

IEEE Trial-Use Supplement to IEEE Standard for Information Technology—Software Reuse— Data Model for Reuse Library Interoperability: Intellectual Property Rights Framework

Sponsor

**Software Engineering Standards Committee
of the
IEEE Computer Society**

Developed in cooperation with the

Reuse Library Interoperability Group (RIG)

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Abstract: This extension to the Basic Interoperability Data Model (IEEE Std 1420.1-1995) incorporates intellectual property rights issues into software asset descriptions for reuse library interoperability.

Keywords: data model, intellectual property rights, interoperability, reuse libraries, rights management, software

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Introduction

(This introduction is not part of IEEE Std 1420.1b-1999, IEEE Trial-Use Supplement to IEEE Standard for Information Technology—Software Reuse—Data Model for Reuse Library Interoperability: Intellectual Property Rights Framework.)

This trial-use supplement was developed as the result of collaboration between the Reuse Library Interoperability Group (RIG) and the Software Engineering Standards Committee (SESC) of the IEEE Computer Society. The RIG is a volunteer organization of experts from the industrial, government, and academic communities working together to create consensus-based specifications for the interoperation of software reuse libraries. Under the terms of a Memorandum of Understanding with the IEEE, the RIG develops specifications and other documents on this subject and submits them to the SESC, where they are considered for acceptance as IEEE standards.

Publication of this trial-use supplement for comment and criticism has been approved by the Institute of Electrical and Electronics Engineers. Trial-use standards are effective for 24 months from the date of publication. Comments for revision will be accepted for 18 months after publication. Suggestions for revision should be directed to the Secretary, IEEE-SA Standards Board, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331, and should be received no later than 21 January 2001. It is expected that following the 24-month period, this trial-use supplement, revised as necessary, shall be submitted to the IEEE-SA Standards Board for approval as a full-use supplement.

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IEEE Trial-Use Supplement to IEEE Standard for Information Technology— Software Reuse— Data Model for Reuse Library Interoperability: Intellectual Property Rights Framework

1. Overview

This supplement defines an Intellectual Property Rights Framework for describing rights management policies and procedures and associated metadata.

Clause 1 describes the scope and purpose of this supplement. Clause 2 lists the reference that is necessary for applying this standard. Clause 3 defines important terms. Clause 4 contains informative material that provides a useful summary of intellectual property considerations related to reusable software assets. Clause 5 defines the Intellectual Property Rights Data Model that extends the Basic Interoperability Data Model (BIDM) in the area of intellectual property rights.

1.1 Scope

The Intellectual Property Rights Framework defines a standard for the consistent structure, labeling, and description of intellectual property rights management policies and procedures for assets. An asset is any item of interest that is stored in a reuse library, such as design documentation, specifications, source code, user manuals, and test suites. This standard addresses legal restrictions commonly asserted in the U.S. for assets, including copyright, patents, license agreements, and export restrictions. This standard does not address international issues or mechanisms for enforcing legal restrictions, other than for the purpose of describing such mechanisms.

1.2 Purpose

The purpose of this document is to define a consistent structure for recording the legal restrictions that have been asserted for assets. This document defines a standard interoperability data model for interchange of legal restriction information.

A reuse library is made up of a collection of assets, a community of subscribers, a set of operational policies and procedures, a library mechanism, and support services. A reuse library's intellectual property rights management policy defines procedures for determining and enforcing legal restrictions on reuse of assets. A consistent standard for recording legal restrictions will improve the reuser's understanding of what rights are held by various parties and what obligations are placed on the reuser.

Interoperability, the sharing of assets among reuse libraries, improves the value and impact of reuse libraries and provides greater visibility and reuse of assets. Sharing of assets that have legal restrictions is currently cumbersome, however, and typically involves negotiation of a separate agreement for each software asset and each pair of interoperating libraries. One goal of this standard is to facilitate prenegotiation of agreements between reuse libraries that enable large-scale sharing of restricted software. By unambiguously recording legal restrictions on software, application of the standard will reduce risks and fears of liability and litigation for reuse libraries.

1.3 Requirement

The Intellectual Property Rights Framework requires that each reuse library be allowed to define rights management policies particular to its needs, but it also prescribes a uniform way to organize and communicate those policies. More specifically, the framework should do the following:

- a) Provide a common basis for understanding a reuse library's rights management policy;
- b) Provide a common basis for understanding what rights are attached to a particular asset and what restrictions and obligations are placed on the reuser;
- c) Define a standard interoperability data model for electronically exchanging rights management policies; and
- d) Define a standard interoperability data model for electronically exchanging information about an asset's intellectual property rights, legal restrictions, and associated rights management artifacts.

1.4 Relationship with other standards and projects

The Intellectual Property Rights Framework is designed to be a supplement to the BIDM standard, IEEE 1420.1-1995, which was developed by the Reuse Library Interoperability Group (RIG). The BIDM defines the minimal set of information about assets that reuse libraries should be able to exchange to support interoperability. The Intellectual Property Rights Framework includes an addition to the BIDM for describing rights management policies and procedures and associated asset metadata.

1.5 Conformance

Use of the standard is a conforming usage if it adheres to the Intellectual Property Rights Data Model presented in Clause 5. Clause 4 of this standard provides informative background material useful in understanding Clause 5.