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First edition
2014-04-15

Information technology — Object Management Group XML Metadata Interchange (XMI)

Reference number
ISO/IEC 19509:2014(E)



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Published in Switzerland

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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.

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.

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 19509 was prepared by the Object Management Group (OMG) and was adopted, under the PAS procedure, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

ISO/IEC 19509 is related to:

- ISO/IEC 19505-2:2011, Information technology - Object Management Group - Unified Modeling Language (OMG UML) - Part 2: Superstructure
- ISO/IEC 19508: 2014, Information technology - Object Management Group - Meta Object Facility (MOF) Core

ISO/IEC 19509, under the general title *Information technology - Open distributed processing - MOF 2 XMI Mapping specification (XMI)*, apart from this introductory material is identical with that for the OMG specification for MOF 2 XMI Mapping, version 2.4.2.

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Introduction

The main purpose of XMI is to enable easy interchange of metadata between application development lifecycle tools (such as modeling tools based on the Unified Modeling Language (UML), ISO/IEC 19505, and metadata repositories/frameworks based on the Meta Object Facility (MOF), ISO/IEC 19508) in distributed heterogeneous environments. XMI integrates three key industry standards:

- XML - eXtensible Markup Language, a W3C standard
- UML - Unified Modeling Language (ISO/IEC 19505)
- MOF - Meta Object Facility (ISO/IEC 19508)

This International Standard does *not* deprecate or replace ISO/IEC 19503:2005, Information technology - XML Metadata Interchange (XMI). The specification provided by this International Standard is identical to the OMG specification XMI 2.4.2 that is aligned with MOF 2.4.1 (ISO/IEC 19508) and UML 2.4.1 (ISO/IEC 19505). It is not backward compatible with XMI 1.4, as specified in ISO/IEC 19503:2005, which is aligned with MOF 1.4, as specified in ISO/IEC 19502:2005, and UML 1.4.2, as specified in ISO/IEC 19501:2005.