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## ***Red Hat Enterprise Linux Release 9.2 Manual Pages on 'pr.1p' command***

***\$ man pr.1p***

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

pr ? print files

### SYNOPSIS

```
pr [+page] [-column] [-adFmrt] [-e[char][gap]] [-h header] [-i[char][gap]]
[-l lines] [-n[char][width]] [-o offset] [-s[char]] [-w width] [-fp]
[file...]
```

### DESCRIPTION

The pr utility is a printing and pagination filter. If multiple input files are specified, each shall be read, formatted, and written to standard output. By default, the input shall be separated into 66-line pages, each with:

- \* A 5-line header that includes the page number, date, time, and the pathname of the file
- \* A 5-line trailer consisting of blank lines

If standard output is associated with a terminal, diagnostic messages shall be deferred until the pr utility has completed processing.

When options specifying multi-column output are specified, output text

columns shall be of equal width; input lines that do not fit into a text column shall be truncated. By default, text columns shall be separated with at least one <blank>.

## OPTIONS

The `pr` utility shall conform to the Base Definitions volume of POSIX.1?2017, Section 12.2, Utility Syntax Guidelines, except that: the `page` option has a '+' delimiter; `page` and `column` can be multi-digit numbers; some of the option-arguments are optional; and some of the option-arguments cannot be specified as separate arguments from the preceding option letter. In particular, the `-s` option does not allow the option letter to be separated from its argument, and the options `-e`, `-i`, and `-n` require that both arguments, if present, not be separated from the option letter.

The following options shall be supported. In the following descriptions, `column`, `lines`, `offset`, `page`, and `width` are positive decimal integers; `gap` is a non-negative decimal integer.

`+page` Begin output at page number `page` of the formatted input.

`-column` Produce multi-column output that is arranged in `column` col?

`umns` (the default shall be 1) and is written down each column

in the order in which the text is received from the input

file. This option should not be used with `-m`. The options `-e`

and `-i` shall be assumed for multiple text-column output.

Whether or not text columns are produced with identical ver?

tical lengths is unspecified, but a text column shall never

exceed the length of the page (see the `-l` option). When used

with `-t`, use the minimum number of lines to write the output.

`-a` Modify the effect of the `-column` option so that the columns

are filled across the page in a round-robin order (for exam?

ple, when `column` is 2, the first input line heads column 1,

the second heads column 2, the third is the second line in

column 1, and so on).

`-d` Produce output that is double-spaced; append an extra <new?

line> following every <newline> found in the input.

**-e[char][gap]**

Expand each input `<tab>` to the next greater column position specified by the formula  $n * \text{gap} + 1$ , where  $n$  is an integer  $> 0$ .

If `gap` is zero or is omitted, it shall default to 8. All

`<tab>` characters in the input shall be expanded into the appropriate

number of `<space>` characters. If any non-digit

character, `char`, is specified, it shall be used as the input

`<tab>`. If the first character of the `-e` option-argument is a

digit, the entire option-argument shall be assumed to be `gap`.

**-f** Use a `<form-feed>` for new pages, instead of the default behavior

that uses a sequence of `<newline>` characters. Pause

before beginning the first page if the standard output is associated

with a terminal.

**-F** Use a `<form-feed>` for new pages, instead of the default behavior

that uses a sequence of `<newline>` characters.

**-h header** Use the string `header` to replace the contents of the file operand

in the page header.

**-i[char][gap]**

In output, replace `<space>` characters with `<tab>` characters

wherever one or more adjacent `<space>` characters reach column

positions  $\text{gap} + 1$ ,  $2 * \text{gap} + 1$ ,  $3 * \text{gap} + 1$ , and so on. If `gap` is

zero or is omitted, default tab settings at every eighth column

position shall be assumed. If any non-digit character,

`char`, is specified, it shall be used as the output `<tab>`. If

the first character of the `-i` option-argument is a digit, the

entire option-argument shall be assumed to be `gap`.

**-l lines** Override the 66-line default and reset the page length to

`lines`. If `lines` is not greater than the sum of both the

header and trailer depths (in lines), the `pr` utility shall

suppress both the header and trailer, as if the `-t` option

were in effect.

**-m** Merge files. Standard output shall be formatted so the `pr`

utility writes one line from each file specified by a file

operand, side by side into text columns of equal fixed widths, in terms of the number of column positions. Implementations shall support merging of at least nine file operands.

**-n[char][width]**

Provide width-digit line numbering (default for width shall be 5). The number shall occupy the first width column positions of each text column of default output or each line of -m output. If char (any non-digit character) is given, it shall be appended to the line number to separate it from whatever follows (default for char is a <tab>).

**-o offset** Each line of output shall be preceded by offset <space> characters. If the -o option is not specified, the default offset shall be zero. The space taken is in addition to the output line width (see the -w option below).

**-p** Pause before beginning each page if the standard output is directed to a terminal (pr shall write an <alert> to standard error and wait for a <carriage-return> to be read on /dev/tty).

**-r** Write no diagnostic reports on failure to open files.

**-s[char]** Separate text columns by the single character char instead of

by the appropriate number of <space> characters (default for char shall be <tab>).

