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Information technology -- XML metadata interchange (XMI)

信息技术 XML元数据交换 (XMI)

(English Translation)

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Foreword

This standard is drafted in accordance with the rules given in GB/T 1.1-2009.

This standard is equivalent to ISO/IEC 19503.:2005 "Information Technology XML Metadata Exchange (XMI)".

International standard in the original index, but only in the electronic version of the role played a link in the national standard in the role of small, so delete.

This standard in the adoption of international standards at the same time, the international standard in English translation of the following rules.

- a) the first letter of the word, in italics;
- b) bold words, expressed in bold;
- c) quoted words, with quotation marks;
- d) capitalization of words with bold, small words with Song;
- e) formal description, not translated, format by original.

Introduction

The main purpose of XMI is to make the application development lifecycle tool in a distributed heterogeneous environment (eg, based on ISO/IEC 19501 "Unified Modeling Language (UML)" modeling tools and elements based on ISO/IEC 19502 "Meta Object Facility (MOF)" Data store/framework) between the metadata easy to exchange. This standard integrates three key industry standards.

- XML. Extensible Markup Language, W3C Standard.

UML. Unified Modeling Language, OMG Modeling Specification, now ISO/IEC 19501.

- MOF. meta-object facility (ISO/IEC 19502).

OMG adopted XMI (version 1.0) in February.1999. As a model and metadata exchange facility, is the OMG analysis and a response requested by the Design Task Force. The purpose of the facility is to support metadata exchange (eg ODP UML model).

October.2002 The XMI Revision Task Force submitted the latest version of XMI 2.0, which included clarifications and corrections to the original specification and changes to meet MOF version 1.4.

The rapid development of distributed processing requires this standard and ITU-T recommendations X.901-904 | ISO/IEC 10746 has a coordinated box (Open source distributed processing reference model (RM-ODP) provides a framework that defines a framework that supports distributed, Operability, portability combined with the architecture. RM-ODP Part 2 (ISO/IEC 10746-2) defines a description of a distributed system the basic concept and modeling framework structure. RM-ODP Part 3 (ISO/IEC 10746-3) Application The basic concepts and boxes of Part 2 the framework defines a generic architecture of an open distributed system.

Of course, the XMI standard is not limited to this standard text, it is open and distributed processing (ODP) standardization of the same task related.

Information Technology XML Metadata Exchange (XMI)

1 Scope

This standard provides specifications for the following.

- a) a collection of production rules based on the MOF-based meta-model into XML Schema Definition (XSD) for XML Schema;
- b) a collection of XML document generation rules that encode and decode metadata based on MOF;
- c) design principles based on XMI patterns and XML documents;

d) Import XMLDTD into a collection of production rules based on the MOF-based meta-model.

This standard improves metadata management and metadata interoperability in the usual distributed object environment and in a special distributed development environment. In the field of object analysis and design, this standard describes the interoperability based on streaming metadata, while XMI (partly because it is based on MOF) is also used in many other areas of metadata.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article. For undated references, the latest edition (including all modifications) applies to this document.

GB 13000-2010 Information technology Universal multi-octet character set (UCS) (ISO/IEC 10646:2003, IDT) Information technology - Open distributed processing reference model - Part 2. Basic concepts - GB/T 18714.2-2002 (ISO/IEC 10746-2:1996, IDT) Information technology - Open distributed processing reference model - Part 3. Architecture - GB/T 18714.3-2003.

(ISO/IEC 10746-3:1996, IDT) ISO/IEC 19501 Information Technology Unified Modeling Language (Information technology - Open distributed processing - Unified modeling language (UML)) ISO/IEC 19502 Information technology Metaobject facility (MOF)

3 Abbreviations

DTD file type definition (DocumentTypeDefinition) MOF meta object facility (MetaObjectFacility) UML Unified Modeling Language (UnifiedModelingLanguage) XMI XML Metadata Exchange (XMLMetadataInterchange) XSD XML Schema Definition (XMLSchemaDefinition)

4.1 Purpose

This chapter is a description of the XML schema, which, together with the XMI specification, allows some meta-model information to be validated by XML.