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Red Hat Enterprise Linux Release 9.2 Manual Pages on 'locale.h.0p' command

\$ man locale.h.0p

locale.h(0P) POSIX Programmer's Manual locale.h(0P)

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

locale.h ? category macros

SYNOPSIS

```
#include <locale.h>
```

DESCRIPTION

Some of the functionality described on this reference page extends the ISO C standard. Applications shall define the appropriate feature test macro (see the System Interfaces volume of POSIX.1?2017, Section 2.2, The Compilation Environment) to enable the visibility of these symbols in this header.

The <locale.h> header shall define the lconv structure, which shall include at least the following members. (See the definitions of LC_MONETARY in Section 7.3.3, LC_MONETARY and Section 7.3.4, LC_NUMERIC.)

char *currency_symbol

char *decimal_point

char frac_digits

char *grouping

char *int_curr_symbol
char int_frac_digits
char int_n_cs_precedes
char int_n_sep_by_space
char int_n_sign_posn
char int_p_cs_precedes
char int_p_sep_by_space
char int_p_sign_posn
char *mon_decimal_point
char *mon_grouping
char *mon_thousands_sep
char *negative_sign
char n_cs_precedes
char n_sep_by_space
char n_sign_posn
char *positive_sign
char p_cs_precedes
char p_sep_by_space
char p_sign_posn
char *thousands_sep

The <locale.h> header shall define NULL (as described in <stddef.h>)

and at least the following as macros:

LC_ALL

LC_COLLATE

LC_CTYPE

LC_MESSAGES

LC_MONETARY

LC_NUMERIC

LC_TIME

which shall expand to integer constant expressions with distinct values for use as the first argument to the setlocale() function.

Additional macro definitions, beginning with the characters LC_ and an uppercase letter, may also be specified by the implementation.

The `<locale.h>` header shall contain at least the following macros representing bitmasks for use with the `newlocale()` function for each supported locale category: `LC_COLLATE_MASK` `LC_CTYPE_MASK` `LC_MESSAGES_MASK` `LC_MONETARY_MASK` `LC_NUMERIC_MASK` `LC_TIME_MASK`

In addition, a macro to set the bits for all categories shall be defined: `LC_ALL_MASK`

The `<locale.h>` header shall define `LC_GLOBAL_LOCALE`, a special locale object descriptor used by the `duplocale()` and `uselocale()` functions.

The `<locale.h>` header shall define the `locale_t` type, representing a locale object.

The following shall be declared as functions and may also be defined as macros. Function prototypes shall be provided for use with ISO C standard compilers.

```
locale_t  duplocale(locale_t);
void      freelocale(locale_t);
struct lconv *localeconv(void);
locale_t  newlocale(int, const char *, locale_t);
char      *setlocale(int, const char *);
locale_t  uselocale (locale_t);
```

The following sections are informative.

APPLICATION USAGE

None.

RATIONALE

It is suggested that each category macro name for use in `setlocale()` have a corresponding macro name ending in `_MASK` for use in `newlocale()`.

FUTURE DIRECTIONS

None.

SEE ALSO

Chapter 8, Environment Variables, `<stddef.h>`

The System Interfaces volume of POSIX.1-2017, `duplocale()`, `freelocale()`, `localeconv()`, `newlocale()`, `setlocale()`, `uselocale()`

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