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stringbuf

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PatchIT Updating Library
PatchIT offers fully automated
updating libraries for coding

AddressSanitizer

Detects buffer overflows and use-after-free in C++. Open source



class

std::stringbuf

<sstream>

typedef basic_stringbuf<char> stringbuf;

String stream buffer

```

graph LR
    streambuf --> stringbuf

```

Stream buffer to read from and write to [string](#) objects.

Objects of this class maintain internally a sequence of characters that they use as their *associated input sequence* and/or *associated output sequence*. The internal sequence can be initialized from a [string](#) object, or copied to one, using member [str](#).

Access to the internal sequence of characters is given to streams by means of the interface offered by the virtual members inherited from [streambuf](#) that are overridden in this class:

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

Public member functions

(constructor)	Construct a string stream buffer object (public member function)
str	Get/set the string content (public member function)

Public member functions inherited from streambuf

Locales:

pubimbue	Imbue locale (public member function)
getloc	Get current locale (public member function)

Buffer management and positioning:

pubsetbuf	Set buffer array (public member function)
pubseekoff	Set internal position pointer to relative position (public member function)
pubseekpos	Set internal position pointer to absolute position (public member function)
pubsync	Synchronize stream buffer (public member function)

Input functions (get):

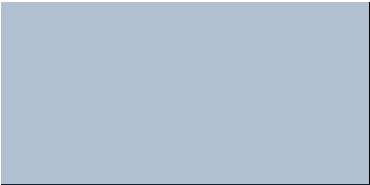
in_avail	Get number of characters available to read (public member function)
snextc	Advance to next position and get character (public member function)
sgetc	Get current character and advance to next position (public member function)
sgetc	Get current character (public member function)
sgetn	Get sequence of characters (public member function)
sputbackc	Put character back (public member function)
sungetc	Decrease current position (public member function)

Output functions (put):

sputc	Store character at current put position and increase put pointer (public member function)
sputn	Put sequence of characters (public member function)

Protected virtual function overrides

setbuf	Set buffer (protected virtual member function)
seekoff	Set position pointer to relative position (protected virtual member function)
seekpos	Set position pointer to absolute position (protected virtual member function)



underflow	Get character (protected virtual member function)
pbackfail	Put character back (protected virtual member function)
overflow	Put character (protected virtual member function)

The class also inherits other protected members that are non-virtual or not overridden. See base class [streambuf](#) for more details.