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IEEE Standard for Learning Technology—Extensible Markup Language (XML) Schema Definition Language Binding for Learning Object Metadata

IEEE Computer Society

Developed by the
Learning Technology Standards Committee

IEEE Std 1484.12.3™-2020
(Revision of IEEE Std 1484.12.3-2005)

IEEE

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Learning Technology Standards Committee
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Approved 5 March 2020

IEEE SA Standards Board

Abstract: This standard defines a World Wide Web Consortium (W3C) Extensible Markup Language (XML) Schema definition language binding of the learning object metadata (LOM) data model defined in IEEE Std 1484.12.1™-2002. The purpose of this standard is to allow the creation of LOM instances in XML, which allows for interoperability and the exchange of LOM XML instances between various systems. This standard uses the W3C XML Schema definition language to de-fine the syntax and semantics of the XML encodings.

Keywords: Extensible Markup Language (XML), IEEE 1484.12.1, IEEE 1483.12.3, learning object metadata (LOM), LOM XML instance, LOM XML Schema binding, metadata, W3C XML Schema definition language, XML Schema definition (XSD)

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Introduction

This introduction is not part of IEEE Std 1484.12.3-2020, IEEE Standard for Learning Technology—Extensible Markup Language (XML) Schema Definition Language Binding for Learning Object Metadata.

This standard defines World Wide Web Consortium (W3C) Extensible Markup Language (XML) structure and constraints on the contents of XML 1.1 documents that can be used to represent learning object metadata (LOM) instances as defined in IEEE Std 1484.12.1-2002. This standard defines the structure and constraints of the XML 1.1 documents in W3C XML Schema definition language.

The purpose of this standard is to allow the creation of interoperable LOM instances in XML. This standard uses the W3C XML Schema definition language as the encoding, which allows for interoperability and the exchange of LOM XML instances between various systems.

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1. Overview

The scope and purpose of this standard are discussed in 1.1 and 1.2.

1.1 Scope

This standard defines World Wide Web Consortium (W3C) Extensible Markup Language (XML) structure and constraints on the contents of XML 1.1 documents that can be used to represent learning object metadata (LOM) instances as defined in IEEE Std 1484.12.1™-2002.[1] This standard defines the structure and constraints of the XML 1.1 documents in W3C XML Schema definition language. An implementation that conforms to this standard shall conform to IEEE Std 1484.12.1-2002.

1.2 Purpose

The purpose of this standard is to allow the creation of interoperable LOM instances in XML. This standard uses the W3C XML Schema definition language as the encoding, which allows for interoperability and the exchange of LOM XML instances between various systems.

1.3 Word usage

The word *shall* indicates mandatory requirements strictly to be followed in order to conform to the standard and from which no deviation is permitted (shall equals is required to).[2, 3]

[1] Information on references can be found in Clause 2.

[2] The use of the word *must* is deprecated and cannot be used when stating mandatory requirements, *must* is used only to describe unavoidable situations.