McAfee®
EasyRecovery™
User's Guide

Notice to Users

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This manual should not be construed as any representation or warranty with respect to the software named herein. Occasionally, changes or variations exist in the software that are not reflected in the manual. Generally, if such changes or variations are known to exist and affect the product significantly, a release note or README file will accompany the User's Guide and/or the distribution CD-ROM, or will be available with EasyUpdate downloads. In that event, please read the release notes or README file before using the product.

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Manual Conventions

This manual uses a number of conventions that make it easier to read and understand.

■ **This font denotes button and field names**

■ **This font denotes menus and menu paths**

You will see this 123 graphic any time there are numbered steps or instructions.

Notes contain additional information that may not directly relate to the current text, but is important to know.

Warnings contain important information that you must be aware of to avoid possible system problems.

The term "click," as in "Click **Next** to continue" means that you move the mouse pointer over the specified area on your screen, and click with the primary mouse button.

The term "right-click," as in "Right-click on the tray icon" means that you move the mouse pointer over the specified location and click the secondary mouse button (the right button if you're right-handed).

Getting Help

THIS MANUAL

This manual will get you started installing and using EasyRecovery™. It provides an introduction and explanation of the tools in EasyRecovery™, and describes how to use each one.

ONLINE HELP

The EasyRecovery online help system is available by several access methods:

- Select the **Help Topics** item from the **Help** menu.
- All tool pages have help, click the **Help** button.

MCAFEE WEB SITE

At the McAfee Web Site, you can send e-mails to our customer support team or order other McAfee products. http://us.mcafee.com

TECHNICAL/CUSTOMER SUPPORT

For technical support, please visit http://ts.mcafeehelp.com/. Our support site offers 24-hour access to the easy-to-use Answer Center for solutions to the most common support questions.

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Chapter 1: Welcome to McAfee® EasyRecovery™

WELCOME TO MCAFEE® EASYRECOVERY™ SOFTWARE!

McAfee® EasyRecovery™ software is a comprehensive collection of essential tool components designed to help you quickly and easily diagnose your system, recover inaccessible data, and repair corrupt files. The software can help manage your data in the following ways:

DIAGNOSE YOUR SYSTEM

- Test for potential hardware problems
- Analyze file system structures

RECOVER LOST DATA

- Accidentally deleted files
- Formatted or fdisked partitions
- Virus outbreaks
- Application damage or corruption
- Make Emergency Boot Diskette of Data Recovery tools

SYSTEM REQUIREMENTS

McAfee® EasyRecovery™ has the following minimum system requirements:

■ Microsoft Windows 98SE, Me, 2000, and XP

Although EasyRecovery requires the above operating systems for installation purposes, EasyRecovery is capable of recovering files from DOS and other Windows-based operating systems such as 3.x, 95, 98, and NT.

■ Minimum of 64MB of available RAM

■ Minimum of 70MB free hard disk space for installation*

■ Pentium-class processor

■ Microsoft Internet Explorer 5.5 or later

■ Operation System designed and tested to support English languages

*To ensure the safety of your data, you will be required to specify a different hard drive or partition with sufficient space allocated on which to store to recovered data.

INSTALLING MCAFEE® EASYRECOVERY™

We recommend that you run EasyUpdate to check for new releases as soon as you have installed McAfee® EasyRecovery™. We often put new releases, bug fixes, and software improvements on the Web site. Updates obtained via EasyUpdate are free of charge.

Follow these steps to install EasyRecovery:

1. Insert the EasyRecovery CD into your CD-ROM drive.

2. The CD will automatically start. If it does not, click **Run** on the **Start** menu, and type *D:\setup.exe*, where *D* is the drive letter of your CD-ROM drive. Click **OK**.

