# Introducing Rescue Disk

# Demo (approx 3:23)

Rescue Disk copies your computer's critical setup data and startup files to a set of removable disks, or to a folder. If your computer fails to start, the rescue disk set can usually get the computer started again. Once the computer is running, the Norton Utilities programs stored on the rescue disk set can help you diagnose and fix computer problems, and restore the computer to full functioning.

You can create two different types of rescue disk sets, depending on your system configuration:



A basic rescue set uses floppy disks to store the rescue information. When you rescue your computer using a standard rescue disk set, the computer boots to DOS. Rescue helps you use the DOS-based Norton Utilities programs to investigate and repair the problems that prevented your computer from starting normally.



A Norton Zip rescue set uses an lomega Zip<sup>10</sup> (or Jaz<sup>10</sup>) disk to store much of the rescue information, and usually requires a single floppy disk to store the minimal information necessary to get the computer started. When you rescue your computer using a Norton Zip rescue disk set, the computer boots to Windows. In this case, the Rescue Recovery Wizard starts automatically to help get your system running properly again.

You must have an lomega Zip or Jaz drive attached to your system to create and use a Norton Zip rescue disk set. If you have a SCSI adapter that is not currently recognized by Rescue Disk, see the Norton Utilities readme file.

To ensure a successful recovery, it is vital that the rescue information be kept current. You should update your rescue disk set whenever you upgrade your operating environment, or when you add, modify, or remove hardware, software, startup files, or disk partitions.

The Rescue Disk sensor of Norton System Doctor can help ensure that the information is up to date by alerting you or automatically running Rescue Disk to update the information whenever necessary.

If you did not create a rescue disk when you installed Norton Utilities, create one now by clicking here **I** to start Rescue Disk.

{button ,AL(`About rescue disk sets;About rescue folders;To create or update a basic rescue set;To create or update a basic rescue disk set;To create or update a Norton Zip rescue disk set',0,`',`')} <u>Related Topics</u>

# Types of rescue items

A basic rescue disk set includes these types of rescue items:

- {button ,JI(`rescue32.HLP>task',`RESCUEW\_TOPIC\_ABOUT\_STARTUP\_DATA')} <u>Startup</u> <u>data</u>
- {button ,JI(`rescue32.HLP>task',`RESCUEW\_TOPIC\_ABOUT\_STARTUP\_FILES')} <u>Startup</u> <u>files</u>
- {button ,JI(`rescue32.HLP>task',`RESCUEW\_TOPIC\_ABOUT\_DOS\_BASED\_PROGRAMS')} DOS-based rescue programs
- {button ,JI(`rescue32.HLP>task',`RESCUEW\_TOPIC\_ABOUT\_USER\_FILES')} <u>User-selected</u> <u>files</u>

In addition to the basic rescue items, a Norton Zip rescue disk set includes:

• Additional startup files added to the boot floppy disk that allow the computer to recognize and access the Zip drive and start the Windows operating system.

• Windows operating system files stored on the Zip disk enable the computer to boot to Windows instead of DOS.

• Norton Utilities Windows-based programs provide a complete arsenal of programs to help you diagnose and repair computer problems.

{button ,AL(`To add or remove rescue items',0,`',`')} <u>Related Topics</u>

### About rescue disk sets

The first floppy disk in the rescue disk set contains the data and files necessary to start your computer and recover its basic systems. The remaining disks include supplementary programs and any additional files you have added. Rescue Disk shows you the number of disks that will be required to create your rescue disk set.

When you create a Norton Zip Rescue disk set, a single floppy disk contains the minimal set of files necessary to start your computer and recover its basic systems. The Zip disk includes all other files, including the files necessary to start Windows, Norton Utilities Windows-based programs, and any other files you specify should be saved with the rescue information.

• Some newer computer systems designate their built-in, internal Zip drives as drive A:, and can boot from the Zip drive when necessary. In these cases, the Norton Zip rescue disk set does not require a floppy disk.

{button ,AL(`About user-selected files;To create or update a basic rescue disk set;When to use a rescue disk set',0,`',`')} <u>Related Topics</u>

### **About rescue folders**

In addition to creating a rescue disk set, you can also store your computer's rescue information to a folder on a network drive, a second hard disk, or other media.

Rescue folders can be convenient because they:

Save time by allowing rescue information to be updated automatically. The Rescue Disk sensor of Norton System Doctor can automatically update your computer's rescue information as necessary. If you have your rescue information saved to a folder, the process can be entirely automatic. You will not generally be prompted to insert floppy or Zip disks.

Allow network administrators to save rescue information on the network. You can store rescue information for each administered workstation to separate folders on the network. If a workstation fails to start, the rescue information can always be retrieved from the network.

Though you can create rescue folders on local hard disks, it is not recommended. In the event of a hardware failure, you may not be able to access the rescue information. We recommend creating rescue folders on network drives only.

To use the information in a rescue folder, you'll need a single bootable floppy disk that includes the basic rescue information for your computer. You should make the bootable floppy on your own computer, **before** you have problems. Using a bootable floppy that was created on another computer can result in your not being able to use some repair programs after you boot from the floppy.

The basic rescue information is stored in the rescue folder itself, so you can copy this information to the bootable floppy at any time from any workstation on the network that has access to the rescue folder.