**-t** Write neither the five-line identifying header nor the five-line trailer usually supplied for each page. Quit writing after the last line of each file without spacing to the end of the page.

**-w width** Set the width of the line to width column positions for multiple

text-column output only. If the -w option is not specified and the -s option is not specified, the default width shall be 72. If the -w option is not specified and the -s option is specified, the default width shall be 512.

For single column output, input lines shall not be truncated.

The following operand shall be supported:

**file** A pathname of a file to be written. If no **file** operands are specified, or if a **file** operand is '-', the standard input shall be used.

## STDIN

The standard input shall be used only if no **file** operands are specified, or if a **file** operand is '-'. See the INPUT FILES section.

## INPUT FILES

The input files shall be text files.

The file `/dev/tty` shall be used to read responses required by the `-p` option.

## ENVIRONMENT VARIABLES

The following environment variables shall affect the execution of `pr`:

**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) and which characters are defined as printable (character class `print`). Non-printable characters are still written to standard output, but are not counted for the purpose for column-width and line-length calculations.

### LC\_MESSAGES

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

**LC\_TIME** Determine the format of the date and time for use in writing header lines.

NLSPATH Determine the location of message catalogs for the processing of LC\_MESSAGES.

TZ Determine the timezone used to calculate date and time strings written in header lines. If TZ is unset or null, an unspecified default timezone shall be used.

## ASYNCHRONOUS EVENTS

If pr receives an interrupt while writing to a terminal, it shall flush all accumulated error messages to the screen before terminating.

## STDOUT

The pr utility output shall be a paginated version of the original file (or files). This pagination shall be accomplished using either <form-feed> characters or a sequence of <newline> characters, as controlled by the -F or -f option. Page headers shall be generated unless the -t option is specified. The page headers shall be of the form:

```
"\n\n%s %s Page %d\n\n", <output of date>, <file>, <page number>
```

In the POSIX locale, the <output of date> field, representing the date and time of last modification of the input file (or the current date and time if the input file is standard input), shall be equivalent to the output of the following command as it would appear if executed at the given time:

```
date "+%b %e %H:%M %Y"
```

without the trailing <newline>, if the page being written is from standard input. If the page being written is not from standard input, in the POSIX locale, the same format shall be used, but the time used shall be the modification time of the file corresponding to file in? instead of the current time. When the LC\_TIME locale category is not set to the POSIX locale, a different format and order of presentation of this field may be used.

If the standard input is used instead of a file operand, the <file> field shall be replaced by a null string.

If the -h option is specified, the <file> field shall be replaced by the header argument.

## STDERR

The standard error shall be used for diagnostic messages and for alert?

ing the terminal when -p is specified.

## 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

Default.

The following sections are informative.

## APPLICATION USAGE

A conforming application must protect its first operand, if it starts with a <plus-sign>, by preceding it with the "--" argument that denotes the end of the options. For example, pr+x could be interpreted as an invalid page number or a file operand.

## EXAMPLES

1. Print a numbered list of all files in the current directory:

```
ls -a | pr -n -h "Files in $(pwd)."
```

2. Print file1 and file2 as a double-spaced, three-column listing

headed by ``file list":

```
pr -3d -h "file list" file1 file2
```

3. Write file1 on file2, expanding tabs to columns 10, 19, 28, ...:

```
pr -e9 -t <file1 >file2
```

## RATIONALE

This utility is one of those that does not follow the Utility Syntax Guidelines because of its historical origins. The standard developers could have added new options that obeyed the guidelines (and marked the old options obsolescent) or devised an entirely new utility; there are examples of both actions in this volume of POSIX.1?2017. Because of its widespread use by historical applications, the standard developers de?

cided to exempt this version of pr from many of the guidelines.

Implementations are required to accept option-arguments to the -h, -l, -o, and -w options whether presented as part of the same argument or as a separate argument to pr, as suggested by the Utility Syntax Guide? lines. The -n and -s options, however, are specified as in historical practice because they are frequently specified without their optional arguments. If a <blank> were allowed before the option-argument in these cases, a file operand could mistakenly be interpreted as an option-argument in historical applications.

The text about the minimum number of lines in multi-column output was included to ensure that a best effort is made in balancing the length of the columns. There are known historical implementations in which, for example, 60-line files are listed by pr -2 as one column of 56 lines and a second of 4. Although this is not a problem when a full page with headers and trailers is produced, it would be relatively use? less when used with -t.

Historical implementations of the pr utility have differed in the action taken for the -f option. BSD uses it as described here for the -F option; System V uses it to change trailing <newline> characters on each page to a <form-feed> and, if standard output is a TTY device, sends an <alert> to standard error and reads a line from /dev/tty before the first page. There were strong arguments from both sides of this issue concerning historical practice and as a result the -F option was added. XSI-conformant systems support the System V historical actions for the -f option.

The <output of date> field in the -l format is specified only for the POSIX locale. As noted, the format can be different in other locales. No mechanism for defining this is present in this volume of POSIX.1?2017, as the appropriate vehicle is a message catalog; that is, the format should be specified as a ``message''.

## FUTURE DIRECTIONS

None.

## SEE ALSO

expand, lp

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

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