



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'paste.1p' command

\$ man paste.1p

PASTE(1P) POSIX Programmer's Manual PASTE(1P)

PROLOG

This manual page is part of the POSIX Programmer's Manual. The Linux implementation of this interface may differ (consult the corresponding Linux manual page for details of Linux behavior), or the interface may not be implemented on Linux.

NAME

paste ? merge corresponding or subsequent lines of files

SYNOPSIS

paste [-s] [-d list] file...

DESCRIPTION

The paste utility shall concatenate the corresponding lines of the given input files, and write the resulting lines to standard output.

The default operation of paste shall concatenate the corresponding lines of the input files. The <newline> of every line except the line from the last input file shall be replaced with a <tab>.

If an end-of-file condition is detected on one or more input files, but not all input files, paste shall behave as though empty lines were read from the files on which end-of-file was detected, unless the -s option is specified.

OPTIONS

The paste utility shall conform to the Base Definitions volume of POSIX.1?2017, Section 12.2, Utility Syntax Guidelines.

The following options shall be supported:

-d list Unless a `<backslash>` character appears in list, each charac?

ter in list is an element specifying a delimiter character.

If a `<backslash>` character appears in list, the `<backslash>`

character and one or more characters following it are an ele?

ment specifying a delimiter character as described below.

These elements specify one or more delimiters to use, instead

of the default `<tab>`, to replace the `<newline>` of the input

lines. The elements in list shall be used circularly; that

is, when the list is exhausted the first element from the

list is reused. When the `-s` option is specified:

- * The last `<newline>` in a file shall not be modified.

- * The delimiter shall be reset to the first element of list after each file operand is processed.

When the `-s` option is not specified:

- * The `<newline>` characters in the file specified by the last file operand shall not be modified.

- * The delimiter shall be reset to the first element of list each time a line is processed from each file.

If a `<backslash>` character appears in list, it and the char?

acter following it shall be used to represent the following

delimiter characters:

`\n` `<newline>`.

`\t` `<tab>`.

`\\` `<backslash>` character.

`\0` Empty string (not a null character). If `'\0'` is immediately followed by the character `'x'`, the character `'X'`, or any character defined by the `LC_CTYPE` digit keyword (see the Base Definitions volume of POSIX.1?2017, Chapter 7, Locale), the results are unspecified.

If any other characters follow the `<backslash>`, the results are unspecified.

-s Concatenate all of the lines from each input file into one

line of output per file, in command line order. The <newline> of every line except the last line in each input file shall be replaced with a <tab>, unless otherwise specified by the -d option. If an input file is empty, the output line corresponding to that file shall consist of only a <newline> character.

OPERANDS

The following operand shall be supported:

file A pathname of an input file. If '-' is specified for one or more of the files, the standard input shall be used; the standard input shall be read one line at a time, circularly, for each instance of '-'. Implementations shall support pasting of at least 12 file operands.

STDIN

The standard input shall be used only if one or more file operands is '-'. See the INPUT FILES section.

INPUT FILES

The input files shall be text files, except that line lengths shall be unlimited.

ENVIRONMENT VARIABLES

The following environment variables shall affect the execution of paste:

LANG Provide a default value for the internationalization variables that are unset or null. (See the Base Definitions volume of POSIX.1?2017, Section 8.2, Internationalization Variables: the precedence of internationalization variables used to determine the values of locale categories.)

LC_ALL If set to a non-empty string value, override the values of all the other internationalization variables.

LC_CTYPE Determine the locale for the interpretation of sequences of bytes of text data as characters (for example, single-byte as opposed to multi-byte characters in arguments and input files).

LC_MESSAGES

Determine the locale that should be used to affect the format and contents of diagnostic messages written to standard error.

NLSPATH Determine the location of message catalogs for the processing of LC_MESSAGES.

ASYNCHRONOUS EVENTS

Default.

STDOUT

Concatenated lines of input files shall be separated by the <tab> (or other characters under the control of the -d option) and terminated by a <newline>.

STDERR

The standard error shall be used only for diagnostic messages.

OUTPUT FILES

None.

EXTENDED DESCRIPTION

None.

EXIT STATUS

The following exit values shall be returned:

0 Successful completion.

>0 An error occurred.

CONSEQUENCES OF ERRORS

If one or more input files cannot be opened when the -s option is not specified, a diagnostic message shall be written to standard error, but no output is written to standard output. If the -s option is specified, the paste utility shall provide the default behavior described in Section 1.4, Utility Description Defaults.

The following sections are informative.

APPLICATION USAGE

When the escape sequences of the list option-argument are used in a shell script, they must be quoted; otherwise, the shell treats the <backslash> as a special character.

Conforming applications should only use the specific <backslash>-escaped delimiters presented in this volume of POSIX.1?2017. Historical implementations treat '\x', where 'x' is not in this list, as 'x', but future implementations are free to expand this list to recognize other common escapes similar to those accepted by printf and other standard utilities.

Most of the standard utilities work on text files. The cut utility can be used to turn files with arbitrary line lengths into a set of text files containing the same data. The paste utility can be used to create (or recreate) files with arbitrary line lengths. For example, if file contains long lines:

```
cut -b 1-500 -n file > file1
cut -b 501- -n file > file2
```

creates file1 (a text file) with lines no longer than 500 bytes (plus the <newline>) and file2 that contains the remainder of the data from file. Note that file2 is not a text file if there are lines in file that are longer than 500 + {LINE_MAX} bytes. The original file can be recreated from file1 and file2 using the command:

```
paste -d "\0" file1 file2 > file
```

The commands:

```
paste -d "\0" ...
paste -d "" ...
```

are not necessarily equivalent; the latter is not specified by this volume of POSIX.1?2017 and may result in an error. The construct '\0' is used to mean ``no separator'' because historical versions of paste did not follow the syntax guidelines, and the command:

```
paste -d "" ...
```

could not be handled properly by getopt().

EXAMPLES

1. Write out a directory in four columns:

```
ls | paste - - - -
```

2. Combine pairs of lines from a file into single lines:

```
paste -s -d "\t\n" file
```

RATIONALE

None.

FUTURE DIRECTIONS

None.

SEE ALSO

Section 1.4, Utility Description Defaults, cut, grep, pr

The Base Definitions volume of POSIX.1-2017, Chapter 7, Locale, Chapter 8, Environment Variables, Section 12.2, Utility Syntax Guidelines

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