

# p1410r0 - Remove deprecated stringstream

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## 0.1 Introduction

Streams have been the oldest part of the C++ standard library and especially stringstream that can use pre-allocated buffers have been deprecated for a long time now, waiting for a replacement. p0407, p0408 and p0448 provide together a modern complete replacement for stringstream. This paper provides wording for actually removing it from appendix D and referring to its removal in appendix C. If p0408 (that includes p0407) and p0448 are accepted for C++20 then this paper can either be applied for C++20 or as some propose applied for C++23. I personally believe time is ripe for C++20, but I let LEWG or the full committee decide.

## 0.2 Impact on the standard

This section is relative to n4791 which is current at the time of the writing.

### 0.2.1 provide wording for difference in Appendix C

Depending on approval standard add the following paragraph to section [diff.cpp17.depr] (or [diff.cpp20.depr] when that exists). The editorial guidance now is relative to n4791.

Add a new paragraph in [diff.cpp17.depr] before p.7 as follows:

<sup>1</sup> **Change:** Remove deprecated `char *` streams

**Rationale:** The introduction of span streams [span.streams] and the provisioning of efficient access to the underlying buffer of string streams [string.streams] provide better alternatives for the use cases of `char *` streams. The latter have been deprecated in all revisions of this international standard.

**Effect on original feature:** A valid C++ 2017 program that relies on the deprecated `char *` stream classes may fail to compile. Such a program must be adapted to employ classes and functions from [span.streams] or [string.streams] to achieve its functionality with equivalent performance.

### 0.2.2 Remove deprecated `char *` streams from Appendix D

Remove all of Appendix D.8 [depr.str.streams]