3. Select the appropriate language.

4. Click **Install EasyRecovery**.

5. Follow the on-screen instructions.

> *If you downloaded McAfee®EasyRecovery™ from the Internet, open Windows Explorer (or My Computer), locate and double-click the downloaded file. The installation process will automatically start.*

STARTING MCAFEE® EASYRECOVERY™

The installation process created an McAfee® EasyRecovery™ icon in the Program files menu. You can start EasyRecovery in one of two ways.

To start EasyRecovery, do one of the following:

- Click the **Start** button, and then point to **Programs**. Point to **EasyRecovery**, and then click **EasyRecovery**.

- Double-click the **EasyRecovery** icon on the desktop.

When McAfee® EasyRecovery™ starts up, you see the main Home window. From the main EasyRecovery window, you can click any of the program buttons on the left side to access the tools. You can also access the McAfee Web site.

UPDATING YOUR SOFTWARE (EASYUPDATE™)

McAfee periodically provide updates to McAfee® EasyRecovery™ software products. Programming updates (also known as patches) are available to you through the Internet, and are free for a limited time. EasyUpdate downloads and installs program patches in minutes.

If there are multiple components for updating, EasyUpdate provides you with a list of options—you can update everything, or select a subset of options.

We recommend running EasyUpdate as soon as you purchase and install EasyRecovery, just in case there is a program patch that was not included with your version.

To run EasyUpdate:

1. Make sure you are connected to the Internet. If you access the Internet using a modem, you should already be dialed in, or your browser should be set up to automatically dial in.

2. Start EasyRecovery.

3. Click the **EasyUpdate** button from the main EasyRecovery window (or click **Software Updates**, and then click **EasyUpdate**).

4. In the **EasyUpdate** window, click **Next**.

   This connects you to the McAfee update server. EasyUpdate will determine which EasyRecovery tools you have installed. The list will include updates and product patches. Checked items will be downloaded to your computer.

5. Select the items you want to update, and click **Next**.

6. Follow the on-screen instructions.

7. At the last screen, click **Done**. Depending on what you updated, you may be prompted to restart Windows. The changes will appear in EasyRecovery the next time you run it.

REMOVING MCAFEE® EASYRECOVERY™

To remove McAfee® EasyRecovery™:

1. Click Control Panel, and then double-click the **Add or Remove Programs** icon.

2. Click **EasyRecovery** and then click **Remove**.

3. Click **Yes** when the confirmation dialog box appears.

4. Follow the on-screen instructions.

Chapter 2: Categories & Tool Components

McAfee® EasyRecovery™ is designed to contain many add-on tool capabilities. Each new tool will be installed and grouped into related categories. The categories are listed along the left column of the main EasyRecovery window.

The Software Updates and Crisis Center categories are standard and always included with EasyRecovery. Any custom categories that are purchased will appear above the Software Updates and Crisis Center categories.

This is an example; the category and tools you have installed may be different from the example.

Just click on a category button to see the installed tool components for that category. Each tool provides you with the specified capabilities relevant to that category. You will notice that when you move the cursor over a utility button, the button becomes available for selection. Click on the button to select the tool.

Chapter 3: McAfee® EasyRecovery™ Categories

Currently, the following categories can be included with McAfee®
EasyRecovery™:

- ■ Disk Diagnostics
- ■ Data Recovery
- ■ Software Updates
- ■ Crisis Center

*This is an example; the category and tools you have installed
may be different from the example.*

DISK DIAGNOSTICS

The Disk Diagnostics category provides you with valuable system diagnostic tools. Tools included in this category are designed to quickly determine whether your system is experiencing hardware or on-disk structure problems. All tools in this category generate a detailed report on the condition of your system.

 This is an example; the category and tools you have installed may be different from the example.

The SMART Tests tool allows you to test the physical health of your disk drive. The tool will perform the following hardware tests.

- SMART Status Check
- Short SMART Test
- Extended SMART Test

SMART stands for Self-Monitoring, Analysis and Reporting Technology. SMART tests will prevent data loss by predicting possible drive failures using special algorithms built into the firmware of your hard drive. The SMART Status Check will perform a quick status check of your hard disk, which takes a few seconds. The Short SMART Test will issue a short (around 90 seconds) self-test command where as the Extended SMART Test will issue a comprehensive (several minutes) self-test command to your hard disk.

