

:mod:`locale` --- Internationalization services

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library] locale.rst, line 1); [backlink](#)

Unknown interpreted text role "mod".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library] locale.rst, line 4)

Unknown directive type "module".

```
.. module:: locale
:synopsis: Internationalization services.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library] locale.rst, line 7)

Unknown directive type "moduleauthor".

```
.. moduleauthor:: Martin von Löwis <martin@v.loewis.de>
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library] locale.rst, line 8)

Unknown directive type "sectionauthor".

```
.. sectionauthor:: Martin von Löwis <martin@v.loewis.de>
```

Source code: `:source:`Lib/locale.py``

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library] locale.rst, line 10); [backlink](#)

Unknown interpreted text role "source".

The `:mod:`locale`` module opens access to the POSIX locale database and functionality. The POSIX locale mechanism allows programmers to deal with certain cultural issues in an application, without requiring the programmer to know all the specifics of each country where the software is executed.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library] locale.rst, line 14); [backlink](#)

Unknown interpreted text role "mod".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library] locale.rst, line 19)

Unknown directive type "index".

```
.. index:: module: _locale
```

The `:mod:`locale`` module is implemented on top of the `:mod:`_locale`` module, which in turn uses an ANSI C locale implementation if available.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library] locale.rst, line 21); [backlink](#)

Unknown interpreted text role "mod".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library] locale.rst, line 21); [backlink](#)

Unknown interpreted text role "mod".

The `mod:locale` module defines the following exception and functions:

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library] locale.rst, line 24); [backlink](#)

Unknown interpreted text role "mod".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library] locale.rst, line 27)

Unknown directive type "exception".

```
.. exception:: Error
```

Exception raised when the locale passed to `:func:~setlocale~` is not recognized.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library] locale.rst, line 33)

Unknown directive type "function".

```
.. function:: setlocale(category, locale=None)
```

If `*locale*` is given and not `~None~`, `:func:~setlocale~` modifies the locale setting for the `*category*`. The available categories are listed in the data description below. `*locale*` may be a string, or an iterable of two strings (language code and encoding). If it's an iterable, it's converted to a locale name using the locale aliasing engine. An empty string specifies the user's default settings. If the modification of the locale fails, the exception `:exc:~Error~` is raised. If successful, the new locale setting is returned.

If `*locale*` is omitted or `~None~`, the current setting for `*category*` is returned.

`:func:~setlocale~` is not thread-safe on most systems. Applications typically start with a call of `::`

```
import locale
locale.setlocale(locale.LC_ALL, '')
```

This sets the locale for all categories to the user's default setting (typically specified in the `:envvar:~LANG~` environment variable). If the locale is not changed thereafter, using multithreading should not cause problems.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library] locale.rst, line 57)

Unknown directive type "function".

```
.. function:: localeconv()
```

Returns the database of the local conventions as a dictionary. This dictionary has the following strings as keys:

```
.. tabularcolumns:: |l|l|L|
```

