

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.

Participants

This document was originally developed as an RIG Proposed Standard, RPS-0005 (1996). It was prepared by the RIG Technical Committee on Intellectual Property Rights, TC8. Membership of the committee was as follows:

Shirley Browne, *Chair*

Glen Adams
Gary Boetticher
Cyrille Cobe
Ed Comer
David Dikel

Kay Hohn
David Kane
James Moore
Tim Niesen
Jim Short

Wilson Tan
Ravi Vedula
David Whisler
Allan Willey
Kathy Yglesias

This document was approved by the RIG Executive Board on 20 September 1996 with the following officers:

James Moore, *Chair*

David Dikel, *Vice Chair*

Kay Hohn, *Secretary*

The document was revised in 1997 by a Working Group of the Reuse Steering Committee, with membership as follows:

Tim Niesen, *Chair, Reuse Steering Committee*

Scott Wells, *Chair, Working Group*

Glen Adams
Robert Biddle
Shirley Browne

David Dikel
Kay Hohn
David Kane
James Moore

Mike Webb
Allan Willey
Roger Williams

The following members of the balloting committee voted on this trial-use supplement:

Bakul Banerjee	Julio Gonzalez-Sanz	Kenneth R. Ptack
Barbara K. Beauchamp	David A. Gustafson	Surendra K. Reddy
Leo Beltracchi	John Harauz	Donald J. Reifer
H. Ronald Berlack	Rob Harker	R. Waldo Roth
Richard E. Biehl	Herbert Hecht	Andrew P. Sage
Juris Borzovs	Debra Herrmann	Frederico Sousa Santos
Greg Brown	John W. Horch	Robert J. Schaaf
Lawrence Catchpole	George Jackelen	Robert W. Shillato
Antonio M. Cicu	Frank V. Jorgensen	Jag Sodhi
Virgil Lee Cooper	Vladan V. Jovanovic	Alfred R. Sorkowitz
Paul R. Croll	William S. Junk	Mark Spillers
Geoffrey Darnton	Thomas M. Kurihara	Fred J. Strauss
Taz Daughtrey	John B. Lane	Toru Takeshita
Perry R. DeWeese	Stan Magee	Richard H. Thayer
David Dikel	Henry A. Malec	Booker Thomas
Verlynda Dobbs	Patrick D. McCray	Glenn D. Venable
George Duffield	James Moore	Scott A. Whitmire
Leo G. Egan	Francisco Navas Plano	Paul A. Wolfgang
William Eventoff	Pavol Navrat	Paul R. Work
John W. Fendrich	Gerald L. Ourada	Natalie C. Yopconka
John H. Fowler	A. Pedar	Janusz Zalewski
Marilyn Ginsberg-Finner	Peter T. Poon	Geraldine Zimmerman
Shirley A. Gloss-Soler	Jeffrey S. Poulin	Peter F. Zoll

This trial-use supplement was approved by the IEEE-SA Standards Board on 26 June 1999, with the following membership:

Richard J. Holleman, Chair

Donald N. Hierman, Vice Chair

Judith Gorman, Secretary

Satish K. Aggarwal	James H. Gurney	Louis-François Pau
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Harold E. Epstein	L. Bruce McClung	Akio Tojo
Jay Forster*	Daleep C. Mohla	Hans E. Weinrich
Ruben D. Garzon	Robert F. Munzner	Donald W. Zipse

*Member Emeritus

Also included is the following nonvoting IEEE-SA Standards Board liaison:

Robert E. Hebner

Yvette Ho Sang
IEEE Standards Project Editor

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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 renegotiation 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.

1.6 Disclaimer

This standard does not constitute legal advice. It provides definitions and descriptions of legal terms and statutes only for the purpose of clarifying the framework that it presents. These legal descriptions and policies reflect jurisprudence of the U.S. and may or may not be applicable to foreign states, governments, and/or countries. As such, any legal descriptions contained herein apply to assets created, generated, and/or manifested in the U.S. or under U.S. sovereignty. Asset authors and reusers, as well as reuse library maintainers, should consult legal counsel for questions about legal issues concerning asset reuse and interchange.

2. References

This supplement shall be used in conjunction with the following publication. If the following standard is superseded by an approved revision, the revision shall apply.