NOTE   *Any drives reporting a SMART failure could likely to fail at any time and should be backed up immediately.*

The Quick Diagnostic Tests and Full Diagnostic Tests are read-only Drive Tests tools designed to check the physical stability of your hard drive. The Quick Diagnostic Test will determine, with 90 percent certainty, in 90 seconds, whether your hard disk has a physical problem. The Full Diagnostic test will check/read the entire hard drive looking for physical problems on the drive such as unreadable sectors.

In some cases, your drive may not have any physical problems but on-disk structure problems. The Partition Tests tool is designed to analyze on-disk file system structures for FAT and NTFS partitions. The tool will do an extensive scan of file systems structures generating a detailed report of the condition of your file data.

DATA RECOVERY

The Data Recovery category includes a collection of recovery tools, which target recovery of file data. The Data Recovery tools will recover files from corrupted FAT and NTFS partitions. All tools are NON-DESTRUCTIVE and READ-ONLY. The tools are designed to recover and copy your data to another destination such as a removable drive, another hard drive, a floppy diskette, or a network volume. Each tool is a fully automated wizard, which walks the user through three simple steps:

1. **Evaluate**: The tool identifies all devices and/or partitions on the system and displays a graphical representation of what was found

2. **Recover**: The tool examines the file structures that remain on the corrupted partition and constructs a virtual file system in memory.

3. **Tag and Copy**: A list of files is graphically presented to you with a "Windows Explorer like" look and feel. You then have the ability to filter select files and folders for copy to a safe location.

The data recovery tools available are listed below.

- DeletedRecovery
- FormatRecovery
- RawRecovery
- ResumeRecovery
- StandardRecovery
- AdvancedRecovery

■ Emergency Diskette

This is an example; the category and tools you have installed may be different from the example.

Mistakenly deleting files is one of the most common data recovery scenarios. The **DeletedRecovery** tool will give you quick access to deleted files, and has different options for scanning a partition. You can perform a quick scan, or a thorough complete scan for deleted files. You also have the option to enter a File Filter string, either with or without using 'wildcards,' to quickly recover files of a specific name.

Another common data recovery situation is accidental reformatting of a partition. The **FormatRecovery** tool will allow you to recover files from an accidentally formatted or reinstalled partition. This type of recovery will ignore the existing file system structures and try to search for structures associated with the previous file system.

The **RawRecovery** tool allows you to scan severely corrupted partitions for files using a file signature search algorithm. This tool will help you recover files from a partition with damaged directory structures. Over 290 popular file signatures are available for scanning for your file data in this tool.

The number of file signatures available for scanning will depend on which EasyRecovery edition you have installed.

For the most difficult recoveries, the **AdvancedRecovery** and **StandardRecovery** tools provide you with advanced recovery options including recovering from mistakenly deleted partitions, virus attacks, and other major file system corruptions. Both tools give you a detailed graphical representation of the devices connected to your system including partitions associated with each device. Which tool you have installed is dependent on the edition of McAfee EasyRecovery purchased.

The Data Recovery category also includes the **EmergencyDiskette** tool that can create an emergency boot diskette. The diskette allows you to recover data from a partition even if you cannot boot to Windows. It includes a DOS version of the Data Recovery engine used in the Windows tools.

All recovery tools in the Data Recovery category allow the option to resume the recovery at a later time. The **ResumeRecovery** tool will load a saved recovery file to resume a previous recovery option.

SOFTWARE UPDATES

McAfee periodically improves EasyRecovery—adding features, enhancements, and making changes based on customer requests.

The Software Updates section of McAfee® EasyRecovery™ provides information on obtaining these new offerings:

EASYUPDATE™

Programming updates (also known as patches) are also available to you through the Internet, and are free for a limited time. EasyUpdate™ downloads and installs program patches in minutes.

