

NAME

localedef - define locale environment

SYNOPSIS

localedef [-**bcDIUv**] [-**f** *charmap*] [-**i** *sourcefile*] [-**u** *codeset*] [-**w** *widthfile*] *localename*

DESCRIPTION

The **localedef** utility converts source definitions for locale categories into a format usable by the functions and utilities whose operational behavior is determined by the setting of the locale environment variables; see `environ(7)`.

The utility reads source definitions for one or more locale categories belonging to the same locale from the file named in the **-i** option (if specified) or from standard input.

Each category source definition is identified by the corresponding environment variable name and terminated by an **END** *category-name* statement. The following categories are supported:

LC_CTYPE Defines character classification and case conversion.

LC_COLLATE Defines collation rules.

LC_MONETARY Defines the format and symbols used in formatting of monetary information.

LC_NUMERIC Defines the decimal delimiter, grouping and grouping symbol for non-monetary numeric editing.

LC_TIME Defines the format and content of date and time information.

LC_MESSAGES Defines the format and values of affirmative and negative responses.

The following options are supported:

-b Use big-endian byte order for output.

-c Creates permanent output even if warning messages have been issued.

-D BSD-style output. Rather than the default of creating the *localename* directory and creating files like *LC_CTYPE*, *LC_COLLATE*, etc. in that directory, the output file names have the format "*<localename>.<category>*" and are dumped to the current directory.

-f *charmap*

Specifies the pathname of a file containing a mapping of character symbols and collating element symbols to actual character encodings. This option must be specified if symbolic names (other than collating symbols defined in a **collating-symbol** keyword) are used. If the **-f** option is not present, the default character mapping will be used.

-i *sourcefile*

The path name of a file containing the source definitions. If this option is not present, source definitions will be read from standard input.

-l Use little-endian byte order for output.

-u *codeset*

Specifies the name of a codeset used as the target mapping of character symbols and collating element symbols whose encoding values are defined in terms of the ISO/IEC 10646-1:2000 standard position constant values. See *NOTES*.

-U Ignore the presence of character symbols that have no matching character definition. This facilitates the use of a common locale definition file to be used across multiple encodings, even when some symbols are not present in a given encoding.

-v Emit verbose debugging output on standard output.

-w *widthfile*

The path name of the file containing character screen width definitions. If not supplied, then default screen widths will be assumed, which will generally not account for East Asian encodings requiring more than a single character cell to display, nor for combining or accent marks that occupy no additional screen width.

-V *version*

Specifies a version string describing the version of the locale definition. This string can be retrieved with `querylocale(3)`, and is intended to allow applications to detect locale definition changes. Currently it is stored only for the **LC_COLLATE** category.

The following operands are required:

localename Identifies the locale. If the name contains one or more slash characters, *localename* will be interpreted as a path name where the created locale definitions will be stored. This capability may be restricted to users with appropriate privileges. (As a consequence of specifying one *localename*, although several categories can be processed in one execution,

only categories belonging to the same locale can be processed.)

OUTPUT

localedef creates a directory of files that represents the locale's data, unless instructed otherwise by the **-D** (BSD output) option. The contents of this directory should generally be copied into the appropriate subdirectory of */usr/share/locale* in order the definitions to be visible to programs linked with *libc*.

ENVIRONMENT

See *environ(7)* for definitions of the following environment variables that affect the execution of **localedef**: *LANG*, *LC_ALL*, *LC_COLLATE*, *LC_CTYPE*, *LC_MESSAGES*, *LC_MONETARY*, *LC_NUMERIC*, *LC_TIME*, and *NLSPATH*.

EXIT STATUS

The following exit values are returned:

- 0 No errors occurred and the locales were successfully created.
- 1 Warnings occurred and the locales were successfully created.
- 2 The locale specification exceeded implementation limits or the coded character set or sets used were not supported by the implementation, and no locale was created.
- >3 Warnings or errors occurred and no output was created.

If an error is detected, no permanent output will be created.

SEE ALSO

locale(1), *iconv_open(3)*, *nl_langinfo(3)*, *querylocale(3)*, *strftime(3)*, *environ(7)*

WARNINGS

If warnings occur, permanent output will be created if the **-c** option was specified. The following conditions will cause warning messages to be issued:

- If a symbolic name not found in the *charmap* file is used for the descriptions of the **LC_CTYPE** or **LC_COLLATE** categories (for other categories, this will be an error condition).
- If optional keywords not supported by the implementation are present in the source.

NOTES

When the **-u** option is used, the *codeset* option-argument is interpreted as a name of a codeset to which

the ISO/IEC 10646-1:2000 standard position constant values are converted. Both the ISO/IEC 10646-1:2000 standard position constant values and other formats (decimal, hexadecimal, or octal) are valid as encoding values within the charmap file. The *codeset* can be any codeset that is supported by the **iconv_open(3)** function.

When conflicts occur between the charmap specification of *codeset*, *mb_cur_max*, or *mb_cur_min* and the corresponding value for the codeset represented by the **-u** option-argument *codeset*, the **localedef** utility fails with an error.

When conflicts occur between the charmap encoding values specified for symbolic names of characters of the portable character set and the character encoding values defined by the US-ASCII, the result is unspecified.

HISTORY

localedef first appeared in FreeBSD 11.

It was written by Garrett D'Amore <garrett@nexenta.com> for illumos. John Marino <draco@marino.st> provided the alternations necessary to compile cleanly on DragonFly. Baptiste Daroussin <bapt@FreeBSD.org> ported it to FreeBSD and converted it to tree(3).