+-----+-----+-----+		
Category	Key	Meaning
+-----+-----+-----+		
:const:~LC_NUMERIC~	~~~'decimal_point'~~~	Decimal point character.
+-----+-----+-----+		
	~~~'grouping'~~~	Sequence of numbers specifying
		which relative positions the
		~~~'thousands_sep'~~~ is
		expected. If the sequence is
		terminated with
		:const:~CHAR_MAX~, no further
		grouping is performed. If the
		sequence terminates with a
		~~~'0'~~~, the last group size is

		repeatedly used.
	``'thousands_sep'``	Character used between groups.
:const:`LC_MONETARY`	``'int_curr_symbol'``	International currency symbol.
	``'currency_symbol'``	Local currency symbol.
	``'p_cs_precedes/n_cs_precedes'``	Whether the currency symbol precedes the value (for positive resp. negative values).
	``'p_sep_by_space/n_sep_by_space'``	Whether the currency symbol is separated from the value by a space (for positive resp. negative values).
	``'mon_decimal_point'``	Decimal point used for monetary values.
	``'frac_digits'``	Number of fractional digits used in local formatting of monetary values.
	``'int_frac_digits'``	Number of fractional digits used in international formatting of monetary values.
	``'mon_thousands_sep'``	Group separator used for monetary values.
	``'mon_grouping'``	Equivalent to ``'grouping'``, used for monetary values.
	``'positive_sign'``	Symbol used to annotate a positive monetary value.
	``'negative_sign'``	Symbol used to annotate a negative monetary value.
	``'p_sign_posn/n_sign_posn'``	The position of the sign (for positive resp. negative values), see below.

All numeric values can be set to :const:`CHAR_MAX` to indicate that there is no value specified in this locale.

The possible values for ``'p_sign_posn'`` and ``'n_sign_posn'`` are given below.

Value	Explanation
``'0'``	Currency and value are surrounded by parentheses.
``'1'``	The sign should precede the value and currency symbol.
``'2'``	The sign should follow the value and currency symbol.
``'3'``	The sign should immediately precede the value.
``'4'``	The sign should immediately follow the value.
``'CHAR_MAX'``	Nothing is specified in this locale.

The function sets temporarily the ``LC_CTYPE`` locale to the ``LC_NUMERIC`` locale or the ``LC_MONETARY`` locale if locales are different and numeric or monetary strings are non-ASCII. This temporary change affects other threads.

.. versionchanged:: 3.7

The function now sets temporarily the ``LC_CTYPE`` locale to the ``LC_NUMERIC`` locale in some cases.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main][Doc][library]locale.rst, line 159)**

Unknown directive type "function".

```
.. function:: nl_langinfo(option)
```

Return some locale-specific information as a string. This function is not available on all systems, and the set of possible options might also vary across platforms. The possible argument values are numbers, for which symbolic constants are available in the locale module.

The `:func:`nl_langinfo`` function accepts one of the following keys. Most descriptions are taken from the corresponding description in the GNU C library.

```
.. data:: CODESET
```

Get a string with the name of the character encoding used in the selected locale.

```
.. data:: D_T_FMT
```

Get a string that can be used as a format string for `:func:`time.strftime`` to represent date and time in a locale-specific way.

```
.. data:: D_FMT
```

Get a string that can be used as a format string for `:func:`time.strftime`` to represent a date in a locale-specific way.

```
.. data:: T_FMT
```

Get a string that can be used as a format string for `:func:`time.strftime`` to represent a time in a locale-specific way.

```
.. data:: T_FMT_AMPM
```

Get a format string for `:func:`time.strftime`` to represent time in the am/pm format.

```
.. data:: DAY_1 ... DAY_7
```

Get the name of the n-th day of the week.

```
.. note::
```

This follows the US convention of `:const:`DAY_1`` being Sunday, not the international convention (ISO 8601) that Monday is the first day of the week.

```
.. data:: ABDAY_1 ... ABDAY_7
```

Get the abbreviated name of the n-th day of the week.

```
.. data:: MON_1 ... MON_12
```

Get the name of the n-th month.

```
.. data:: ABMON_1 ... ABMON_12
```

Get the abbreviated name of the n-th month.

```
.. data:: RADIXCHAR
```

Get the radix character (decimal dot, decimal comma, etc.).

```
.. data:: THOUSEP
```

Get the separator character for thousands (groups of three digits).

```
.. data:: YESEXPR
```

Get a regular expression that can be used with the `regex` function to recognize a positive response to a yes/no question.

```
.. note::
```

The expression is in the syntax suitable for the `:c:func:`regex`` function from the C library, which might differ from the syntax used in `:mod:`re``.