For more information, see "Updating Your Software (EasyUpdate™)" on page 4.

CRISIS CENTER™

The Crisis Center provides information on software and services that can help you recover from a data loss situation. This includes free information and technical support on data loss situations, and additional solutions for recovering from data loss disasters. See Chapter 4 for a detailed explanation.

Chapter 4: Crisis Center™

WHAT IS CRISIS CENTER™?

Even if you've had the worst possible disaster happen to your computer, you may still be able to get the data from it. Professional data recovery services have experience recovering data resulting from severe software corruption, hard drive failures, viruses, user error, and natural disasters including floods, fires, and earthquakes. So if you're reading this because your data is in real trouble, the first thing to remember is *Do not panic*! Even in the worst of circumstances, data can often be recovered.

Of course, making regular backups of your critical data is very important. If you back up your data regularly, you may lose only a few hours to a few days' worth of work. However, in some cases this can be devastating. If the worst should happen, Crisis Center provides information on software and services that can help you recover from your data loss situation.

The Crisis Center contains the following information on recovering from data loss disasters:

- Crisis Information (Information and Technical Support for data loss situations)
- Remote Data Recovery™ (Data Recovery via modem or the Internet)
- In-Lab Data Recovery (Recover data from physically damaged disks)

WHAT IF THERE IS SERIOUS PHYSICAL DAMAGE

If you ever find your computer hard drive making unusual noises, submerged in water, buried under rubble, sitting amongst the wreckage of a fire, or otherwise physically compromised, the first course of action should be to

contact a professional data recovery service. Never assume that lost data is unrecoverable, because in most cases it can be retrieved. Professional data recovery engineers have vast experience recovering lost or corrupted data from damaged storage media.

HELP! MY DISK IS DEAD!!

"Now what do I do? I can't afford to have my computer down, or worse yet, lose all the information on my PC!"

You may be surprised to learn that just because a hard drive is not working or your system won't boot, you still have a good chance of at least recovering your data. This chapter, along with all of the supporting information and web site links provided through the Crisis Center™, is a tutorial on data recovery and how to go about it. Your data may still be recoverable, and we'll step you through the various data recovery methods from the easiest all the way to Ontrack's premier data recovery services.

FIRST, EVALUATE THE LEVEL OF DAMAGE

There are varying levels of data recovery situations, from accidentally deleting an important file, to losing critical disk information such as a File Allocation Table (Windows 98/Me) or NTFS Master File Table (Windows NT/2000/XP), all the way to severe physical damage.

If you seem to have lost data or even your operating system, but the disk itself seems to be spinning correctly (no strange noises when the computer is running), the chances of recovering data at a minimum of cost are very good.

On the other hand, if you disk has obvious physical damage, then you must send the disk into a data recovery service that has cleanroom facilities to clean the disk and can recover as much data as possible.

NEXT, GET ALL THE INFORMATION YOU CAN

Ontrack® has been recovering data from all kinds of damage situations for years. Their trained technical support staff can help you evaluate the damage and determine the most effective way for you to recover the data. If your system is still bootable to Windows, click on the CrisisInformation button in the Crisis Center™ window. This is an information center that provides among other things, a telephone number for free technical support, FAQs for those who have specific questions, and links to helpful Web sites. If you can't boot your system, see the Getting Help section of this User Guide for contact information.

RUNNING CRISIS CENTER

When you first open the Crisis Center, you see the buttons corresponding to each option:

CRISIS INFORMATION

If you are having difficulty recovering your critical data, please visit http://ts.mcafeehelp.com/. Our support site offers 24-hour access to the easy-to-use Answer Center for solutions to the most common support questions.

