NAME

format – disk partitioning and maintenance utility

SYNOPSIS

format [**–f** *command-file*] [**–l** *log-file*] [**–x** *data-file*] [**–d** *disk-name*] [**–t** *disk-type*]
[**–p** *partition-name*] [**–s**] [**–m**] [**–M**] [**–e**] [*disk-list*]

AVAILABILITY

SUNWcsu

DESCRIPTION

format enables you to format, label, repair and analyze disks on your system. Unlike previous disk maintenance programs, **format** runs under SunOS. Because there are limitations to what can be done to the system disk while the system is running, **format** is also supported within the memory-resident system environment. For most applications, however, running **format** under SunOS is the more convenient approach.

format first uses the disk list defined in *data-file* if the **–x** option is used. **format** then checks for the **FORMAT_PATH** environment variable, a colon-separated list of filenames and/or directories. In the case of a directory, **format** searches for a file named **format.dat** in that directory; a filename should be an absolute pathname, and is used without change. **format** adds all disk and partition definitions in each specified file to the working set. Multiple identical definitions are silently ignored. If **FORMAT_PATH** is not set, the path defaults to **/etc/format.dat**.

disk-list is a list of disks in the form **c?t?d?** or **/dev/rdsk/c?t?d?s?**. With the latter form shell wildcard specifications are supported. For example, specifying **/dev/rdsk/c2*** will cause **format** to work on all drives connected to controller **c2** only. If no *disk-list* is specified, **format** lists all the disks present in the system.

OPTIONS

The following options are supported:

–f *command-file* Take command input from *command-file* rather than the standard input. The file must contain commands that appear just as they would if they had been entered from the keyboard. With this option, **format** does not issue **continue?** prompts; there is no need to specify y(es) or n(o) answers in the *command-file*. In non-interactive mode, **format** does not initially expect the input of a disk selection number. The user must specify the current working disk with the **–d** *disk-name* option when format is invoked, or specify **disk** and the disk selection number in the *command-file*.

–l *log-file* Log a transcript of the **format** session to the indicated *log-file*, including the standard input, the standard output and the standard error.

–x *data-file* Use the list of disks contained in *data-file*.

–d *disk-name* Specify which disk should be made current upon entry into the program. The disk is specified by its logical name (for instance, **–c0t1d0**). This can also be accomplished by specifying a single disk in the disk list.

–t *disk-type* Specify the type of disk which is current upon entry into the program, A disk's type is specified by name in the data file. This option can only be used if a disk is being made current as described above.

–p *partition-name*
Specify the partition table for the disk which is current upon entry into the program. The table is specified by its name as defined in the data file. This option can only be used if a disk is being made current, and its type is either specified or available from the disk label.

–e Enable SCSI expert menu. Note this option is not recommended for casual use.

–s Silent. Suppress all of the standard output. Error messages are still displayed. This is generally used in conjunction with the **–f** option.

–m Enable extended messages. Provides more detailed information in the event of an error.

–M Enable extended and diagnostic messages. Provides extensive information on the state of an SCSI device's mode pages, during formatting.

USAGE

The **format** utility's main menu items allow you to do the following tasks:

analyze Run read, write, and compare tests.

backup Search for backup labels.

current Display the device name, manufacturer and model of the current disk.

defect Retrieve and print defect lists.

disk Choose the disk that will be used in subsequent operations (known as the current disk.)

fdisk (x86 systems only.) Run the **fdisk**(1M) program to create a Solaris **fdisk** partition.

format Format and verify the current disk.

inquiry Display the vendor, product name, and revision level of the current drive.

label Write a new label to the current disk.

partition Create and modify slices.

quit Exit the format menu.

repair Repair a specific block on the disk.

save Save new disk and slice information.

type Identify the manufacturer and model of the current disk.

verify Print the following information about the disk: manufacturer and model, number of cylinders, alternate cylinders, heads and sectors, and partition table.

volname Label the disk with a new eight character volume name.

ENVIRONMENT

FORMAT_PATH a colon-separated list of filenames and/or directories of disk and partition definitions. If a directory is specified, **format** searches for the file **format.dat** in that directory.

FILES

/etc/format.dat default data file

SEE ALSO

fmthard(1M), **prtvtoc**(1M), **format.dat**(4), **ipi**(7D), **sd**(7D)

See *Disk Management* in *System Administration Guide*, *Volume I*.

x86 Only

fdisk(1M)

WARNINGS

When the **format** function is selected to format the Maxtor 207MB disk, the following message displays:

Mode sense page(4) reports rpm value as 0, adjusting it to 3600

This is a drive bug that may also occur with older third party drives. The above message is not an error; the drive will still function correctly.

NOTES

format provides a help facility you can use whenever format is expecting input. You can request help about what information is expected by simply entering a question mark (**?**) and **format** prints a brief description of what type of input is needed. If you enter a **?** at the menu prompt, a list of available commands is displayed.

For SCSI disks, formatting is done with both Primary and Grown defects list by default. However, if only Primary list is extracted in defect menu before formatting, formatting will be done with Primary list only.