TECHNICAL REPORT

ISO/IEC TR 23272

Third edition
2011-12-15

Information technology — Common Language Infrastructure (CLI) — Information Derived from Partition IV XML File

Technologies de l'information — Infrastructure commune de langage (ICL) — Information dérivée du fichier partition IV XML

Reference number
ISO/IEC TR 23272:2011(E)

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

In exceptional circumstances, when the joint technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide to publish a Technical Report. A Technical Report is entirely informative in nature and shall be subject to review every five years in the same manner as an International Standard.

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.

ISO/IEC TR 23272 was prepared by Ecma International (as ECMA-TR/84) 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 national bodies of ISO and IEC.

This third edition cancels and replaces the second edition (ISO/IEC TR 23272:2006).

Information technology — Common Language Infrastructure (CLI) — Information Derived from Partition IV XML File

1 Scope

This Technical Report is intended as an aid for understanding the libraries specified in ISO 23271 (ECMA-335), Partition IV: Profiles and Libraries. That Partition includes a machine-readable specification, in XML, of the types that comprise the standard libraries. This Technical Report, in companion files, provides the following items, which help to form a traceable chain from the normative XML specification to a portable, printable representation of its contents:

1. **Tool Source Code:** A program written in the C# programming language, XML Style-sheet Language (XSL), and using the facilities of the Microsoft® .NET Framework and Microsoft® Office to convert the XML into files viewable using Microsoft® Word. This program, initially provided by Intel Corporation and updated by the CLI editor for this edition, can be modified to produce other views of the XML.
2. **.DOC Files:** These are the files produced by running the tool mentioned above on the XML from Partition IV. The Ecma task group TC49/TG3 used similar files (produced using earlier versions of this tool run against earlier versions of the XML) as the primary means of reviewing the XML.
3. **.PDF Files:** These files are produced from the Microsoft® Word files using the Adobe® Acrobat® program. They are viewable on a wide range of computer systems and printable on a range of computer output devices. In most cases, they will appear visually identical regardless of the means used to render them.

Partition IV normatively specifies the format of the XML file. The tool provided here renders all parts of the XML with exceptions for some XML nodes, as described below. For the purpose of description, XML nodes referred to here are specified in XPath notation relative to Type nodes.

- Name (this is redundant and unnecessary since the FullName of the type is rendered)
- FullNameSP (this is redundant and unnecessary since the FullName of the type is rendered)
- AssemblyInfo/AssemblyCulture (this is reserved for future use; currently its value is “none”)
- AssemblyInfo/Attributes/Attribute/Excluded (if its value is 0, it is not rendered, but if it is 1, the library that is necessary for inclusion is listed)
- TypeExcluded (as above)
- Interfaces/Interface/Excluded (as above)
- Attributes/Attribute/Excluded (as above)
- Attributes/Attribute/ExcludedTypeName (the short Name is rendered, however)
- Members/Member/ReturnValue/ReturnType (the FullName of the type of the return value is not specified, but it is implied via the member’s signature)
- Members/Member/Parameters/Parameter/Type (the FullName of the type of the parameter is not specified, but it is implied via the member’s signature)
- The "value_" field for enums.
- Member/Member/Docs/altcompliant (used on methods/properties that have a CLSCompliant(false) attribute tag, and specifies a CLS-compliant method/property that can be use as an alternative. The remarks/description section usually specifies this anyway).
- Member/Member/Docs/altmember (used on methods/properties that have equivalent alternatives that may be used. For example, the System.String op_equality operator has the altmember element and specifies the String.Equals() method as an equivalent alternative. The remarks/description section usually specifies this anyway).