{button ,AL(`To create or update rescue folders;To create or update a basic rescue set;About using rescue folders;types of rescue items;When to use a rescue disk set;Notes for network administrators',0,`',`')} <u>Related Topics</u>

# About using rescue folders

Before using a rescue folder that is on a network drive, you'll need to have a single, bootable floppy disk that includes basic rescue information and any real-mode DOS-based network drivers you need to access the network. You can use any computer on the network to copy the basic rescue information from your computer's network rescue folder to the boot floppy. Basic rescue information you should copy to the boot floppy consists of:

RESCUE.EXE

Rescue program that can restore the information contained in the following DAT files

# CMOS.DAT

Information from your computer's <u>CMOS.</u>

# BOOTINFO.DAT

Configuration information from the <u>boot record</u> of your computer's main hard disk.

# PARTINFO.DAT

Information from the hard disk's partition table.

# AUTOEXEC.BAT and CONFIG.SYS

Used to load any real-mode DOS-based network and other drivers you need, like CD-ROM drivers.

{button ,AL(`To create or update rescue folders;To create or update a basic rescue set;About rescue folders;When to use a rescue disk set;Notes for network administrators',0,`',`')} <u>Related Topics</u>

### When to use a rescue disk set

**Warning:** Your rescue disk set is customized for your computer's configuration. Never use rescue disks that were created on or for another computer.

The rescue disk set created for your computer can be used to repair most types of system startup problems. Below is a list of common startup messages that could appear if your computer fails to start. The exact text of your computer's messages may differ somewhat.

{button ,PI(`',`RESCUEW\_BATTERY\_DISCHARGED')} **<u>Battery discharged</u>** 

{button ,PI(`',`RESCUEW\_HARDWARE\_INFO\_LOST')} <u>Hardware information lost</u>-<u>run setup</u>

# Invalid CMOS Checksum

-<u>run setup</u>

{button ,PI(`',`RESCUEW\_INSERT\_BOOT\_DISK')} Please insert boot-disk and press any key

{button ,PI(`',`RESCUEW\_INSERT\_VALID\_BOOT\_DISK')} **Please insert valid boot-disk and press any key** 

{button ,PI(`',`RESCUEW\_NONSYSTEM\_DISK')} Non-System Disk, please insert boot-disk and press any key

{button ,PI(`',`RESCUEW\_BOOT\_SECTOR\_INVALID')} Hard disk boot sector invalid

{button ,AL(`About rescue disk sets;About rescue folders;To create or update a basic rescue set',0,`',`')} <u>Related Topics</u>

# Notes for network administrators

Having a set of rescue disks for each workstation can be costly if you intend to use Zip or standard 3½-inch floppy disks. Storing rescue information to folders on a network drive can save money and time.

Workstation rescue folder recommendations:

• Organize rescue folders for each workstation under a single folder on a network drive. Create a folder named "rescue" on a network drive. Create individual subfolders for each workstation are contained.

• Follow the procedures for creating a basic rescue disk set. From the workstation for which you want to create a network rescue folder, open Rescue Disk and follow the procedures for creating a basic rescue disk set. Specify a network drive as the destination, and click Create.

• If you need to resuscitate a workstation, use it's network rescue folder to create a workstation-specific boot floppy. The boot floppy should include these files from the rescue folder:

- RESCUE.EXE
- CMOS.DAT
- BOOTINFO.DAT
- PARTINFO.DAT
- AUTOEXEC.BAT (if present)
- CONFIG.SYS (if present)

The information above should be sufficient to restore the workstation to proper functioning, whereupon any other information in the rescue folder can be retrieved. However, it's also a good idea to include any real-mode DOS-based network drivers necessary for accessing the network on the bootable floppy disk.

{button ,AL(`About rescue folders;About user-selected files;To add or remove rescue items;To create or update a basic rescue set;To create or update rescue folders',0,`',`')} <u>Related Topics</u>

# About startup data

Startup data includes system and disk configuration information that is necessary for your computer to start. Rescue Disk saves this information to your rescue disk set as files with DAT extensions:

# CMOS.DAT

Contains system configuration information gathered from the computer's <u>CMOS</u>. The data includes such information as:

- Amount of memory <u>(RAM)</u> installed on the computer
- Types of disk drives installed on the computer
- Other information specific to your computer's basic operation

# **BOOTINFO.DAT**

Contains information gathered from the main hard disk's <u>boot record</u>. The data includes information about the disk's physical characteristics and logical structure (sector size, cluster size). It also contains the boot record program that loads the operating system.

# - PARTINFO.DAT

Contains information gathered from the main hard disk's <u>partition table</u> This information describes the <u>partitions</u> that represent the physical disk to the operating system.

{button ,AL(`To create or update a basic rescue disk set;About startup files;Types of rescue items',0,`',`')} <u>Related Topics</u>

# About startup files

Startup files include the files necessary for system startup <u>(IO.SYS, MSDOS.SYS,</u> and <u>COMMAND.COM</u> plus supplemental files, such as <u>AUTOEXEC.BAT</u> and <u>CONFIG.SYS</u>, that are used to load special features or <u>device drivers</u> before Windows starts. These files are copied to the rescue disk set from the disk your computer uses to start (usually the hard drive or <u>partition</u> designated as drive C:).