```
.. data:: NOEXPR
```

Get a regular expression that can be used with the `regex(3)` function to recognize a negative response to a yes/no question.

.. data:: CRNCYSTR

Get the currency symbol, preceded by "-" if the symbol should appear before the value, "+" if the symbol should appear after the value, or "." if the symbol should replace the radix character.

.. data:: ERA

Get a string that represents the era used in the current locale.

Most locales do not define this value. An example of a locale which does define this value is the Japanese one. In Japan, the traditional representation of dates includes the name of the era corresponding to the then-emperor's reign.

Normally it should not be necessary to use this value directly. Specifying the ``E`` modifier in their format strings causes the `:func:`time.strftime`` function to use this information. The format of the returned string is not specified, and therefore you should not assume knowledge of it on different systems.

.. data:: ERA_D_T_FMT

Get a format string for `:func:`time.strftime`` to represent date and time in a locale-specific era-based way.

.. data:: ERA_D_FMT

Get a format string for `:func:`time.strftime`` to represent a date in a locale-specific era-based way.

.. data:: ERA_T_FMT

Get a format string for `:func:`time.strftime`` to represent a time in a locale-specific era-based way.

.. data:: ALT_DIGITS

Get a representation of up to 100 values used to represent the values 0 to 99.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]locale.rst, line 282)**

Unknown directive type "function".

.. function:: getdefaultlocale([envvars])

Tries to determine the default locale settings and returns them as a tuple of the form `((language code, encoding))`.

According to POSIX, a program which has not called `((setlocale(LC_ALL, ''))` runs using the portable `((C))` locale. Calling `((setlocale(LC_ALL, ''))` lets it use the default locale as defined by the `:envvar:LANG` variable. Since we do not want to interfere with the current locale setting we thus emulate the behavior in the way described above.

To maintain compatibility with other platforms, not only the `:envvar:LANG` variable is tested, but a list of variables given as `envvars` parameter. The first found to be defined will be used. `*envvars*` defaults to the search path used in GNU gettext; it must always contain the variable name `((LANG))`. The GNU gettext search path contains `((LC_ALL))`, `((LC_CTYPE))`, `((LANG))` and `((LANGUAGE))`, in that order.

Except for the code `((C))`, the language code corresponds to `:rfc:1766`. `*language code*` and `*encoding*` may be `((None))` if their values cannot be determined.

.. deprecated:: 3.11 3.13

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library]locale.rst, line 307)**

Unknown directive type "function".

```
.. function:: getlocale(category=LC_CTYPE)
```

Returns the current setting for the given locale category as sequence containing *language code*, *encoding*. *category* may be one of the :const:`LC_`* values except :const:`LC_ALL`. It defaults to :const:`LC_CTYPE`.

Except for the code ``'C'``, the language code corresponds to :rfc:`1766`. *language code* and *encoding* may be ``None`` if their values cannot be determined.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library] locale.rst, line 318)**

Unknown directive type "function".

```
.. function:: getpreferredencoding(do_setlocale=True)
```

Return the :term:`locale encoding` used for text data, according to user preferences. User preferences are expressed differently on different systems, and might not be available programmatically on some systems, so this function only returns a guess.

On some systems, it is necessary to invoke :func:`setlocale` to obtain the user preferences, so this function is not thread-safe. If invoking setlocale is not necessary or desired, *do_setlocale* should be set to ``False``.

On Android or if the :ref:`Python UTF-8 Mode <utf8-mode>` is enabled, always return ``'UTF-8'``, the :term:`locale encoding` and the *do_setlocale* argument are ignored.

The :ref:`Python preinitialization <c-preinit>` configures the LC_CTYPE locale. See also the :term:`filesystem encoding and error handler`.

```
.. versionchanged:: 3.7
```

The function now always returns ``'UTF-8'`` on Android or if the :ref:`Python UTF-8 Mode <utf8-mode>` is enabled.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library] locale.rst, line 341)**

Unknown directive type "function".

```
.. function:: normalize(localename)
```

Returns a normalized locale code for the given locale name. The returned locale code is formatted for use with :func:`setlocale`. If normalization fails, the original name is returned unchanged.

If the given encoding is not known, the function defaults to the default encoding for the locale code just like :func:`setlocale`.

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Unknown directive type "function".

