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**Technical Specification — C++  
Extensions for Coroutines**

*Langages de programmation — Extensions C++ pour les Coroutines*



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# Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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This document was prepared by Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 22, *Programming languages, their environments and system software interfaces*.

# Technical Specification — C++ Extensions for Coroutines

## 1 Scope [intro.scope]

- <sup>1</sup> This document describes extensions to the C++ Programming Language (Clause 2) that enable definition of coroutines. These extensions include new syntactic forms and modifications to existing language semantics.
- <sup>2</sup> The International Standard, ISO/IEC 14882:2014, provides important context and specification for this document. This document is written as a set of changes against that specification. Instructions to modify or add paragraphs are written as explicit instructions. Modifications made directly to existing text from the International Standard use underlining to represent added text and ~~strikethrough~~ to represent deleted text.

## 2 Normative references [intro.refs]

- <sup>1</sup> The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.
  - (1.1) — ISO/IEC 14882:2014, *Programming Languages – C++*

ISO/IEC 14882:2014 is hereafter called the *C++ Standard*. Beginning with Clause 5, all clause and subclause numbers, titles, and symbolic references in [brackets] refer to the corresponding elements of the C++ Standard. Clauses 1 through 4 of this document are unrelated to the similarly-numbered clauses and subclauses of the C++ Standard.