 If your system uses AUTOEXEC.BAT or CONFIG.SYS, to load additional drivers, such as CD-ROM or sound card drivers, be sure to add the drivers to the list of rescue items. If you have Windows on a CD-ROM, then your rescue disks should always include the CD-ROM drivers to ensure your access to Windows files.

{button ,AL(`To add or remove rescue items;To add or remove rescue items;About Rescue disk compression and security program support;About startup data;About user-selected files;Types of rescue items',0,)} <u>Related Topics</u>

## About user-selected files

Apart from the files that Rescue Disk copies to the rescue disk set by default, you can add additional files to be included on the rescue set. From the Options dialog box click Add Files. The files are added to the User-selected Files groups, and remain there until you explicitly remove them.

- **Warning:** Add files only if they are important to restoring your system after a crash. Do not attempt to use your rescue disk set as a full system backup. For Zip disks, it is important to leave at least 5MB of free space on the Zip rescue disk, as this space is needed for dynamic creation of necessary Windows components.

{button ,AL(`To add or remove rescue items',0,`',`')} <u>Related Topics</u>

# To open Rescue Disk

You can open any of the Norton Utilities programs from the Norton Utilities Integrator. To open Rescue Disk:

- 1 Double-click Norton Utilities Integrator on the Windows desktop.
- 2 Click Preventative Maintenance in the left pane of the Norton Utilities Integrator.
- 3 Click Rescue Disk in the right pane.
- Or click here
- to open Rescue Disk now.

{button ,AL(`To create or update a basic rescue disk set;Introducing Rescue Disk',0,`',`')} Related Topics

# To create or update a basic rescue disk set

- 1 Click here to open Rescue Disk.
- 2 Select Basic Rescue.
- 3 Select the destination drive used to store rescue information. The main window shows how many floppy and/or Zip disks are required.
- 4 To create a new rescue disk set, click Create. To update an existing rescue disk set, click Update.
- 5 Label the disks with the date the rescue disk set was created. Store the rescue disks in a safe place, preferably with the Emergency Disks that came with Norton Utilities.

Most PCs are set up so they can boot from one of their floppy drives. If you have
more than one type of floppy drive attached to your computer, the floppy disks you use as
rescue disks must fit the floppy drive that your computer can use for booting.

 Rescue Disk saves the startup data for the computer on which it was run. Do not attempt to use this rescue disk set to recover a different system.

{button ,AL(`To use a basic rescue disk set for recovery;About rescue disk sets;About startup data;To add or remove rescue items',0,`',`')} <u>Related Topics</u>

## To add or remove rescue items

In addition to the default rescue items, you can specify other files to be included in the rescue disk set. The files are added to the User-selected Files category, and remain there until you explicitly remove them.

- **Warning:** Add files only if they are important to get your system back up after a crash. Do not attempt to use your rescue disk set as a full system backup. For Zip disks, it is important to leave at least 5MB of free space on the Zip rescue disk, as this space is needed for dynamic creation of necessary Windows components.

- 1 Click here to open Rescue Disk.
- 2 Click Options.

# To add rescue items

- 1 Click Add Files.
- 2 Select the files you want to add.

 You can hold down the Shift or Control (Ctrl) keys to select more than one file from the same folder.

# To remove a user-selected rescue item

- 1 Click User-selected Files.
- 2 Click the file you want to remove.
- 3 Click Remove File.

{button ,AL(`About user-selected files',0,`',`')} <u>Related Topics</u>

# To use a basic rescue disk set for recovery

 If you need to use a basic rescue disk set to recover from a crash, you won't be able to access this help file for the following instructions. It is a good idea to print these instructions and keep them with your rescue disk set. Click here

- to print this topic now.

- Insert the first rescue disk of the set (the basic rescue floppy boot disk) into the computer's boot drive.
   The boot drive is typically the A: drive.
- 2 Reboot the computer.
- 3 Follow the on-screen instructions.

{button ,AL(`About DOS-based rescue programs;',0,`',`')} <u>Related Topics</u>

# To create or update a Norton Zip rescue disk set

To create a Norton Zip rescue disk set, you need a Zip disk and a floppy disk. If you have a system that can boot from the Zip drive, you won't need a floppy disk.

- 1 Click here to open Rescue Disk.
- 2 Select Norton Zip Rescue.
- 3 If you have more than one Zip drive attached to the computer, select the Zip drive to be used for the Zip rescue disk. If you ever need to use your Norton Zip rescue set, you must use this same drive for the Norton Zip rescue disk.
- 4 Insert a floppy disk into drive A: and a Zip disk into the Zip drive. If your computer designates the Zip drive as drive A:, you need not use a floppy disk. You can store the entire rescue set on the Zip disk.
- Warning: Any preexisting files on the Zip and floppy disk will be deleted during creation

of a new Norton Zip rescue set.

- 5 To create a new Norton Zip rescue disk set, click Create. To update an existing Norton Zip rescue disk set, click Update. To view the progress of the rescue disk creation, click Show Details.
- 6 **Recommended:** After the rescue disk set has been created or updated, click Restart to test it.