IEEE Std 1420.1-1995, IEEE Standard for Information Technology—Software Reuse—Data Model for Reuse Library Interoperability: Basic Interoperability Data Model (BIDM).¹

3. Definitions and acronyms

3.1 Definitions

For the purposes of this supplement, the following terms and definitions apply. IEEE Std 100-1996 should be referenced for terms not defined in this clause.

3.1.1 copyright: The exclusive right granted to the owner of an original work of authorship, which is fixed in any tangible medium of expression, to reproduce, publish, perform, and/or sell the work.

3.1.2 disclaimer: A notice that renounces or repudiates a legal claim or right.

3.1.3 intellectual property: An output of creative human thought process that has some intellectual or informational value. Intellectual property can be protected by patents, copyrights, trademarks, or trade secrets.

3.1.4 liability: The state of being responsible or answerable under a legal obligation.

3.1.5 license: A legal agreement between two parties, the licensor and the licensee, as to the terms and conditions for the use or transfer of an intellectual property right from the licensor to the licensee.

3.1.6 patent: A document protecting an invention that grants an inventor the right to prevent others from making, using, or selling the invention for 20 years from the date of application for patent.

3.1.7 trademark: A symbol, word, or phrase used to denote a particular source of goods or services.

3.1.8 trade secret: Any formula, process, design, or intellectual property interest that is protected by secrecy.

3.1.9 validated export license: A license for which the exporter must submit an application requesting specific Bureau of Export Administration (BXA) approval.

¹IEEE publications are available from the Institute of Electrical and Electronics Engineers, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331, USA (<http://www.standards.ieee.org/>).

3.2 Acronyms

BIDM	Basic Interoperability Data Model
BXA	Bureau of Export Administration
CCL	Commerce Control List
CFR	Code of Federal Regulations
EAR	Export Administration Regulations
ECCN	Export Control Classification Number
ITAR	International Traffic in Arms Regulations
OFAC	Office of Foreign Assets Control
RIG	Reuse Library Interoperability Group
SESC	Software Engineering Standards Committee
USC	United States Code
UTSA	Uniform Trade Secrets Act

4. Summary of intellectual property considerations (Informative)

This clause provides a summary of the intellectual property considerations relevant to reusable software assets. This information does not constitute legal advice and is provided solely to clarify the structure of the data model specified in Clause 5.

4.1 Overview of the rights management process

A request to release an asset to a reuse library is generally made by the author or owner to the organization for which the said author or owner works, which may or may not be the same organization that runs the reuse library. The author or owner must typically fill out a form, which captures information required to resolve rights issues and detect possible infringement of patents, trademarks, or copyrights. Then, an intellectual property assessment is carried out by the organization's intellectual property counsel. This assessment determines the following:

- a) Whether any rights infringements have been made by the author;
- b) Whether the organization should seek to protect intellectual property rights embodied in the asset (e.g., by filing a patent application); and
- c) Whether the asset is eligible for foreign release and, if so, whether or not an export license will be required.

The assessment may also determine authorship if such information is not known or is in dispute. Ownership may be claimed by one or many entities. After the intellectual property assessment has been carried out, the software is labeled with a copyright legend and, if applicable, patent and/or trademark notices. Finally, a release category is chosen for the asset. Organizations typically have several release categories, such as public domain, royalty-free license (e.g., freeware), beta-testing, and licensed. It is also at this stage that a disclaimer may be placed upon the asset. If a category requiring a license is chosen, one or more appropriate licenses are written. Different licenses might be required for different end users (e.g., research vs. commercial use).

If the organization that contributes the asset is different from the organization that runs the reuse library from which the asset is to be distributed, an agreement needs to be in effect between the two organizations specifying how the intellectual property rights owned by the contributing organization will be managed by the reuse library. Similarly, when reuse libraries interchange non-public-domain software, agreements need to be in effect specifying how reuse libraries will manage each other's intellectual property rights.

