Using Rescue Disk

Rescue Disk lets you create an emergency boot disk that you can use to boot up your PC later if you encounter a problem that prevents you from starting the computer from the system hard drive. The system hard drive is the hard drive that contains your Windows directory or folder.

You can use the Rescue disk that is created by default. Or if you are an advanced user, you can customize your Rescue disk to add the most important files that you may want to use when recovering a failed hard drive. For example, you might want to add your CD drive's driver software so you can also access that drive during the recovery process.

These topics explain how to use Rescue Disk:

- Creating a Rescue Disk
- Adding or Removing Files on a Rescue Disk
- Using a Rescue Disk

Creating a Rescue Disk

You should create a rescue disk when you first start using Safe & Sound. If you update your system later, such as installing a newer version of Windows, you should create another new rescue disk. The rescue disk will be formatted, so you can reuse your 3.5-inch rescue disk if you want to add more files to it in the future.

To create a rescue disk:

1. Start Rescue Disk by doing one of the following:

Click the Start button and choose the Programs > Safe & Sound > Rescue Disk command.

• Open the Safe & Sound folder and double-click the Rescue Disk icon from the Windows Explorer or My Computer window.

Click the Start button, choose Safe & Sound, click the Tools button, and choose the Rescue Disk command.

The Rescue Disk dialog box appears.

2. Click the Next > button in the Rescue Disk window.

The <u>Rescue Disk (Insert Disk) dialog box</u> appears.

- **3.** Do one of the following:
- Go to step 3 if you want to use the default Rescue disk.

Click Advanced if you are an advanced user and want to add additional files to (or remove them from) the Rescue disk.

- **4.** Click Next >. Then click Finish.
- 5. Insert a disk into drive A and click OK.

Rescue Disk formats the disk and copies critical startup files to it as well as any files you added. When the process is complete, Rescue Disk exits and returns to the desktop.

Adding or Removing Files on a Rescue Disk

While you are creating a rescue disk, you can specify additional files that you want to add to the rescue disk. For example, you may want to add your CD-ROM's driver file so you can access files on that drive.

To add or remove files when creating a rescue disk:

1. Start Rescue Disk by doing one of the following:

Click the Start button and choose the Programs > Safe & Sound > Rescue Disk command.

Open the Safe & Sound folder and double-click the Rescue Disk icon from the Windows Explorer or My Computer window.

Click the Start button, choose Safe & Sound, click the Tools button, and choose the Rescue Disk command.

The <u>Rescue Disk dialog box</u> appears.

2. Click the Next > button in the Rescue Disk window.

The <u>Rescue Disk (Insert Disk) dialog box</u> appears.

- **3.** Click Advanced to add additional files to (or remove them from) the Rescue disk.
- **4.** Click the Add button, select a file in the standard Windows Open dialog box that appears. Then click Open.
- 5. Repeat step 4 to add more files to the list of those that will be added to your rescue disk.

You can also select a file in the list and click the Remove button to remove it.

6. When you finish adding files, click OK.

The Rescue Disk (Insert Disk) dialog box reappears.

- **7.** Click Next >. Then click Finish.
- **8.** Insert a disk into drive A and click OK.

Rescue Disk formats the disk and copies critical startup files to it as well as the files you added. When the process is complete, Rescue Disk exits and returns to the desktop.

Using a Rescue Disk

You will be able to use your rescue disk when you can't boot from your Windows system hard drive.

Tip These instructions are also included in your *McAfee Safe & Sound User's Guide* in the event you encounter a problem and cannot access the Safe & Sound online help.

To use a rescue disk:

- **1.** Insert your Rescue disk into drive A:.
- **2.** Reboot your computer (or turn on the power).

If your system doesn't boot, access CMOS and make sure the Booting From Floppy option is enabled.

3. Follow the on-screen instructions.

Rescue Disk Dialog Box

This dialog box contains the following options:

Next >

Click the Next > button to begin the process of creating a rescue disk. The <u>Rescue Disk (Insert Disk)</u> <u>dialog box</u> appears.

Cancel

Click the Cancel button to close Rescue Disk without creating a rescue disk and return to the desktop.

Rescue Disk (Insert Disk) Dialog Box

This dialog box contains the following options:

< Back

Click the < Back button to go back to the first dialog box. The <u>Rescue Disk dialog box</u> appears.

Next >

Insert a disk to use as your rescue disk into drive A and click the Next > button to continue.

Cancel

Click the Cancel button to close Rescue Disk without creating a rescue disk and return to the desktop.

Advanced >>

Click the Advanced >> button to add or remove other files on the rescue disk you'll be creating. The <u>Disk</u> <u>Rescue (Add/Remove Files) dialog box</u> appears.

Cancel

Click Cancel to close the Rescue Disk without creating a rescue disk and return to the desktop.