```
.. function:: resetlocale(category=LC_ALL)
```

Sets the locale for *category* to the default setting.

The default setting is determined by calling :func:`getdefaultlocale`. *category* defaults to :const:`LC_ALL`.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library] locale.rst, line 359)**

Unknown directive type "function".

```
.. function:: strcoll(string1, string2)
```

Compares two strings according to the current :const:`LC_COLLATE` setting. As any other compare function, returns a negative, or a positive value, or ``0``, depending on whether *string1* collates before or after *string2* or is equal to it.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library] locale.rst, line 367)**

Unknown directive type "function".

```
.. function:: strxfrm(string)
```

Transforms a string to one that can be used in locale-aware comparisons. For example, ``strxfrm(s1) < strxfrm(s2)`` is equivalent to ``strcoll(s1, s2) < 0``. This function can be used when the same string is compared repeatedly, e.g. when collating a sequence of strings.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library] locale.rst, line 376)**

Unknown directive type "function".

```
.. function:: format_string(format, val, grouping=False, monetary=False)
```

Formats a number *val* according to the current :const:`LC_NUMERIC` setting. The format follows the conventions of the ``%`` operator. For floating point values, the decimal point is modified if appropriate. If *grouping* is true, also takes the grouping into account.

If *monetary* is true, the conversion uses monetary thousands separator and grouping strings.

Processes formatting specifiers as in ``format % val``, but takes the current locale settings into account.

```
.. versionchanged:: 3.7
    The *monetary* keyword parameter was added.
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library] locale.rst, line 393)**

Unknown directive type "function".

```
.. function:: format(format, val, grouping=False, monetary=False)
```

Please note that this function works like :meth:`format_string` but will only work for exactly one ``%char`` specifier. For example, ``'%f'`` and ``'%0f'`` are both valid specifiers, but ``'%f KiB'`` is not.

For whole format strings, use :func:`format_string`.

```
.. deprecated:: 3.7
    Use :meth:`format_string` instead.
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library] locale.rst, line 405)**

Unknown directive type "function".

```
.. function:: currency(val, symbol=True, grouping=False, international=False)
```

Formats a number *val* according to the current :const:`LC_MONETARY` settings.

The returned string includes the currency symbol if *symbol* is true, which is the default. If *grouping* is true (which is not the default), grouping is done with the value. If *international* is true (which is not the default), the international currency symbol is used.

Note that this function will not work with the 'C' locale, so you have to set a locale via `:func:`setlocale`` first.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library] locale.rst, line 418)**

Unknown directive type "function".

```
.. function:: str(float)
```

Formats a floating point number using the same format as the built-in function ``str(float)``, but takes the decimal point into account.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library] locale.rst, line 424)**

Unknown directive type "function".

```
.. function:: delocalize(string)
```

Converts a string into a normalized number string, following the `:const:`LC_NUMERIC`` settings.

```
.. versionadded:: 3.5
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library] locale.rst, line 432)**

Unknown directive type "function".

```
.. function:: localize(string, grouping=False, monetary=False)
```

Converts a normalized number string into a formatted string following the `:const:`LC_NUMERIC`` settings.

```
.. versionadded:: 3.10
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library] locale.rst, line 440)**

Unknown directive type "function".

```
.. function:: atof(string, func=float)
```

Converts a string to a number, following the `:const:`LC_NUMERIC`` settings, by calling `*func*` on the result of calling `:func:`delocalize`` on `*string*`.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library] locale.rst, line 446)**

Unknown directive type "function".

```
.. function:: atoi(string)
```

Converts a string to an integer, following the `:const:`LC_NUMERIC`` conventions.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library] locale.rst, line 451)**

Unknown directive type "data".

```
.. data:: LC_CTYPE
```



```
.. index:: module: string
```

Locale category for the character type functions. Depending on the settings of this category, the functions of module `:mod:`string`` dealing with case change their behaviour.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library] locale.rst, line 460)**

Unknown directive type "data".