If you need the assistance of a data recovery engineer, additional services are available via Ontrack Data Recovery™. These fee-based services include Remote Data Recovery™ and In-Lab Data Recovery. For more information or pricing on these services by Ontrack®, please contact Ontrack at the following:

United States/Canada	1-888-685-2658
U.K., Germany, France	00 800 10 12 13 14
Japan	+81-4-2932-6365

REMOTE DATA RECOVERY™

Remote Data Recovery is a powerful service used in data loss situations that require the expertise of an engineer. Remote Data Recovery can be the best option for deleted files, an unbootable computer, damage caused by viruses, deleted or missing partitions, user error, software malfunction, and corrupted file structures. This technology enables engineers to quickly recover lost data directly from personal computers, laptops, and servers remotely via a modem or Internet connection. The fees for this service are additional.

For more information or pricing on this service by Ontrack®, please contact Ontrack at the following:

United States/Canada	1-888-685-2658
U.K., Germany, France	00 800 10 12 13 14
Japan	+81-4-2932-6365

IN-LAB DATA RECOVERY

In-Lab Data Recovery is for the most serious of data loss situations when you need to send the hard drive into a data recovery lab. Hard drives that are malfunctioning, physically damaged, or have been exposed to a disaster would require this level of service. The fees for this service are additional.

For more information or pricing on this service by Ontrack®, please contact Ontrack at the following:

United States/Canada	1-888-685-2658
U.K., Germany, France	00 800 10 12 13 14
Japan	+81-4-2932-6365

TECHNICAL SUPPORT AND DATA RECOVERY SERVICES

For technical support, please visit http://ts.mcafeehelp.com/. Our support site offers 24-hour access to the easy-to-use Answer Center for solutions to the most common support questions.

In case of severe data loss damage, additional services are available via Ontrack Data Recovery™. These fee-based services include Remote Data Recovery™ and In-Lab Data Recovery. For more information or pricing on these services by Ontrack, you can also consult with Ontrack data recovery representatives by calling the following numbers 24 hours a day.

United States/Canada	1-888-685-2658
U.K., Germany, France	00 800 10 12 13 14
Japan	+81-4-2932-6365

Chapter 5: Troubleshooting

Even if you've had the worst possible disaster happen to your computer, you may still be able to get the data from it.

Problem/Symptoms	Possible Causes	What to Do
The file I want to repair cannot be found.	The file was deleted or not recently saved.	Search the complete partition for the file. Optionally, try the DataRecovery category to attempt to recover the lost file.
The file I repaired still does not open.	The file is not repairable.	Many of the tools will create more than one type of file as part of the recovery process. Be sure to try all destination files that have been generated. View the help file for the individual tool for more information. Some tools will create more than one destination file in an attempt to retrieve the data.
My computer is exhibiting erratic, unpredictable behavior.	Possible virus. Possible corrupted operating systems structures.	McAfee® EasyRecovery™ requires a healthy system. Use a PC maintenance or McAfee anti-virus product to diagnose, clean up, or repair the system problem.

Problem/Symptoms	Possible Causes	What to Do
My hard drive is making unusual grinding or scraping noises and generally sounds in bad shape.	The drive may be going bad.	Back up everything important to another destination immediately. Turn off the computer. Get the computer checked out by a good technician. You may have to replace the hard drive but before doing so, make sure you've recovered any data that hasn't been backed up using a data recovery software or service solution - See Crisis Center for more information.
There is evidence of bad sectors on my drive.	The drive may be going bad.	McAfee® EasyRecovery™ Professional contains a Disk Diagnostic utility that will scan the surface of the drive for bad sectors. Some bad sectors do not preclude a successful recovery, but can affect the quality of the recovery. If the drive is making noise or is reporting an increasing number of bad sectors, Ontrack Data Recovery™ in-house data recovery service is recommended.
My boot drive is corrupt.	The drive has experienced corruption.	Install McAfee® EasyRecovery™ on a functioning computer. In the DataRecovery category there is a selection to make an Emergency Diskette. This will create a bootable data recovery tools diskette that can be run on the computer with the corrupt boot drive.

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