Disk Rescue (Add/Remove Files) Dialog Box

This dialog box contains the following options:

Items to Copy to Rescue Disk

This list displays all the files you've added and want to be copied onto the rescue disk that you'll be creating if you finish this session with Rescue Disk.

Add

Click the Add button to display the Add to Rescue Disk dialog box (which is a standard Windows Open dialog box) where you can select a file to add to the rescue disk you'll be creating. After selecting a file, click Open.

Remove

Select a file in the Items to Copy to Rescue Disk list and click the Remove button to remove that file from the list.

οκ

Click OK to accept the current list of files to copy to the rescue disk you'll be creating during this session.

Cancel

Click the Cancel button to close the Disk Rescue (Add/Remove Files) dialog box without changing the list of additional files to add.

Address Space

The sum total of all possible memory addresses available at a given time. This is 4 GB (gigabytes) on a 386 or later PC in protected mode.

Launch Pad

The Launch Pad is a window where you can place application and document icons so you can conveniently access them.

Benchmarks

A benchmark is a standardized task that tests various devices for measurements, such as speed.

BIOS

The BIOS (or Basic Input/Output System) contains buffers for sending information from an application to the hardware device, such as a printer, where the information should go.

Buffers

A buffer is a temporary storage location for information being sent or received.

Bytes

A byte is eight bits of information composed of zeros and ones, one of which may be a parity bit. Most character sets, such as ASCII, use one byte to represent each character (letter, number, or special symbol).

Cache

A cache is part of the computer's memory used to temporarily store recently accessed information. A cache is designed on the premise that recently used information may be needed again soon. Keeping information available in cache reduces the time it takes for an application to obtain the information again.

Cluster

A cluster is a unit of storage allocation usually consisting of four or more 512-byte sectors.

Conventional Memory

Conventional memory is the first 640 K (kilobytes) of RAM (random access memory).

CPU (Central Processing Unit)

The "brain" of your computer. This is main computer chip that controls all activity that takes place on a computer.

Diagnostics

Diagnostics are tests run to detect faults in a computer system. Diagnostics tests are run to detect faults before they become serious problems so the faults can be corrected.

Directories

Directories are locations within a volume on a drive where you can store files or subdirectories. In Windows, directories are equivalent to folders that appear on the desktop in a drive window.

Discardable Memory

Discardable memory is memory used by an application that it has marked as discardable. Windows can reallocate the discardable memory to a different application if it needs to.

DLLs (Dynamic Link Libraries)

A DLL is an executable code module that can be loaded on demand and linked at run time. DLLs can be shared among multiple applications and independently updated, transparent to the applications. DLLs can also be unloaded when they are no longer needed.

DMA (Direct Memory Access)

DMA is a fast method of moving information from a storage device or LAN interface card directly to RAM which speeds processing time. DMA is direct memory access by a peripheral device that by-passes the CPU to save time.

Expanded Memory

DOS running on the Intel 80286, 80386, or 80486 family of computers can only address one megabyte of memory at one time. Expanded memory is the memory located between the base memory (either 512 K or 640 K) and one megabyte. Expanded memory is reserved by DOS for housekeeping tasks, such as managing information that appears on the screen.

Extended Memory

Memory above one megabyte in 80286 and higher PCs. Extended memory can be used for RAM disks, disk caches, or Windows, but it requires the CPU to run in a special mode (protected mode or virtual real mode).

FAT (File Allocation Table)

The FAT is an index to the location where all the information is stored on a floppy disk or hard drive. The FAT is extremely important because the system uses it to store and retrieve files containing information.

GDT (General Description Table)

The GDT is a table that is basic to the operation of protected mode. This table contains data structures (descriptors) that describe various regions of memory and how they may be accessed. Windows uses the GDT for system devices. *See LDT*.

Global Heap

The Global Heap is the general pool of memory available to Windows applications.

GPF (General Protection Fault)

An error condition caused by an application when it attempts to perform an operation not allowed by the operating system. Windows uses GPFs to determine and control the state of the currently executing application. GPFs that are unexpected by Windows cause a system error message to appear.

HMA (High Memory Area)

The HMA is the first 64 K of extended memory. If you use DOS 5.0, you can save memory by loading DOS into the HMA. Do this by adding the DOS=HIGH setting to your CONFIG.SYS file and restarting your PC.

Interrupt

A temporary suspension of a process caused by an event outside that process. More specifically, an interrupt is a signal or call to a specific routine. Interrupts allow peripheral devices, such as printers or modems, to send a call to the CPU requesting attention.

I/O (Input/Output) Device

An I/O device is any piece of computer hardware that can exchange information with the CPU. Examples of I/O devices include network cards, printers, speakers or other sound devices, or devices connected to the serial or parallel ports of your PC such as external modems.

Kernel

The Kernel is the part of a computer operating system that performs basic functions such as switching between tasks.

LDT (Local Descriptor Table)

The LDT is a secondary data structure table that contains additional information about various regions of memory and how they can be accessed. Windows uses the LDT for programs.

