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Information technology — Programming languages, their environments, and system software interfaces — ECMAScript® Specification Suite

Technologies de l'information — Langages de programmation, leur environnement et interfaces des logiciels de systèmes — Suite de spécifications ECMAScript®



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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

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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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC 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 on 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 the following URL: www.iso.org/iso/foreword.html.

This first edition of ISO/IEC 22275 was prepared by Ecma International (as ECMA-414) and was adopted, under a special "fast-track procedure", by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by the national bodies of ISO and IEC.

This first edition of ISO/IEC 22275 cancels and replaces ISO/IEC 16262:2011. Technical content has been replaced with normative references to ECMA-262 and ECMA-402 which, together, were equivalent to the former ISO/IEC 16262:2011. This first edition of ISO/IEC 22275 is complemented with additional specifications, thus now establishing a full specification Suite.

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Introduction

ECMAScript is the general purpose programming language that is an essential part of the Web Browser application platform, but it is also widely used in many other environments.

Essential components of an ECMAScript implementation are described in several individual standards and technical reports.

The ECMAScript Specification Suite is just a collection of those. The specifications that define the ECMAScript programming language and its built-in libraries are developed by Ecma International.

The International Standard for ECMAScript Specification Suite defined by this document aggregate these specifications via normative and informative references to the latest published Ecma International ECMAScript specifications. This has the advantage that an update of the Suite is only needed if there is a change (addition or deletion) in the set of the individual ECMAScript standards and technical reports.

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Information technology — Programming languages, their environments, and system software interfaces — ECMAScript® Specification Suite

1 Scope

This International Standard defines the ECMAScript Specification Suite containing the ECMAScript programming language and its required and optional built-in libraries. It defines all the necessary components (both normative and informative) that is needed to implement this suite of standards. This suite does not change if one or more components are updated by a new standard edition. The Suite changes only when new components are added and / or old components are removed from it.

2 Normative references

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.

ECMA-262, *ECMAScript® Language Specification*

ECMA-402, *ECMAScript® Internationalization API Specification*

ISO/IEC 21778, *Information technology — The JSON data interchange syntax* [Adoption of ECMA-404]

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

4 ECMAScript

An implementation of ECMAScript consists of the ECMAScript programming language, required built-in libraries, and optional built-in libraries. The implementation of the ECMAScript language and required library shall conform to ECMA-262. The required library include data interchange functions that shall conform to ISO/IEC 21778. An implementation of ECMAScript may include an optional internationalization library that if included shall conform to ECMA-402.

The following Standards constitute the current ECMAScript Specification Suite (see Figure 1):

- ECMA-262, *ECMAScript® Language Specification*
- ECMA-402, *ECMAScript® Internationalization API Specification*
- ISO/IEC 21778, *The JSON data interchange syntax* [Adoption of ECMA-404]

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