



Search:

Go

Not logged in

Reference

<sstream>

ostream

register

log in

C++

Information
Tutorials
Reference
Articles
Forum

Reference

Library:
Containers:
Input/Output:
 <fstream>
 <iomanip>
 <ios>
 <iosfwd>
 <iostream>
 <istream>
 <ostream>
 <sstream>
 <streambuf>
Multi-threading:
Other:

<sstream>

class templates:
 basic_istream
 basic_ostream
 basic_stringbuf
 basic_stringstream
classes:
 istream
 ostream
 stringbuf
 stringstream
 wstringstream
 wstringbuf
 wstringstream

ostream

ostream::ostream
public member functions:
 ostream::operator=
 ostream::rdbuf
 ostream::str
 ostream::swap
non-member overloads:
 swap (ostream)

Answers to C++ Questions

Free Answers to Your Programming Language Questions. Register Now!

class

std::ostream

<sstream>

typedef basic_ostream<char> ostream;

Output string stream



Output stream class to operate on strings.

Objects of this class use a *string buffer* that contains a sequence of characters. This sequence of characters can be accessed directly as a *string* object, using member *str*.

Characters can be inserted into the stream with any operation allowed on *output streams*.

This is an instantiation of *basic_ostream* with the following template parameters:

template parameter	definition	comments
charT	char	Aliased as member <i>char_type</i>
traits	char_traits<char>	Aliased as member <i>traits_type</i>
Alloc	allocator<char>	Aliased as member <i>allocator_type</i>

Apart from the internal *string buffer*, objects of these classes keep a set of internal fields inherited from *ios_base* and *ios*:

	field	member functions	description
Formatting	format flags	flags setf unsetf	A set of internal flags that affect how certain input/output operations are interpreted or generated. See member type <i>fmtflags</i> .
	field width	width	Width of the next formatted element to insert.
	display precision	precision	Decimal precision for the next floating-point value inserted.
	locale	getloc imbue	The <i>locale</i> object used by the function for formatted input/output operations affected by localization properties.
	fill character	fill	Character to pad a formatted field up to the <i>field width</i> (<i>width</i>).
State	error state	rdstate setstate clear	The current error state of the stream. Individual values may be obtained by calling <i>good</i> , <i>eof</i> , <i>fail</i> and <i>bad</i> . See member type <i>iostate</i> .
	exception mask	exceptions	The state flags for which a <i>failure</i> exception is thrown. See member type <i>iostate</i> .
Other	callback stack	register_callback	Stack of pointers to functions that are called when certain events occur.
	extensible arrays	iword pword xalloc	Internal arrays to store objects of type <i>long</i> and <i>void*</i> .
	tied stream	tie	Pointer to output stream that is flushed before each i/o operation on this stream.
	stream buffer	rdbuf	Pointer to the associated <i>streambuf</i> object, which is charge of all input/output operations.

Member types

The class declares the following member types:

member type	definition
char_type	char
traits_type	char_traits<char>
allocator_type	allocator<char>
int_type	int
pos_type	streampos
off_type	streamoff

These member types are inherited from its base classes *ostream* and *ios_base*:

event	Type to indicate event type (public member type)
event_callback	Event callback function type (public member type)
failure	Base class for stream exceptions (public member class)
fmtflags	Type for stream format flags (public member type)
Init	Initialize standard stream objects (public member class)
iostate	Type for stream state flags (public member type)

openmode	Type for stream opening mode flags (public member type)
seekdir	Type for stream seeking direction flag (public member type)
sentry	Prepare stream for output (public member class)

fx Public member functions

(constructor)	Construct an object and optionally initialize its content (public member function)
str	Get/set content (public member function)
operator= <small>C++11</small>	Move assignment (public member function)
swap <small>C++11</small>	Swap internals (public member function)

fx Public member functions inherited from ostream

operator<<	Insert formatted output (public member function)
put	Put character (public member function)
write	Write block of data (public member function)
tellp	Get position in output sequence (public member function)
seekp	Set position in output sequence (public member function)
flush	Flush output stream buffer (public member function)

fx Public member functions inherited from ios

good	Check whether state of stream is good (public member function)
eof	Check whether eofbit is set (public member function)
fail	Check whether either failbit or badbit is set (public member function)
bad	Check whether badbit is set (public member function)
operator!	Evaluate stream (not) (public member function)
operator bool <small>C++11</small>	Evaluate stream (public member function)
rdstate	Get error state flags (public member function)
setstate	Set error state flag (public member function)
clear	Set error state flags (public member function)
copyfmt	Copy formatting information (public member function)
fill	Get/set fill character (public member function)
exceptions	Get/set exceptions mask (public member function)
imbue	Imbue locale (public member function)
tie	Get/set tied stream (public member function)
rdbuf	Get/set stream buffer (public member function)
narrow	Narrow character (public member function)
widen	Widen character (public member function)

fx Public member functions inherited from ios_base

flags	Get/set format flags (public member function)
setf	Set specific format flags (public member function)
unsetf	Clear specific format flags (public member function)
precision	Get/Set floating-point decimal precision (public member function)
width	Get/set field width (public member function)
imbue	Imbue locale (public member function)
getloc	Get current locale (public member function)
xalloc	Get new index for extensible array [static] (public static member function)
word	Get integer element of extensible array (public member function)
pword	Get pointer element of extensible array (public member function)
register_callback	Register event callback function (public member function)
sync_with_stdio	Toggle synchronization with cstdio streams [static] (public static member function)

fx Non-member function overloads

swap	Swap output string streams (function template)
-------------	---

[Home page](#) | [Privacy policy](#)

© cplusplus.com, 2000-2015 - All rights reserved - v3.1

[Spotted an error? contact us](#)