If the computer does not start properly, remove the rescue disks and restart the computer. Restart Rescue Disk, click Options, click the Zip Settings tab, and choose Safe Mode, then update the Norton Zip rescue disk set and retest. The computer should boot to Windows. Remove the rescue disks and restart the computer.

7 Label the disks with the date the rescue disk set was created, and store them in a safe place, preferably with the Emergency Disks that came with Norton Utilities.

 Rescue Disk saves the startup data for the computer on which it was run. Do not attempt to use this rescue disk set to recover a different system.

{button ,AL(`About rescue disk sets;About startup data;To add or remove rescue items;To use a Norton Zip rescue disk set for recovery',0,`',`')} <u>Related Topics</u>

# To create a Zip or boot floppy rescue disk separately

If you created a Norton Zip rescue disk set and have since lost either the Zip disk or the bootable floppy disk of the set you can use the procedure below to recreate the disk you lost. You can only do this if the startup information on your system has not changed.

- 1 Click here to open Rescue Disk.
- 2 Select Norton Zip Rescue.
- 3 Click Options.
- 4 Click the Zip Settings tab.
- 5 To recreate the Zip disk only, uncheck Create Rescue Boot Floppy Disk. To recreate the bootable floppy disk only, uncheck Create Rescue Zip Disk.
- 6 Click Close, to close the Options window.
- 7 Click Create.
- 8 **Recommended:** After the rescue disk set has been created or updated, click Restart to test it.

If the computer does not start properly, remove the rescue disks and restart the computer. Restart Rescue Disk, click Options, click the Zip Settings tab, and choose Safe Mode, then update the Norton Zip rescue disk set and retest. The computer should boot to Windows. Remove the rescue disks and restart the computer.

9 Be sure to label your rescue disk appropriately.

{button ,AL(`About rescue disk sets;To create or update a Norton Zip rescue disk set',0,`',`')} Related Topics

# To create or update rescue folders

Rescue Disk gives you the option of creating a basic rescue disk set as a folder on a network drive. This can save time and floppy disks, and ensures you'll always have the rescue information available.

- 1 Click here to open Rescue Disk.
- 2 Select Basic Rescue.
- 3 Click a network drive on which to store the rescue items.

 Though you can create rescue folders on local hard disks, it is not recommended. In the event of a hardware failure, you may not be able to access the rescue information. We recommend creating rescue folders on network drives only.

- 4 To create a new rescue folder, click Create. To update an existing rescue folder, click Update.
- 5 Select the folder in which to store the rescue items.
- 6 Click OK.

When creating a rescue folder, Rescue Disk does not save system startup files that would normally be present on a bootable floppy disk. You must create the bootable floppy disk manually, preferably using your own computer **before** you have problems.

At any time later, you can copy the basic rescue information from the rescue folder to the bootable floppy from any workstation that has access to your rescue folder on the network.

# To create a bootable floppy disk

- 1 Insert a blank floppy disk into a floppy drive.
- 2 Right click the floppy drive in Window Explorer, and choose Format from the context menu.
- 3 In the Format dialog box, check Copy System Files.
- 4 Click OK to format the disk and copy the system files to the disk to make it bootable.

- The floppy disk will start your system. However, it's a good idea to also copy any realmode, DOS-based network drivers your system requires to access the network. After you have done this, try booting from the floppy disk to ensure you can access the network.

{button ,AL(`About rescue folders;About using rescue folders;When to use a rescue disk set;To use a rescue folder for recovery',0,`',`')} <u>Related Topics</u>

# To use a Norton Zip rescue disk set for recovery

- Click here
- to print these instructions now. Keep them together with your rescue disk set.
- 1 If your Norton Zip rescue disk set includes a bootable floppy, insert it into the computer's boot drive. The boot drive is typically the A: drive.
- 2 Insert the Zip disk in the Zip drive.

 $-\,$  If you have multiple Zip drives, make sure you use the same drive you used to create the rescue disk set.

3 Reboot the computer and follow the instructions presented by the Rescue Recovery Wizard.

Note that starting your system using the Norton Zip rescue disk set will take longer than a regular startup.

{button ,AL(`To create or update a Norton Zip rescue disk set;Types of rescue items',0,`',`')} <u>Related Topics</u>

## To use a rescue folder for recovery

 If you need to use a rescue folder to recover from a crash, you won't be able to access this help file for the following instructions. It is a good idea to print these instructions and keep them with your bootable floppy rescue disk. Click here

to print this topic now.

To use the information stored in the rescue folder, you'll need the bootable floppy disk you made when you created the rescue folder. (For instructions on creating a bootable rescue floppy, see <u>To Create Or Update Rescue Folders.</u>) You use this disk to get your system started and to recover some basic system information.

1 Copy these files from the rescue folder to the bootable floppy:

- RESCUE.EXE
- CMOSINFO.BAT
- BOOTINFO.BAT
- PARTINFO.BAT
- AUTOEXEC.BAT (if present)
- CONFIG.SYS (if present)

Since the rescue folder is on the network, you can copy the files using any workstation that has access to the folder on the network.

- The information above should be sufficient to restore the computer to basic functioning, whereupon other rescue information and emergency programs can be retrieved from the rescue folder on the network.