Linear Memory

Linear memory is the currently defined address space of the system that Windows uses to allocate memory to Windows applications.

Local Heap

The Local Heap is a region of memory allocated for local use by an application.

Locked Memory

Locked memory is memory used by an application that cannot be relocated or discarded by Windows.

Mapping

Mapping is the process of assigning physical memory (RAM) to a particular linear address range.

Mode Switch

A mode switch is a transition made by the CPU when changing from one mode of operation to another. For example, switching from real or protected mode, or a transition between different levels of protection. *See Ring 0, 1, 2, 3.*

Modules

A module is a device driver loaded by Windows.

Paging

The process of saving information stored in RAM to the swap file on the system hard drive so Windows can make the RAM available at a different linear address.

Parallel Port

The parallel port is a connector on the back of your PC and on some peripheral devices. With the appropriate driver software installed and a parallel cable connected to the parallel ports on your PC and a peripheral device, the two can communicate with each other. Parallel transmissions have no EIA standard, but most equipment follows a quasi-standard called the Centronics Parallel Standard.

PCI (Peripheral Component Interconnect) Bus

The PCI Bus is a local motherboard specification (that provides connector slots on the motherboard for installing peripheral cards). The PCI Bus, designed by Intel, offers a high performance, peripheral component level interface to the CPU bus.

Physical Memory

Physical memory is the RAM (Random Access Memory) installed in your PC. See Random Access Memory (RAM).

Protected Mode

A mode of operation of 80286 or later CPUs which allows access to more than 1 MB of memory.

RAM (Random Access Memory)

RAM (Random Access Memory) is also called physical memory. It is installed in your PC on SIMMs (Single Inline Memory Modules) or DIMMs (Dual Inline Memory Modules). RAM is volatile, extremely high-speed storage used by your computer for processing information.

Real Mode

A mode of 80286 or later CPUs, where the CPU operates substantially like an older 8086 CPU and can address directly only 1 MB of memory.

Resources

Resources are objects that Windows and its applications can use, such as the buttons on the screen that you can click.

Ring 0, 1, 2, 3

Different levels of protection in protected mode, where programs having varying degrees of freedom of operation. Ring 0 (zero) is least protected and has direct access to all hardware in the system.

Sector

A sector is a pie-shaped portion of a hard disk. A disk is divided into tracks and sectors. Tracks are complete circuits and are divided into sectors. Under DOS, a sector is 512 bytes.

Serial Port

A serial port is an input/output port (connector) that allows the transmission of information out at one bit at a time, as opposed to parallel which transmits eight bits, or one byte at a time.

Swap File

The swap file is created by Windows on the system hard disk. It uses the swap file to copy information stored in part of the linear address space so it can reallocate the RAM used at that location to another linear address space.

Swapping

Swapping is the process of saving to disk or restoring from disk the contents of RAM so that the RAM can be used elsewhere in linear memory.

System Resources

System resources are a series of data structures kept by Windows. System resources are managed by the Windows User and GDI programs and maintain information about objects that appear on your screen.

32BDA (32-Bit Disk Access)

32BDA is a process in Windows where the device driver that accesses the disk runs entirely as a 32-bit program at Ring 0 (zero).

32BFA (32-Bit File Access)

32BFA is a process in Windows where the DOS file operations are controlled by a program, or set of devices, that operate entirely as 32-bit programs at Ring 0 (zero).

Unlocked Memory

Unlocked memory is physical memory that Windows can copy to the swap file on disk, and whose linear address can be changed whenever Windows chooses.

UMB (Upper Memory Block)

The UMB is the area in memory between 640 K and 1 MB that have RAM mapped into them by memory managers, such as Network Associates' Netroom or MemMaker. *See Expanded memory.*

V86 Mode (Virtual 8086 Mode)

V86 mode is a mode of operation of 80386 or later CPUs where programs, originally designed to run in real mode, can run as sub-programs to a protected mode control program or operating system.

Video Memory

Video memory, called VRAM, is physical memory installed on your PC's video card that is used for displaying information on the screen.

Virtual Memory

Virtual memory is the amount of memory that exists either as physical memory (RAM) or on the hard drive (in the swap file). When a part of memory that is located in the swap file is accessed by an application, Windows reads the information into RAM.

VMs (Virtual Machines)

Virtual machines (also called Virtual DOS machines or VDMs) are created in Windows 95/98 when you open a MS-DOS Prompt window. The VDM is a software emulation of a separate computer, offering all the services that the DOS application expects of a PC.

VxDs (Virtual Device Drivers)

VxDs are used in Windows to communicate with all physical hardware in the system. This prevents any application from having direct access to a piece of hardware. Instead, it communicates only through the VxD for that hardware.

Windows Registry

The Windows 95/98 Registry file contains user, application, and computer-specific configuration information in a central location that was kept in various .INI files in Windows 3.1. The Registry contains settings that determine how your computer runs.