IBM or they were informed of the possibility of such losses:

1. loss of, or damage to, data;
2. special, indirect, or consequential loss; or
3. loss of profits, business, revenue, goodwill, or anticipated savings.

SLOVAKIA

Limitation of Liability: *The following is added to the end of the last paragraph:*

The limitations apply to the extent they are not prohibited under §§ 373-386 of the Slovak Commercial Code.

SOUTH AFRICA, NAMIBIA, BOTSWANA, LESOTHO AND SWAZILAND

Limitation of Liability: *The following is added to this section:*

IBM's entire liability to you for actual damages arising in all situations involving nonperformance by IBM in respect of the subject matter of this Statement of Warranty will be limited to the charge paid by you for the individual Machine that is the subject of your claim from IBM.

UNITED KINGDOM

Limitation of Liability: *The following replaces the terms of this section in its entirety:*

For the purposes of this section, a "Default" means any act, statement, omission, or negligence on the part of IBM in connection with, or in relation to, the subject matter of this Statement of Limited Warranty in respect of which IBM is legally liable to you, whether in contract or tort. A number of Defaults which together result in, or contribute to, substantially the same loss or damage will be treated as one Default. Circumstances may arise where, because of a Default, you are entitled to recover damages from IBM. This section sets out the extent of IBM's liability and your sole remedy.

1. IBM will accept unlimited liability for:
 - a. death or personal injury caused by the negligence of IBM; and
 - b. any breach of its obligations implied by Section 12 of the Sale of Goods Act 1979 or Section 2 of the Supply of Goods and Services Act 1982, or any statutory modification or re-enactment of either such Section.
2. IBM will accept unlimited liability, subject always to the **Items for Which IBM is Not Liable** below, for physical damage to your tangible property resulting from the negligence of IBM.
3. IBM's entire liability for actual damages for any one Default will not in any event, except as provided in items 1 and 2 above, exceed the greater of 1) Pounds Sterling 75,000, or 2) 125% of the total purchase price payable or the charges for the Machine directly relating to the Default.

These limits also apply to IBM's suppliers and resellers. They state the maximum for which IBM and such suppliers and resellers are collectively responsible.

Items for Which IBM is Not Liable

Save with respect to any liability referred to in item 1 above, under no circumstances is IBM or any of its suppliers or resellers liable for any of the following, even if IBM or they were informed of the possibility of such losses:

1. loss of, or damage to, data;

2. special, indirect, or consequential loss; or
3. loss of profits, business, revenue, goodwill, or anticipated savings.

Part 3 - Warranty Information

This Part 3 provides information regarding the warranty applicable to your Machine, including the warranty period and type of warranty service IBM provides.

Warranty Period

The warranty period may vary by country or region and is specified in the table below. NOTE: "Region" means either Hong Kong or Macau Special Administrative Region of China. A warranty period of 3 years on parts and 3 years on labor means that IBM provides warranty service without charge for parts and labor during the 3 year warranty period.

IBM Portable 40GB USB 2.0 Hard Drive with Rescue and Recovery

Country or Region of Purchase	Warranty Period	Type of Warranty Service
Worldwide	3 years	7

Types of Warranty Service

If required, IBM provides repair or exchange service depending on the type of warranty service specified for your Machine in the above table and as described below. Warranty service may be provided by your reseller if approved by IBM to perform warranty service. Scheduling of service will depend upon the time of your call and is subject to parts availability. Service levels are response time objectives and are not guaranteed. The specified level of warranty service may not be available in all worldwide locations, additional charges may apply outside IBM's normal service area, contact your local IBM representative or your reseller for country and location specific information.

1. Customer Replaceable Unit ("CRU") Service

IBM provides replacement CRUs to you for you to install. CRU information and replacement instructions are shipped with your Machine and are available from IBM at any time on your request. Installation of Tier 1 CRUs is your responsibility. If IBM installs a Tier 1 CRU at your request, you will be charged for the installation. You may install a Tier 2 CRU yourself or request IBM to install it, at no additional charge, under the type of warranty service designated for your Machine. IBM specifies in the materials shipped with a replacement CRU whether a defective CRU must be returned to IBM. When return is required, 1) return instructions and a container are shipped with the replacement CRU, and 2) you may be charged for the replacement CRU if IBM does not receive the defective CRU within 30 days of your receipt of the replacement.

2. On-site Service

IBM or your reseller will either repair or exchange the failing Machine at your location and verify its operation. You must provide suitable working area to allow disassembly and reassembly of the IBM Machine. The area must be clean, well lit and suitable for the purpose. For some Machines, certain repairs may require sending the Machine to an IBM service center.

3. Courier or Depot Service *

You will disconnect the failing Machine for collection arranged by IBM. IBM will provide you with a shipping container for you to return your Machine to a designated service center. A courier will pick up your Machine and deliver it to the designated service center. Following its repair or exchange, IBM will arrange the return delivery of the Machine to your location. You are responsible for its installation and verification.