- 2 Insert the bootable floppy into the computer's boot drive (typically the A: drive).
- 3 Reboot the computer, and follow the instructions for recovering the basic rescue information.

Depending on the cause of the problem, this procedure alone may restore your system to full functioning. If not, access the network rescue folder for your system and copy the DOS-based emergency programs to a floppy disk and use them on your system to help diagnose and repair any other problems.

{button ,AL(`About DOS-based rescue programs;To create or update rescue folders',0,`',`')} <u>Related Topics</u>

# **Options: Rescue Files tab**

Use this tab to view, add, or remove the items that will be included in the rescue disk set. You can add or remove user-selected files only.

### **Add Files**

Click to specify additional files that you want Rescue Disk to store on the rescue disk set.

 Do not use this as a backup utility. Add files only if they are important to restoring your system after a crash. We recommend that the Zip disk have at least 5MB of available space after the rescue disk is created.

#### **Remove File**

Click to remove the selected file under User-selected Files. The files will no longer be included on the rescue disk set.

#### **Rescue items list**

The list is categorized, and presented in a hierarchical view, similar to a Windows Explorer view. Click the plus sign next to a category to expand the list and see what the category contains. Click the plus sign next to a specific file for more information about the file.

The list of rescue items is different, depending on the type of rescue set you are using:

#### - For Basic rescue sets:

#### **Basic Rescue Boot Floppy Files**

Files Rescue Disk stores on the floppy disk that you use to start your system.

#### **DOS Emergency Utility Programs**

DOS-based emergency programs Rescue Disks stores on the rescue disk set. You can use these DOS-based utilities to recover your system.

#### **User-selected Files**

Files you have added to the rescue set. Add files to this list by clicking Add Files. Remove files from this list by clicking the file, then clicking Remove.

#### - For Norton Zip rescue sets:

#### **Windows Files**

Windows files Rescue Disk needs to start your system to Windows rather than DOS.

#### **Norton Zip Rescue Boot Floppy Files**

Files Rescue Disk stores on the floppy disk that you use to start your system.

#### Windows Emergency Utility Programs

Windows-based emergency utilities Rescue Disk stores on the rescue disk set. You can use these Windows-based utilities to recover your system.

#### **User-selected Files**

Files you have added to the rescue set. Add files to this list by clicking Add Files. Remove files from this list by clicking the file, then clicking Remove.

{button ,AL(`About user-selected files;To add or remove rescue items',0,`',`')} <u>Related</u> <u>Topics</u> This message indicates that the internal battery has run out of power. The result of a battery discharge is the loss of your system's <u>CMOS</u> information. This message generally appears when the internal battery is not a rechargeable battery. Systems with rechargeable batteries installed recharge while the system is on. To repair this problem, install a fresh battery or as outlined by the hardware manufacturer. Then use your system's rescue disk to restore the CMOS information.

This message indicates that your system's <u>CMOS</u> information has been lost. This message appears when there has been a break in power between the internal battery and the CMOS chip or when the internal battery is discharged. This message generally indicates the internal battery needs replacement or recharging. To repair this problem, check the battery's connection to the motherboard. If the connection appears sound, replace or recharge the battery, then use your system's rescue disk to restore the CMOS information.

This message indicates that the <u>system files</u> are not present. This message appears when the <u>boot records</u> on your system's startup disk are missing. However, before you reach for the rescue disk, make sure you are booting from the correct drive. If you are trying to boot from the C: drive, but you have a disk in the A: drive, you probably have a <u>non-bootable</u> <u>disk</u> in the A: drive causing this message. Remove the disk from the A: drive and then boot the system again. Otherwise, use your system's rescue disk to restore the boot records and partition tables. This message indicates that the system's normal startup disk (usually drive C:) was not found. It usually means the <u>system files</u> are corrupt or damaged. Before you reach for the rescue disk, make sure you are booting from the correct drive. If you are trying to boot from the C: drive, but you have a disk in the A: drive, you probably have a <u>non-bootable</u> <u>disk</u> in the A: drive causing this message. Remove the disk from the A: drive and then boot the system again. Otherwise, use your system's rescue disk to restore the boot records.

This message indicates that a startup disk was found, but the system's startup files are not present. Before you reach for the rescue disk, make sure you are booting from the correct drive. If you are trying to boot from the C: drive, but you have a disk in the A: drive, you probably have a <u>non-bootable disk</u> in the A: drive causing this message. Remove the disk from the A: drive and then boot the system again. Otherwise, use your system's rescue disk to restore the boot records. This message indicates that the drive's <u>boot sector</u> is corrupt or damaged. This message appears when invalid information exists in the drive's boot sector. Use your system's rescue disk to restore the boot record and partition table.

# About DOS-based rescue programs

DOS-based programs don't require Windows to run. In the event that you cannot start Windows, these programs can help you diagnose and fix problems with your system. By default, Rescue Disk saves the following DOS-based programs to basic rescue disk sets: - Norton Diagnostics (NDIAGS.EXE)

# -Tests the computer's hardware for easy diagnoses of hardware problems.

Norton Disk Doctor (NDD.EXE)

- -Repairs most disk problems.
- Disk Editor (DISKEDIT.EXE)
- -Lets you manually edit and repair the data on a disk.

