Search: Go

Not logged in
Reference <climits> register log in

C++
Information
Tutorials
Reference
Articles
Forum

Reference
C library:
<cassert> (assert.h)
<cctype> (ctype.h)
<cerrno> (errno.h)
<cfenv> (fenv.h)
<cfloat> (float.h)
<cinttypes> (inttypes.h)
<ciso646> (iso646.h)
<climits> (limits.h)
<clocale> (locale.h)
<cmath> (math.h)
<csetjmp> (setjmp.h)
<csignal> (signal.h)
<cstdarg> (stdarg.h)
<cstdbool> (stdbool.h)
<cstddef> (stddef.h)
<cstdint> (stdint.h)
<cstdio> (stdio.h)
<cstdlib> (stdlib.h)
<cstring> (string.h)
<ctgmath> (tgmath.h)
<ctime> (time.h)
<cuchar> (uchar.h)
<cwchar> (wchar.h)
<cwctype> (wctype.h)
Containers:
Input/Output:
Multi-threading:
Other:

Start Download
Convert Any File to a PDF - Word, Jpeg, Gif, Rtf - Free Download!

header

<climits> (limits.h)

Sizes of integral types

This header defines constants with the limits of fundamental integral types for the specific system and compiler implementation used.

The limits for fundamental floating-point types are defined in <cfloat> (<float.h>).
The limits for width-specific integral types and other typedef types are defined in <cstdint> (<stdint.h>).

Macro constants

name	expresses	value*
CHAR_BIT	Number of bits in a char object (byte)	8 or greater*
SCHAR_MIN	Minimum value for an object of type signed char	-127 (-2^7+1) or less*
SCHAR_MAX	Maximum value for an object of type signed char	127 (2^7-1) or greater*
UCHAR_MAX	Maximum value for an object of type unsigned char	255 (2^8-1) or greater*
CHAR_MIN	Minimum value for an object of type char	either SCHAR_MIN or 0
CHAR_MAX	Maximum value for an object of type char	either SCHAR_MAX or UCHAR_MAX
MB_LEN_MAX	Maximum number of bytes in a multibyte character, for any locale	1 or greater*
SHRT_MIN	Minimum value for an object of type short int	-32767 ($-2^{15}+1$) or less*
SHRT_MAX	Maximum value for an object of type short int	32767 ($2^{15}-1$) or greater*
USHRT_MAX	Maximum value for an object of type unsigned short int	65535 ($2^{16}-1$) or greater*
INT_MIN	Minimum value for an object of type int	-32767 ($-2^{15}+1$) or less*
INT_MAX	Maximum value for an object of type int	32767 ($2^{15}-1$) or greater*
UINT_MAX	Maximum value for an object of type unsigned int	65535 ($2^{16}-1$) or greater*
LONG_MIN	Minimum value for an object of type long int	-2147483647 ($-2^{31}+1$) or less*
LONG_MAX	Maximum value for an object of type long int	2147483647 ($2^{31}-1$) or greater*
ULONG_MAX	Maximum value for an object of type unsigned long int	4294967295 ($2^{32}-1$) or greater*
LLONG_MIN	Minimum value for an object of type long long int	-9223372036854775807 ($-2^{63}+1$) or less*
LLONG_MAX	Maximum value for an object of type long long int	9223372036854775807 ($2^{63}-1$) or greater*
ULLONG_MAX	Maximum value for an object of type unsigned long long int	18446744073709551615 ($2^{64}-1$) or greater*

* the actual value depends on the particular system and library implementation, but shall reflect the limits of these types in the target platform.

Compatibility

LLONG_MIN, LLONG_MAX and ULLONG_MAX are defined for libraries complying with the C standard of 1999 or later (which only includes the C++ standard since 2011: C++11).

See also

<cfloat> (float.h)	Characteristics of floating-point types (header)

Home page | Privacy policy
© cplusplus.com, 2000-2015 - All rights reserved - v3.1
Spotted an error? contact us