4.2 Copyright

Authors of original works fixed in any tangible medium of expression can obtain limited protection for their intellectual property through the copyright laws of the U.S., described under the terms of the U.S. Copyright Act, Title 17 of the United States Code (17 USC) [B8].² Copyright protection is in effect as soon as the work is fixed in a tangible medium of expression, but the copyright owner cannot bring an infringement action until the copyright has been registered with the U.S. Copyright Office. The copyright usually belongs to either the author or his or her assignee. The exception is a work for hire, which can either be a work authored by an employee within the scope of his or her employment or a commissioned work. The latter requires a written agreement declaring that the task is a work for hire, signed by both parties, and one of the enumerated classes of work subject to a work-for-hire agreement. In the case of a work for hire, the employer or person commissioning the work is deemed the author, and thus the owner of the copyright. If authored by an individual, the copyright protection remains in effect for the author's lifetime plus 50 years. For a work for hire, the duration of the copyright is 75 years from publication or 100 years from creation, whichever is earlier.

The copyright owner may assign or license the rights to the copyrighted work. The owner or licensor of a copyright may loan, sell, or lease the copy without restriction. The owner of a copy of a computer program can install and execute the program on a single computer. Additionally, the owner can make a copy of the program for archival purposes. The copyright owner may assign reusers the right to make and distribute copies of the program, but unless the program has been explicitly placed in the public domain, such permission may subsequently be withdrawn. Copyright ownership should be reflected by the use of the copyright mark © on the copyrighted work.

4.3 Patents

A patent protects an idea and gives an inventor the exclusive right to prevent others from making, using, or selling his or her invention for 20 years from the filing date of the application for patent. The governing law for patents in the U.S. is Title 35 of the United States Code (35 USC). In order to be patentable, the invention must fall into one of the following five statutory classes of things that are patentable:

- a) processes
- b) machines
- c) manufactures
- d) compositions of matter
- e) new uses of any of the preceding

Most software patents fall under the category of processes. In addition, the invention must be useful, novel, and nonobvious.

Patents are issued by the U.S. Patent and Trademark Office. Under U.S. patent law, a patent will not be granted to an applicant unless the application is filed less than one year from the date that the invention was first sold or offered for sale within the U.S. The patent will also be denied unless the application is filed within one year of the date the invention was described in a printed publication anywhere in the world. Under 35 USC [B9], a patent owner is required to mark goods embodying the invention with the patent number.

Note—The one-year “grace period” for filing is not applicable to applications filed in countries foreign to the U.S. Typically, such sales or publications will invalidate such foreign patents. If the publication is by a third party, the 1 year period is not applicable.

²The numbers in brackets correspond to those of the bibliography in Annex A.

4.4 Trademarks

A trademark can be any name, symbol, figure, letter, word, or mark adopted and used by one manufacturer to distinguish its product or products from the ones sold and/or manufactured by another.

Trademarks can be registered at the state government, the federal government, or both. Trademarks registered with the federal government carry a ® symbol while trademarks registered with the state government carry a ™ symbol. Registration at the state level is awarded by the state Trademark Office. Registration of trademarks at the federal level is awarded by the U.S. Patent and Trademark Office. Federal registration carries a 10 year duration period with 10 year renewal terms.

4.5 Trade secrets

As defined in Clause 3, a trade secret is any formula, process, design, or intellectual property interest that is protected by secrecy. The Freedom of Information Act requires government agencies to disclose trade secret information gathered by third parties. However, trade secret requirements are not governed by federal law, but instead are governed by state common law as well as under some form of the Uniform Trade Secrets Act (UTSA). The duration of a trade secret is indefinite as long as the secret meets the following two requirements (see Pooley [B6]):

- a) There is some level of potential value due to its proprietary nature; and
- b) A reasonable effort has been made to protect it from unauthorized use.

Trade secrets are protectable only from unauthorized use; i.e., there is no right to protection against one who acquires a trade secret by lawful means, e.g., by reverse engineering.

4.6 Export restrictions

Export restrictions on software are governed by the International Traffic in Arms Regulations (ITAR) (22 CFR [B3]), the Office of Foreign Assets Control (OFAC) (31 CFR [B4]), and the Export Administration Regulations (EAR) (15 CFR [B2]). Release to a foreign national living in the U.S. is considered an export.

ITAR specifically controls cryptographic software. Export of ITAR-controlled software to any destination except to Canada requires a validated export license issued by the Office of Defense Trade Controls of the State Department.