# Rescue Disk (RESCUE.EXE)

- -Restores a computer's startup data.
- UnErase (UNERASE.EXE)
- -Recovers erased files automatically or manually.
- UnFormat (UNFORMAT.EXE)
- -Recovers files after accidentally formatting a disk.
- Microsoft's Fdisk (FDISK.EXE)
- -Creates, modifies, or removes <u>physical</u> and <u>logical</u> hard disk partitions.

# Microsoft's Sys (SYS.COM)

-Makes floppy or hard disks bootable. When a disk is bootable, you can use it to start your computer.

# Microsoft's Format (FORMAT.COM)

-Formats floppy and hard disks.

{button ,AL(`To add or remove rescue items;About user-selected files;Types of rescue items',0,`',`')} <u>Related Topics</u>

## **Options: Zip Settings tab**

Use this tab to specify settings for Norton Zip rescues. This tab is only available if you have an lomega Zip- drive attached to your system.

### Safe Mode

Click to have the Norton Zip rescue disk set boot your computer to Windows' Safe Mode of operation. Under Safe Mode, Windows loads only the minimal set of device drivers necessary to start Windows. For example, under Safe Mode Windows uses the default VGA monitor setting, Microsoft mouse driver, and loads no network support. You will not have access to CD-ROM drives.

### Normal Mode

Click to have the Norton Zip rescue disk set boot your computer to Windows' Normal Mode of operation. Normal Mode is the familiar Windows environment that includes all drivers and network support you normally have when you start Windows.

#### **Create Rescue Zip Disk**

Uncheck to prevent creation of the Zip disk of the rescue set. Use this option if you have lost the floppy boot disk of your Norton Zip rescue set and need to create another.

### Create Rescue Boot Floppy Disk

Uncheck to prevent creation of the boot floppy disk of the rescue set. Use this option if you have lost the Zip disk of your Norton Zip rescue set and need to create another.

### Introducing Rescue Recovery Wizard

The Rescue Recovery Wizard recovers your system from catastrophic problems that prevent the computer from starting properly. The wizard guides you through a step-bystep process that checks for and repairs system configuration errors, disk drive problems, and can alert you to virus infections. It starts automatically whenever you start your computer with your Norton Zip rescue disk set, and can usually restore your system to normal functioning.

### If this is an emergency, and you can't start your computer normally:

Rescue Recovery Wizard will guide you through restoring your system.

Before continuing, click here {button, JI(`rescue32.hlp>recover', `RRW\_Limitations')} to read about the limitations of Rescue Recovery mode.

Then click Next on the Rescue Recovery Wizard to begin restoring your system. **If you are just testing a newly-created Norton Zip rescue disk set:** Congratulations—it worked!

• Now click Cancel to exit the wizard, remove the Zip and bootable floppy disks, and restart your computer.

Store your rescue disks in a safe but handy location. You should update your rescue disk set whenever you change your system's hardware or software. This ensures you can recover your system to its most recent configuration.

– Use the Rescue Disk sensor of Norton System Doctor to keep your rescue disk set upto-date. The sensor periodically checks your system, and reminds you to update the rescue disk set whenever vital rescue information has changed.

# Check CMOS

CMOS (complimentary metal oxide semiconductor) is a type of memory chip used for storing basic system configuration information, such as the amount of installed physical memory (RAM) and the number, types, and sizes of hard disks. If this information is lost or corrupted, the computer will not start properly. Your rescue disk set stores a copy of the CMOS information, and the Rescue Recovery Wizard can restore the information from that copy.

If the computer's CMOS information matches the information stored on the rescue disk set, click Next to continue the recovery process.

If this screen indicates a mismatch between the system's CMOS information and the version stored on the rescue disk set, click Restore to let the wizard fix the problem.

After the wizard restores the information, remove the rescue disks from the drives and restart the computer to see if that fixed the problem. If you still cannot start the computer normally, re-insert the rescue disks and restart. The Rescue Recovery Wizard will start again and guide you through other repairs.

 If the Rescue Recovery Wizard indicates a CMOS problem, and you have already recovered the CMOS data earlier during this recovery session, check to ensure the BIOS is detecting your hard drives:

Reboot your system, and enter the system Setup. (Entering Setup usually involves pressing the Delete or F1 keys during startup.) Check to see if your hard drives are listed correctly on the setup screen. If not, there may be a hardware failure.

Hardware failures resulting in CMOS errors can be simple to fix, such as a loose connection or discharged CMOS battery, or they can be more serious, such as problems with a hard drive, or with the CMOS chip itself. If the problem is hardware-related, you must fix the problem to get the computer running properly again. Contact your system vendor for help.

# **Check for viruses**

A computer virus is a self-replicating program, written intentionally to alter the way your computer operates without your knowledge or permission.

Whenever your computer starts, it runs boot programs from a special area of the disk to ready itself for work. If these programs are infected with a virus, it can load into the computer's memory at startup and prevent your computer from starting normally. Some computer viruses damage the data on your disks by corrupting programs, deleting files, or even reformatting the disk.

Click Scan to let the Rescue Recovery Wizard check the computer memory and disk boot areas for viruses.

If no virus is found, click Next to continue the recovery process.