4. Customer Carry-In or Mail-In Service

You will deliver or mail as IBM specifies (prepaid unless IBM specifies otherwise) the failing Machine suitably packaged to a location IBM designates. After IBM has repaired or exchanged the Machine, IBM will make it available for your collection or, for Mail-in Service, IBM will return it to you at IBM's expense, unless IBM specifies otherwise. You are responsible for the subsequent installation and verification of the Machine.

5. CRU and On-site Service

This type of Warranty Service is a combination of Type 1 and Type 2 (see above).

6. CRU and Courier or Depot Service

This type of Warranty Service is a combination of Type 1 and Type 3 (see above).

7. CRU and Customer Carry-In or Mail-In Service

This type of Warranty Service is a combination of Type 1 and Type 4 (see above).

When a 5, 6 or 7 type of warranty service is listed, IBM will determine which type of warranty service is appropriate for the repair.

* This type of service is called ThinkPad EasyServ or EasyServ in some countries. The IBM Machine Warranty worldwide web site at http://www.ibm.com/servers/support/machine_warranties/ provides a worldwide overview of IBM's Limited Warranty for Machines, a Glossary of IBM definitions, Frequently Asked Questions (FAQs) and Support by Product (Machine) with links to Product Support pages. **The IBM Statement of Limited Warranty is also available on this site in 29 languages.**

To obtain warranty service contact IBM or your IBM reseller. In Canada or the United States, call 1-800-IBM-SERV (426-7378). In Canada or the United States, call 1-800-IBM-SERV (426-7378). For other countries, see the telephone numbers below.

Phone numbers are subject to change without notice. For the latest phone number list, go to <http://www.ibm.com/pc/support> and click **Support Phone List**.

Country or Region	Telephone Number	Country or Region	Telephone Number
Africa	+44 (0) 1475 555 055	Japan	Desktop: 0120-887-870 • Overseas calls: 81-46-266-1084 ThinkPad: 0120-887-874 • Overseas calls: 81-46-266-1084 IntelliStation and xSeries: 81-46-266-1358 PC Software: 0120-558-695 • Overseas calls: 81-44-200-8666
Argentina	0800-666-0011	Luxembourg	298-977-5063
Australia	131-426	Malaysia	(60) 3-7727-7800
Austria	01-24592-5901	Mexico	001-866-434-2080
Bolivia	0800-0189	Middle East	+44 (0) 1475 555 055
Belgium	Dutch: 02-210 9820 French: 02-210 9800	Netherlands	020-514 5770
Brazil	55-11-3889-8986	New Zealand	0800-446-149
Canada	English: 1-800-565-3344 French: 1-800-565-3344 In Toronto: 416-383-3344	Nicaragua	255-6658
Chile	800-224-488	Norway	66 81 11 00
China	800-810-1818	Panama	206-6047
China (Hong Kong and S.A.R.)	Home PC: 852-2825-7799 Commercial PC: 852-8205-0333	Peru	0-800-50-866
Colombia	980-912-3021	Philippines	(63) 2-995-2225
Costa Rica	284-3911	Portugal	21-892-7147
Denmark	45 20 82 00	Russia	095-940-2000
Dominican Republic	566-4755 or 566-5161 ext. 8201 Toll Free within the Dominican Republic: 1-200-1929	Singapore	(65) 1-800-840-9911
Ecuador	1-800-426911 (option #4)	Spain	91-714-7983

Country or Region	Telephone Number	Country or Region	Telephone Number
El Salvador	250-5696	Sweden	08-477 4420
Finland	09-459 69 60	Switzerland	058-333-0900
France	02 38 55 74 50	Taiwan	886-2-8723-9799
Germany	07032-1549 201	Thailand	(66) 2-273-4000
Guatemala	335-8490	Turkey	00-800-446-32-041
Honduras	Tegucigalpa & Sand Pedro Sula: 232-4222 San Pedro Sula: 552-2234	United Kingdom	0-1475-555 055
India	1600-44-6666	United States	1-800-IBM-SERV (1-800-426-7378)
Indonesia	(62) 21-523-8535	Uruguay	000-411-005-6649
Ireland	01-815-9202	Venezuela	0-800-100-2011
Italy	01-815-9202	Vietnam	Ho Chi Minh: (84) 8-829-5160 Hanoi: (84) 4-843-6675

Appendix E. Notices

IBM may not offer the products, services, or features discussed in this document in all countries. Consult your local IBM representative for information on the products and services currently available in your area. 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. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described 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
North Castle Drive
Armonk, NY 10504-1785
U.S.A.*

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 NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information 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 without notice.

The products described in this document are not intended for use in implantation or other life support applications where malfunction may result in injury or death to persons. The information contained in this document does not affect or change IBM product specifications or warranties. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of IBM or third parties. All information contained in this document was obtained in specific environments and is presented as an illustration. The result obtained in other operating environments may vary.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

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.

Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may

vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Trademarks

The following terms are trademarks of International Business Machines Corporation in the United States, other countries, or both:

IBM
IBM logo
ThinkPad
Rescue and Recovery
Rapid Restore

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

Electronic emission notices

Portable 40GB USB 2.0 Hard Drive with Rescue and Recovery

Federal Communications Commission (FCC) statement

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:


- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult an IBM authorized dealer or service representative for help.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. Proper cables and connectors are available from IBM authorized dealers. IBM is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible party:
International Business Machines Corporation

New Orchard Road
Armonk, NY 10504
Telephone: 1-919-543-2193

 Tested To Comply
With FCC Standards
FOR HOME OR OFFICE USE

Industry Canada Class B emission compliance statement

This Class B digital apparatus complies with Canadian ICES-003.

Avis de conformité a la réglementation d'Industrie Canada

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Deutsche EMV-Direktive (electromagnetische Verträglichkeit)

Zulassungsbesccheinigung laut dem Deutschen Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG) vom 30. August 1995 (bzw. der EMC EG Richtlinie 89/336):

Dieses Gerät ist berechtigt in Übereinstimmung mit dem Deutschen EMVG das EG-Konformitätszeichen - CE - zu führen. Verantwortlich für die Konformitätserklärung nach Paragraph 5 des EMVG ist die:

IBM Deutschland Informationssysteme GmbH, 70548 Stuttgart.

Informationen in Hinsicht EMVG Paragraph 3 Abs. (2) 2:

Das Gerät erfüllt die Schutzanforderungen nach EN 55024:1998 und EN 55022:1998 Klasse B.
--

EN 55022 Hinweis:

“Wird dieses Gerät in einer industriellen Umgebung betrieben (wie in EN 55022:B festgelegt), dann kann es dabei eventuell gestört werden. In solch einem FA11 ist der Abstand bzw. die Abschirmung zu der industriellen Störquelle zu vergrößern.”

Anmerkung:

Um die Einhaltung des EMVG sicherzustellen sind die Geräte, wie in den IBM Handbüchern angegeben, zu installieren und zu betreiben.

European Union - emission directive

This product is in conformity with the protection requirements of EU Council Directive 89/336/ECC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

IBM can not accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including the fitting of non-IBM option cards.

This product has been tested and found to comply with the limits for Class B Information Technology Equipment according to European Standard EN 55022. The limits for Class B equipment were derived for typical residential environments to provide reasonable protection against interference with licensed communication devices.

Union Européenne - Directive Conformité électromagnétique

Ce produit est conforme aux exigences de protection de la Directive 89/336/EEC du Conseil de l'UE sur le rapprochement des lois des États membres en matière de compatibilité électromagnétique.

IBM ne peut accepter aucune responsabilité pour le manquement aux exigences de protection résultant d'une modification non recommandée du produit, y compris l'installation de cartes autres que les cartes IBM.

Ce produit a été testé et il satisfait les conditions de l'équipement informatique de Classe B en vertu de Standard européen EN 55022. Les conditions pour l'équipement de Classe B ont été définies en fonction d'un contexte résidentiel ordinaire afin de fournir une protection raisonnable contre l'interférence d'appareils de communication autorisés.

Unione Europea - Directiva EMC (Conformidad electromagnética)

Este producto satisface los requisitos de protección del Consejo de la UE, Directiva 89/336/CEE en lo que a la legislatura de los Estados Miembros sobre compatibilidad electromagnética se refiere.

IBM no puede aceptar responsabilidad alguna si este producto deja de satisfacer dichos requisitos de protección como resultado de una modificación no recomendada del producto, incluyendo el ajuste de tarjetas de opción que no sean IBM.

Este producto ha sido probado y satisface los límites para Equipos Informáticos Clase B de conformidad con el Estándar Europeo EN 55022. Los límites para los equipos de Clase B se han establecido para entornos residenciales típicos a fin de proporcionar una protección razonable contra las interferencias con dispositivos de comunicación licenciados.

Union Europea - Normativa EMC

Questo prodotto è conforme alle normative di protezione ai sensi della Direttiva del Consiglio dell'Unione Europea 89/336/CEE sull'armonizzazione legislativa degli stati membri in materia di compatibilità elettromagnetica.

IBM non accetta responsabilità alcuna per la mancata conformità alle normative di protezione dovuta a modifiche non consigliate al prodotto, compresa l'installazione di schede e componenti di marca diversa da IBM.

Le prove effettuate sul presente prodotto hanno accertato che esso rientra nei limiti stabiliti per le apparecchiature di informatica Classe B ai sensi della Norma Europea EN 55022. I limiti delle apparecchiature della Classe B sono stati stabiliti al fine di fornire ragionevole protezione da interferenze mediante dispositivi di comunicazione in concessione in ambienti residenziali tipici.

이 기기는 가정용으로 전자파 적합등록을 한 기기로서
주거지역에서는 물론 모든 지역에서 사용할 수 있습니다.

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。

Japanese statement of compliance for products less than or equal to 20 A per phase

高調波ガイドライン適合品



Part Number: 73P3317

Printed in USA

(1P) P/N: 73P3317