```
.. data:: LC_COLLATE
```

Locale category for sorting strings. The functions `:func:`strcoll`` and `:func:`strxfrm`` of the `:mod:`locale`` module are affected.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library] locale.rst, line 466)**

Unknown directive type "data".

```
.. data:: LC_TIME
```

Locale category for the formatting of time. The function `:func:`time.strftime`` follows these conventions.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library] locale.rst, line 472)**

Unknown directive type "data".

```
.. data:: LC_MONETARY
```

Locale category for formatting of monetary values. The available options are available from the `:func:`localeconv`` function.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library] locale.rst, line 478)**

Unknown directive type "data".

```
.. data:: LC_MESSAGES
```

Locale category for message display. Python currently does not support application specific locale-aware messages. Messages displayed by the operating system, like those returned by `:func:`os.strerror`` might be affected by this category.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library] locale.rst, line 486)**

Unknown directive type "data".

```
.. data:: LC_NUMERIC
```

Locale category for formatting numbers. The functions `:func:`.format``, `:func:`atoi``, `:func:`atof`` and `:func:`.str`` of the `:mod:`locale`` module are affected by that category. All other numeric formatting operations are not affected.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library] locale.rst, line 494)**

Unknown directive type "data".

```
.. data:: LC_ALL
```

Combination of all locale settings. If this flag is used when the locale is changed, setting the locale for all categories is attempted. If that fails for any category, no category is changed at all. When the locale is retrieved using this flag, a string indicating the setting for all categories is returned. This string can be later used to restore the settings.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library] locale.rst, line 503)**

Unknown directive type "data".

```
.. data:: CHAR_MAX
```

This is a symbolic constant used for different values returned by :func:`localeconv`.

Example:

```
>>> import locale
>>> loc = locale.getlocale() # get current locale
# use German locale; name might vary with platform
>>> locale.setlocale(locale.LC_ALL, 'de_DE')
>>> locale.strcoll('f\xe4n', 'foo') # compare a string containing an umlaut
>>> locale.setlocale(locale.LC_ALL, '') # use user's preferred locale
>>> locale.setlocale(locale.LC_ALL, 'C') # use default (C) locale
>>> locale.setlocale(locale.LC_ALL, loc) # restore saved locale
```

## Background, details, hints, tips and caveats

The C standard defines the locale as a program-wide property that may be relatively expensive to change. On top of that, some implementations are broken in such a way that frequent locale changes may cause core dumps. This makes the locale somewhat painful to use correctly.

Initially, when a program is started, the locale is the C locale, no matter what the user's preferred locale is. There is one exception: the :data:`LC_CTYPE` category is changed at startup to set the current locale encoding to the user's preferred locale encoding. The program must explicitly say that it wants the user's preferred locale settings for other categories by calling `setlocale(LC_ALL, '')`.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library] locale.rst, line 529); [backlink](#)**

Unknown interpreted text role "data".

It is generally a bad idea to call :func:`setlocale` in some library routine, since as a side effect it affects the entire program. Saving and restoring it is almost as bad: it is expensive and affects other threads that happen to run before the settings have been restored.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library] locale.rst, line 536); [backlink](#)**

Unknown interpreted text role "func".

If, when coding a module for general use, you need a locale independent version of an operation that is affected by the locale (such as certain formats used with :func:`time.strftime`), you will have to find a way to do it without using the standard library routine. Even better is convincing yourself that using locale settings is okay. Only as a last resort should you document that your module is not compatible with non-C locale settings.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library] locale.rst, line 541); [backlink](#)**

Unknown interpreted text role "func".

The only way to perform numeric operations according to the locale is to use the special functions defined by this module: :func:`atof`, :func:`atoi`, :func:`.format`, :func:`.str`.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main] [Doc] [library] locale.rst, line 548); [backlink](#)**

Unknown interpreted text role "func".

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main][Doc][library]locale.rst, line 548); [backlink](#)

Unknown interpreted text role "func".

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main][Doc][library]locale.rst, line 548); [backlink](#)

Unknown interpreted text role "func".

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main][Doc][library]locale.rst, line 548); [backlink](#)

Unknown interpreted text role "func".

There is no way to perform case conversions and character classifications according to the locale. For (Unicode) text strings these are done according to the character value only, while for byte strings, the conversions and classifications are done according to the ASCII value of the byte, and bytes whose high bit is set (i.e., non-ASCII bytes) are never converted or considered part of a character class such as letter or whitespace.

## For extension writers and programs that embed Python

Extension modules should never call `:func:`setlocale``, except to find out what the current locale is. But since the return value can only be used portably to restore it, that is not very useful (except perhaps to find out whether or not the locale is C).

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main][Doc][library]locale.rst, line 565); [backlink](#)

Unknown interpreted text role "func".

When Python code uses the `:mod:`locale`` module to change the locale, this also affects the embedding application. If the embedding application doesn't want this to happen, it should remove the `:mod:`_locale`` extension module (which does all the work) from the table of built-in modules in the `:file:`config.c`` file, and make sure that the `:mod:`_locale`` module is not accessible as a shared library.

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main][Doc][library]locale.rst, line 570); [backlink](#)

Unknown interpreted text role "mod".

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main][Doc][library]locale.rst, line 570); [backlink](#)

Unknown interpreted text role "mod".

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main][Doc][library]locale.rst, line 570); [backlink](#)

Unknown interpreted text role "file".

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main][Doc][library]locale.rst, line 570); [backlink](#)

Unknown interpreted text role "mod".

## Access to message catalogs

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\[cpython-main][Doc][library]locale.rst, line 583)

Unknown directive type "function".