- If a virus is found, you should use Norton AntiVirus (or a similar program) to remove the virus before continuing with the rescue.

# **Check boot record**

The boot record on the hard disk identifies the disk's architecture (disk type, number of recordable sides, bytes per sector, sectors per cluster and track). For bootable disks, it also contains the bootstrap loader, a program that loads the operating system. If the boot record is lost or damaged, the computer will not start properly. Your rescue disk set stores a copy of the boot record information, and the Rescue Recovery Wizard can restore the information from that copy.

– If the computer's boot record information matches the information stored on the rescue disk set, click Next to continue the recovery process.

- If this screen indicates a mismatch between the system's boot record information and the version stored on the rescue disk set, click Restore to let the wizard fix the problem.

After the wizard restores the information, remove the rescue disks from the drives and restart the computer to see if that fixed the problem. If you still cannot start the computer normally, re-insert the rescue disks and restart. The Rescue Recovery Wizard will start again and guide you through other repairs.

# **Check partition table**

A single physical hard disk can be seen by the operating system as one or more logical disk drives. Each physical disk has a partition table that describes to the operating system how the physical disk space is alotted to each logical drive. The partition table also tells the operating system what file system (FAT, FAT32, NTFS, etc.) is to be used for each partition. If the partition table is lost or damaged, the computer will not start properly. Your rescue disk set stores a copy of the partition table information, and the Rescue Recovery Wizard can restore the information from that copy.

– If the computer's partition table information matches the information stored on the rescue disk set, click Next to continue the recovery process.

 If this screen indicates a mismatch between the system's partition table information and the version stored on the rescue disk set, click Restore to let the wizard fix the problem.

After the wizard restores the information, remove the rescue disks from the drives and restart the computer to see if that fixed the problem. If you still cannot start the computer normally, re-insert the rescue disks and restart. The Rescue Recovery Wizard will start again and guide you through other repairs.

## Check for disk damage

The Rescue Recovery Wizard has checked the boot record and partition table of the disk. Another disk area critical to computer functioning is the File Allocation Table (FAT). The FAT identifies every cluster on the disk as either free (available), belonging to a file, or bad (defective). The FAT structure is central to the way Windows identifies and manipulates files, so the disk stores two copies of the FAT. Damage to the main copy of the FAT can prevent the computer from starting properly. Your rescue disk set includes a copy of Norton Disk Doctor, which can use the second copy of the FAT to restore lost or damaged FAT information.

Click Run NDD to let the Rescue Recovery Wizard check the disk for any damage, including damage to the FAT.

- If a problems are found, allow Norton Disk Doctor to repair them, then remove the rescue disks from the drives and restart the computer to see if that fixed the problem. If you still cannot start the computer normally, re-insert the rescue disks and restart. The Rescue Recovery Wizard will start again and guide you through other repairs. When the wizard returns to this screen, click Next to continue.

### **Unerase critical deleted files**

Windows employs an extensive number of files, many of which are required for Windows to operate properly. If any of these critical files are accidentally deleted, the system may not start properly. Your rescue disk set includes a copy of UnErase Wizard, which can recover deleted files.

Click Run UnErase Wizard to look for critical files that may have been deleted. In particular, look for files with these file extensions: **INI**, **EXE**, **COM**, **SYS**, **DLL**, **VXD**, **DRV**, and **386**.

If files with these extensions are found by UnErase Wizard, allow the wizard to restore them, then remove the rescue disks from the drives and restart the computer to see if that fixed the problem. If you still cannot start the computer normally, re-insert the rescue disks and restart. The Rescue Recovery Wizard will start again and guide you through other repairs. When the wizard returns to this screen, click Next to continue.

# Check key startup files

These files are required for system startup, even before Windows is started. The key startup files include MSDOS.SYS to get the operating system started, AUTOEXEC.BAT and CONFIG.SYS optionally used to load older, DOS-based device drivers, and SYSTEM.INI to load older Windows device drivers. If any of these files has been modified incorrectly, it could prevent your system from starting properly. Your rescue disk set stores copies of these critical startup files, and the Rescue Recovery Wizard can restore the files from the copies to their state before the modifications.

– If the computer's startup files match the versions stored on the rescue disk set, click Next to continue the recovery process.

- If this screen indicates a mismatch between the startup files and the versions stored on the rescue disk set, click Restore to let the wizard fix the problem.

After the wizard restores the information, remove the rescue disks from the drives and restart the computer to see if that fixed the problem. If you still cannot start the computer normally, re-insert the rescue disks and restart. The Rescue Recovery Wizard will start again and guide you through other repairs.

### **Restore registry from rescue backup**

The registry is a centralized database that provides storage of startup, configuration, and other information for Windows and Windows applications. The registry stores information about all installed hardware and any software that has been designed expressly for the Windows operating system. If critical data in the registry is damaged or lost, your system may not start properly. Rescue Disk stores a copy of the registry when you create or update a rescue disk set. The Rescue Recovery Wizard can restore the registry to its state at the time of the last rescue update.

Note that if you restore the registry from the copy, you will lose any registry data that may have been added or changed since the update of your rescue disk set. This could affect certain operational aspects of the computer, such as the file associations and desktop layout, especially if you have installed any new software since the last rescue disk update.
 Click Restore to restore the registry from the rescue copy.

