



Search:

[Reference](#)
[<ios>](#)
[showpoint](#)

Not logged in
[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:

<ios>

types:

basic_ios

fpos

ios

ios_base

io_errc

streamoff

streampos

streamsize

wios

wstreampos

manipulators:

boolalpha

dec

defaultfloat

fixed

hex

hexfloat

internal

left

noboolalpha

noshowbase

noshowpoint

noshowpos

noskipws

nounitbuf

nouppercase

oct

right

scientific

showbase

showpoint

showpos

skipws

unitbuf

uppercase

other functions:

istream_category

function

std::showpoint

<ios> <iostream>

```
ios_base& showpoint (ios_base& str);
```

Show decimal point

Sets the showpoint format flag for the *str* stream.

When the showpoint format flag is set, the decimal point is always written for floating point values inserted into the stream (even for those whose decimal part is zero). Following the decimal point, as many digits as necessary are written to match the *precision* set for the stream (if any).

This flag can be unset with the *noshowpoint* manipulator. When not set, the decimal point is only written for numbers whose decimal part is not zero.

The precision setting can be modified using the *precision* member function.

For standard streams, the showpoint flag is **not set** on initialization.

Parameters

str

Stream object whose *format flag* is affected.
Because this function is a manipulator, it is designed to be used alone with no arguments in conjunction with the *insertion* (<<) and *extraction* (>>) operations on streams (see example below).

Return Value

Argument *str*.

Example

```
1 // modify showpoint flag
2 #include <iostream> // std::cout, std::showpoint, std::noshowpoint
3
4 int main () {
5     double a = 30;
6     double b = 10000.0;
7     double pi = 3.1416;
8     std::cout.precision(5);
9     std::cout << std::showpoint << a << '\t' << b << '\t' << pi << '\n';
10    std::cout << std::noshowpoint << a << '\t' << b << '\t' << pi << '\n';
11    return 0;
12 }
```

Possible output:

```
30.000 10000. 3.1416
30      10000  3.1416
```

Data races

Modifies *str*. Concurrent access to the same stream object may cause data races.

Exception safety

Basic guarantee: if an exception is thrown, *str* is in a valid state.

See also

noshowpoint

Do not show decimal point ([function](#))

ios_base::flags

Get/set format flags ([public member function](#))

ios_base::setf

Set specific format flags ([public member function](#))

ios_base::unsetf

Clear specific format flags ([public member function](#))

Answers to C++ Questions

Free Answers to Your Programming Language Questions. Register Now!

Home page | Privacy policy

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

Spotted an error? contact us