NAME

cat - concatenate and print files

SYNOPSIS

cat [**-belnstuv**] [*file ...*]

DESCRIPTION

The **cat** utility reads files sequentially, writing them to the standard output. The *file* operands are processed in command-line order. If *file* is a single dash ('**-**') or absent, **cat** reads from the standard input. If *file* is a UNIX domain socket, **cat** connects to it and then reads it until EOF. This complements the UNIX domain binding capability available in inetd(8).

The options are as follows:

-b Number the non-blank output lines, starting at 1.

-e Display non-printing characters (see the **-v** option), and display a dollar sign ('$') at the end of each line.

-l Set an exclusive advisory lock on the standard output file descriptor. This lock is set using fcntl(2) with the F_SETLKW command. If the output file is already locked, **cat** will block until the lock is acquired.

-n Number the output lines, starting at 1.

-s Squeeze multiple adjacent empty lines, causing the output to be single spaced.

-t Display non-printing characters (see the **-v** option), and display tab characters as '^I'.

-u Disable output buffering.

-v Display non-printing characters so they are visible. Control characters print as '^X' for control-X; the delete character (octal 0177) prints as '^?'. Non-ASCII characters (with the high bit set) are printed as 'M-' (for meta) followed by the character for the low 7 bits.

EXIT STATUS

The **cat** utility exits 0 on success, and >0 if an error occurs.

EXAMPLES

The command:

    cat file1

will print the contents of *file1* to the standard output.

The command:

    cat file1 file2 > file3

will sequentially print the contents of *file1* and *file2* to the file *file3*, truncating *file3* if it already exists. See the manual page for your shell (e.g., sh(1)) for more information on redirection.

The command:

    cat file1 - file2 - file3

will print the contents of *file1*, print data it receives from the standard input until it receives an EOF ('^D') character, print the contents of *file2*, read and output contents of the standard input again, then finally output the contents of *file3*. Note that if the standard input referred to a file, the second dash on the command-line would have no effect, since the entire contents of the file would have already been read and printed by **cat** when it encountered the first '**-**' operand.

SEE ALSO

head(1), more(1), pr(1), sh(1), tail(1), vis(1), zcat(1), fcntl(2), setbuf(3)

Rob Pike, "UNIX Style, or cat -v Considered Harmful", *USENIX Summer Conference Proceedings*, 1983.

STANDARDS

The **cat** utility is compliant with the IEEE Std 1003.2-1992 ("POSIX.2") specification.

The flags [**-belnstv**] are extensions to the specification.

HISTORY

A **cat** utility appeared in Version 1 AT&T UNIX. Dennis Ritchie designed and wrote the first man page. It appears to have been for **cat**.

BUGS

Because of the shell language mechanism used to perform output redirection, the command "cat file1 file2 > file1" will cause the original data in *file1* to be destroyed!

The **cat** utility does not recognize multibyte characters when the **-t** or **-v** option is in effect.