After the wizard restores the information, remove the rescue disks from the drives and restart the computer to see if that fixed the problem. If you still cannot start the computer normally, re-insert the rescue disks and restart. The Rescue Recovery Wizard will start again, and you can try any repairs you may have skipped before.

# Likely hardware failure

If you have allowed the Rescue Recovery Wizard to perform all repairs, and your system still does not start, there may be a failure in the system's critical hardware.

First turn off the power, be sure you are electrically grounded (as by touching the compuer chassis), then check all connections and cables. Make sure all circuit boards are well-seated on the motherboard. If this fails to solve the problem, seek technical assistance from your system vendor, or from the individual vendors of your system components.

Areas for more investigation include:

- Hard disk
- Hard disk controller
- Physical memory (RAM)
- Motherboard

# Limitations of Rescue Recovery mode

This is a special diagnostic and recovery mode of Windows, actually running from your Norton Zip Rescue disk. This mode of operation provides a familiar Windows environment, and lets the Rescue Recovery Wizard guide you through recovering your computer.

Because Windows is running from a Zip disk, and not from the usual hard drive, you might notice some differences from the usual Windows environment, such as a different screen font and wallpaper background. Your familiar desktop will return when your system is restored.

There are also limitations in recovery mode that you should be aware of:

- The Zip disk holds all the files necessary to run Windows, so the free space that can be used for memory management (swap file) is limited and smaller than usual. Because of this, you should not try to run large applications or multiple applications until you have restored your computer, and it is again running Windows from the hard drive.

- You should not run these Norton Utilities programs in this mode:
- Norton CrashGuard (CGMAIN.EXE)
- Norton Optimization Wizard (OPTWIZ.EXE)
- Norton Registry Editor (NREGEDIT EXE)
- Norton Registry Tracker (REGTRK.EXE)
- Norton System Doctor (SYSDOC32\_EXE)
- Norton WinDoctor (WINDOC EXE)
- Rescue Disk (RESCUE32.EXE)

We recommend you allow the Rescue Recovery Wizard to restore your system before attempting to run other applications. If your hard disk is accessible at this time, however, you may copy important files to a floppy disk now, before continuing with the recovery.

Click here {button,JI(`rescue32.hlp>recover',`RRW\_Introducing')} to return.

Creates a rescue disk set to the destination drive specified below.

Updates the rescue disk set in the destination drive specified below.

Click to see the files that will be saved to the rescue set, and to add other files to the rescue set.

Closes Rescue Disk.

Click to create a rescue disk set that can boot your system to Windows. Norton Zip rescue disk sets include Windows-based recovery and repair programs. When you recover a damaged computer using a Norton Zip rescue set, the Rescue Recovery Wizard starts automatically to guide you through the recovery process. This option requires an lomega Zip — or Jaz

- drive.

Click to create a basic rescue disk set that boots your system to DOS. Basic rescue disk sets include DOS-based recovery and repair programs. When you recover a damaged computer using a basic rescue set, rescue starts automatically to help guide you through the recovery process.

Click the drive to which you want to save the rescue information. For Norton Zip Rescues, click the letter of the Zip drive to use. The computer's primary floppy drive will be used for creating the bootable floppy disk. If the computer can boot from the Zip drive, no floppy disk is required for the rescue set.

Click to show or hide details of the progress of the current rescue set creation.

Indicates the progress of copying files to the Zip disk.

Indicates the progress of copying files to the current floppy disk or rescue folder.

Indicates the overall progress of rescue disk creation.

Click the drive to which you want to save the rescue information. For Norton Zip Rescues, click the letter of the Zip drive to use. The computer's primary floppy drive will be used for creating the bootable floppy disk. If the computer can boot from the Zip drive, no floppy disk is required for the rescue set.

Uncheck to prevent creation of the Zip disk of the rescue set. Use this option if you have lost the floppy boot disk of your Norton Zip rescue set and need to create another.

Uncheck to prevent creation of the boot floppy disk of the rescue set. Use this option if you have lost the Zip disk of your Norton Zip rescue set and need to create another.

Click to have the Norton Zip rescue disk set boot your computer to Windows' Normal Mode of operation. Normal Mode is the familiar Windows environment that includes all drivers and network support you normally have when you start Windows.

Click to have the Norton Zip rescue disk set boot your computer to Windows' Safe Mode of operation. Under Safe Mode, Windows loads only the minimal set of device drivers necessary to start Windows. For example, under Safe Mode Windows uses the default VGA monitor setting, Microsoft mouse driver, and loads no network support. You will not have access to CD-ROM drives.

Lists the files that can be included on your rescue disk set. The files are arranged into categories. To view all the files in a category, click the plus (+) sign next to the category name. — To add your own files to the list, click Add Files. The files are added under the User Selected Files category. You can remove any of these files from the list by clicking the filename, then clicking Remove File.

Click to add files to the rescue set. The new files are added under the User-selected Files category.

Click to remove a file from the User Selected Files category. This button is disabled until you have selected a file for removal.

Lists the disks that will be created for the rescue disk set. You should label the disks to match this list. — If the floppy disks you use are not empty, any files currently on the disks will be deleted.