

**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.