```
.. function:: gettext(msg)
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library] locale.rst, line 584)**

Unknown directive type "function".

```
.. function:: dgettext(domain, msg)
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library] locale.rst, line 585)**

Unknown directive type "function".

```
.. function:: dcgettext(domain, msg, category)
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library] locale.rst, line 586)**

Unknown directive type "function".

```
.. function:: textdomain(domain)
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library] locale.rst, line 587)**

Unknown directive type "function".

```
.. function:: bindtextdomain(domain, dir)
```

The locale module exposes the C library's gettext interface on systems that provide this interface. It consists of the functions `:func:`!gettext``, `:func:`!dgettext``, `:func:`!dcgettext``, `:func:`!textdomain``, `:func:`!bindtextdomain``, and `:func:`!bind_textdomain_codeset``. These are similar to the same functions in the `mod:`gettext`` module, but use the C library's binary format for message catalogs, and the C library's search algorithms for locating message catalogs.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library] locale.rst, line 589); [backlink](#)**

Unknown interpreted text role "func".

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library] locale.rst, line 589); [backlink](#)**

Unknown interpreted text role "func".

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library] locale.rst, line 589); [backlink](#)**

Unknown interpreted text role "func".

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library] locale.rst, line 589); [backlink](#)**

Unknown interpreted text role "func".

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library] locale.rst, line 589); [backlink](#)**

Unknown interpreted text role "func".

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\cpython-main [Doc] [library] locale.rst, line 589); [backlink](#)**

Unknown interpreted text role "func".

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-**

**main\Doc\library\ [cpython-main] [Doc] [library] locale.rst, line 589); [backlink](#)**

Unknown interpreted text role "mod".

Python applications should normally find no need to invoke these functions, and should use `mod: gettext` instead. A known exception to this rule are applications that link with additional C libraries which internally invoke `:c:func: gettext` or `:c:func: dcgettext`. For these applications, it may be necessary to bind the text domain, so that the libraries can properly locate their message catalogs.

**System Message: ERROR/3 (D: \onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library] locale.rst, line 596); [backlink](#)**

Unknown interpreted text role "mod".

**System Message: ERROR/3 (D: \onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library] locale.rst, line 596); [backlink](#)**

Unknown interpreted text role "c:func".

**System Message: ERROR/3 (D: \onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ [cpython-main] [Doc] [library] locale.rst, line 596); [backlink](#)**

Unknown interpreted text role "c:func".