**[setlocale](https://www.cnblogs.com/springbarley/archive/2013/05/11/3072689.html)**

//涉及宽字符同多字符的转换时候，要特别注意这个

setlocale:

函数原形为：char \*setlocale( int category, const char \*locale );  
头文件：<locale.h>  
所支持的操作系统为:ANSI, Win 95, Win NT  
对于简体中文可以使用如下设置：setlocale( LC\_ALL, "chs" );

为什么一定要调用setlocale呢？

因为在C/C++语言标准中定义了其运行时的字符集环境为"C"，也就是ASCII字符集的一个子集，那么mbstowcs在工作时会将cstr中所包含的字符串看作是ASCII编码的字符，而不认为是一个包含有chs编码的字符串，所以他会将每一个中文拆成2个ASCII编码进行转换，这样得到的结果就是会形成4个wchar\_t的字符组成的串，那么如何才能够让mbstowcs正常工作呢？在调用mbstowcs进行转换之间必须明确的告诉mbstowcs目前cstr串中包含的是chs编码的字符串，通过setlocale( LC\_ALL, "chs" )函数调用来完成，需要注意的是这个函数会改变整个应用程序的字符集编码方式，必须要通过重新调用setlocale( LC\_ALL, "C" )函数来还原，这样就可以保证mbstowcs在转换时将cstr中的串看作是中文串，并且转换成为2个wchar\_t字符，而不是4个。

本地化设置需要具备三个条件：

a.语言代码(Language Code)

b.国家代码(Country Code)

c.编码(Encoding)

本地名字可以用下面这些部分来构造：

语言代码\_国家代码.编码 比如（zh\_CN.UTF-8, en\_US等）

locale的别名表见 /usr/lib/X11/locale/locale.alias(以Debian GNU/Linux为例)

**setlocale语言字符串参考**

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| **Primary language** | **Sublanguage** | **Language string** |
| Chinese | Chinese | "chinese" |
| Chinese | Chinese (simplified) | "chinese-simplified" or "chs" |
| Chinese | Chinese (traditional) | "chinese-traditional" or "cht" |
| Czech | Czech | "csy" or "czech" |
| Danish | Danish | "dan" or "danish" |
| Dutch | Dutch (default) | "dutch" or "nld" |
| Dutch | Dutch (Belgian) | "belgian", "dutch-belgian", or "nlb" |
| English | English (default) | "english" |
| English | English (Australian) | "australian", "ena", or "english-aus" |
| English | English (Canadian) | "canadian", "enc", or "english-can" |
| English | English (New Zealand) | "english-nz" or "enz" |
| English | English (United Kingdom) | "eng", "english-uk", or "uk" |
| English | English (United States) | "american", "american english", "american-english", "english-american", "english-us", "english-usa", "enu", "us", or "usa" |
| Finnish | Finnish | "fin" or "finnish" |
| French | French (default) | "fra" or "french" |
| French | French (Belgian) | "frb" or "french-belgian" |
| French | French (Canadian) | "frc" or "french-canadian" |
| French | French (Swiss) | "french-swiss" or "frs" |
| German | German (default) | "deu" or "german" |
| German | German (Austrian) | "dea" or "german-austrian" |
| German | German (Swiss) | "des", "german-swiss", or "swiss" |
| Greek | Greek | "ell" or "greek" |
| Hungarian | Hungarian | "hun" or "hungarian" |
| Icelandic | Icelandic | "icelandic" or "isl" |
| Italian | Italian (default) | "ita" or "italian" |
| Italian | Italian (Swiss) | "italian-swiss" or "its" |
| Japanese | Japanese | "japanese" or "jpn" |
| Korean | Korean | "kor" or "korean" |
| Norwegian | Norwegian (default) | "norwegian" |
| Norwegian | Norwegian (Bokmal) | "nor" or "norwegian-bokmal" |
| Norwegian | Norwegian (Nynorsk) | "non" or "norwegian-nynorsk" |
| Polish | Polish | "plk" or "polish" |
| Portuguese | Portuguese (default) | "portuguese" or "ptg" |
| Portuguese | Portuguese (Brazilian) | "portuguese-brazil" or "ptb" |
| Russian | Russian (default) | "rus" or "russian" |
| Slovak | Slovak | "sky" or "slovak" |
| Spanish | Spanish (default) | "esp" or "spanish" |
| Spanish | Spanish (Mexican) | "esm" or "spanish-mexican" |
| Spanish | Spanish (Modern) | "esn" or "spanish-modern" |
| Swedish | Swedish | "sve" or "swedish" |
| Turkish | Turkish | "trk" or "turkish" |

**setlocale国家字符串参考**

|  |  |
| --- | --- |
| **Country/Region** | **Country/Region string** |
| Australia | "aus" or "australia" |
| Austria | "aut" or "austria" |
| Belgium | "bel" or "belgium" |
| Brazil | "bra" or "brazil" |
| Canada | "can" or "canada" |
| China | "china", "chn", "pr china", or "pr-china" |
| Czech Republic | "cze" or "czech" |
| Denmark | "dnk" or "denmark" |
| Finland | "fin" or "finland" |
| France | "fra" or "france" |
| Germany | "deu" or "germany" |
| Greece | "grc" or "greece" |
| Hong Kong SAR | "hkg", "hong kong", or "hong-kong" |
| Hungary | "hun" or "hungary" |
| Iceland | "iceland" or "isl" |
| Ireland | "irl" or "ireland" |
| Italy | "ita" or "italy" |
| Japan | "jpn" or "japan" |
| Korea | "kor" or "korea" |
| Mexico | "mex" or "mexico" |
| The Netherlands | "nld", "holland", or "netherlands" |
| New Zealand | "nzl", "new zealand", "new-zealand", or "nz" |
| Norway | "nor" or "norway" |
| Poland | "pol" or "poland" |
| Portugal | "prt" or "portugal" |
| Russia | "rus" or "russia" |
| Singapore | "sgp" or "singapore" |
| Slovakia | "svk" or "slovak" |
| Spain | "esp" or "spain" |
| Sweden | "swe" or "sweden" |
| Switzerland | "che" or "switzerland" |
| Taiwan | "twn" or "taiwan" |
| Turkey | "tur" or "turkey" |
| United Kingdom | "gbr", "britain", "england", "great britain", "uk", "united kingdom", or "united-kingdom" |
| United States | "usa", "america", "united states", "united-states", or "us" |