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sg15@lists.isocpp.org

# Working Draft, Standard for C++ Ecosystem

Note: this is an early draft. It's known to be incomplet and incorrekt, and it has lots of bad formatting.

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#### **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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 ISO documents 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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/IEC JTC1, Information technology, Subcommittee 22, Programming languages, their environments and system software interfaces, Working Group 21, C++.

The main changes are as follows:

— Initial release.

A list of all parts in the ISO/IEC 00000 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

#### 1 Scope

# [intro.scope]

<sup>1</sup> This document specifies formats, processes, definitions, and so on, that facilitates the interoperation of the tools and systems that implement, and interface with, the C++ programming language.

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<sup>2</sup> C++ is a general purpose programming language described in ISO/IEC 14882:2020 Programming languages — C++ (hereinafter referred to as the C++ standard).

#### 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.

Vocabulary ISO/IEC 2382, Information technology — Vocabulary C++ ISO/IEC 14882:2020, Programming languages — C++

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#### 3 Conformance

[intro.cnf]

- $^{\, 1}\,$  A conforming implementation shall meet the following criteria for conformance to this standard:
- (1.1) An application shall support...

#### 4 Terms and definitions

### [intro.defs]

- <sup>1</sup> For the purposes of this document, the terms and definitions given in ISO/IEC 2382, the terms and definitions given in ISO/IEC 14882:2020, and the following apply.
- <sup>2</sup> ISO and IEC maintain terminology databases for use in standardization at the following addresses:
- (2.1) ISO Online browsing platform: available at https://www.iso.org/obp
- (2.2) IEC Electropedia: available at https://www.electropedia.org/
  - <sup>3</sup> Terms that are used only in a small portion of this document are defined where they are used and italicized where they are defined.

4.1	$[{ m defns.}\_\_{ m term}\_\_]$
term	-
$\langle \underline{\hspace{1cm}} context1\underline{\hspace{1cm}} \underline{\hspace{1cm}} context2\underline{\hspace{1cm}} \rangle$ the definition of the term	
[Note 1 to entry: An interesting note. — end note]	

# 5 Introspection

# [intspct]

5.1 Preamble [intspct.pre]

 $^{1}$  This clause describes options, output, and formats that describe what capabilities of this standard an application supports.

5.2	Overview	[intspct.overview]
5.3	Options	$[{\bf intspct.options}]$
<b>5.4</b>	Output	$[{\bf intspct.output}]$
5.5	Schema	[intspct.schema]
5.6	Capabilities	[intspct.cap]
5.7	Versions	[intspct.vers]
<b>5.8</b>	Minimum Level	$[{ m intspct.min}]$
5.9	Full Level	$[\mathbf{intspct.full}]$
5.10	Introspection Information	[intspct.info]
5.11	Introspection Declaration	$[{ m intspct.dcl}]$

# 6 Package Format

[pkgfmt]

6.1 Preamble [pkgfmt.pre]

<sup>1</sup> This clause describes options, output, and formats that define how to consume and produce packaged C++projects.

#### 7 File Name Extensions

[nameext]

7.1 Preamble [nameext.pre]

 $^{1}$  This clause describes file name extensions and their meanings to applications.

# 8 Diagnostics Output

[diag]

8.1 Preamble [diag.pre]

 $^{1}$  This clause describes options, output, and formats that define formatted reporting of application diagnostics messages.

# 9 Response File

[rsp]

9.1 Preamble [rsp.pre]

 $^{1}$  This clause defines a structured response file format, and related options and output, that allows for precise communication of compiling C++.

# Bibliography

— ISO xxxx:YYYY, Working Draft, Standard for C++ Ecosystem Title

#### Cross references

Each clause and subclause label is listed below along with the corresponding clause or subclause number and page number, in alphabetical order by label.

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