All software exports to OFAC-embargoed countries must be approved by OFAC.

The Bureau of Export Administration (BXA) of the Department of Commerce issues the EAR [B10], which regulates software that does not fall under ITAR. The term “license” is used to refer only to authorization issued by BXA upon application. The many existing general licenses have been converted into a smaller number of “exceptions.” The redesigned Commerce Control List (CCL), to be used in tandem with a Country Chart, indicates whether a license is required for a given Export Control Classification Number (ECCN) to any country in the world and the reasons for control. In using a license exception, the exporter certifies that all terms, conditions, and provisions for use of that license exception have been met. A license requirement may be based on the end-use or the end-user. Various end-use and end-user limitations are placed on certain license exceptions.

When a U.S. domestic party is releasing software to another U.S. domestic party, there is no need for an export control provision in the agreement, even when it is known that the recipient will be exporting the software. The only exception is that the software may not be delivered domestically if the supplier has reason to believe that it will be exported illegally.

5. Intellectual property rights data model

This clause defines the data model for the Intellectual Property Rights Framework. Reuse libraries shall use this data model to record, disseminate, and exchange information about their rights management procedures and software-distribution policies, as well as the results of applying these procedures and policies to assets.

The Intellectual Property Rights Framework data model is a compatible extension to the BIDM. The BIDM defines four classes that are subclasses of a root RIGObject. The data model is illustrated using graphic notation adapted from Rumbaugh et al. [B7]. Figure 1 provides a legend for the graphic notation. The relationships defined for the BIDM classes are depicted in Figure 2, which omits the attributes for these classes.

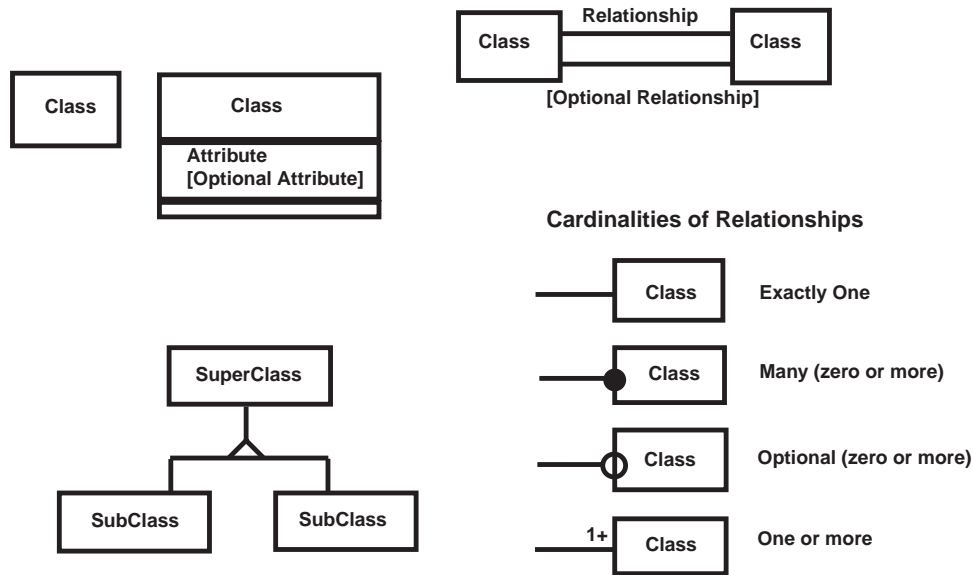


Figure 1—Legend for the BIDM graphic notation

5.1 LicensingTerms

LicensingTerms is a subclass of the class **Element**. This subclass is for the specific licensing requirements that detail all of the terms between licensor and licensee of an Asset. A licensing term may apply to either an Asset object (via its Element) or a Rights Category object. Only one Licensing Terms entity is allowed per license agreement form.

5.2 RightsAssessment

A **RightsAssessment** is an object that records and summarizes the intellectual property rights assessment that has been performed on an asset, as described in Clause 4. A rights assessment is performed by an organization. Rights assessments performed by different organizations are recorded in separate rights assessment objects. Rights assessments performed at different times are recorded in different rights assessment objects. The results of the rights assessment determine the assignment of the rights category.

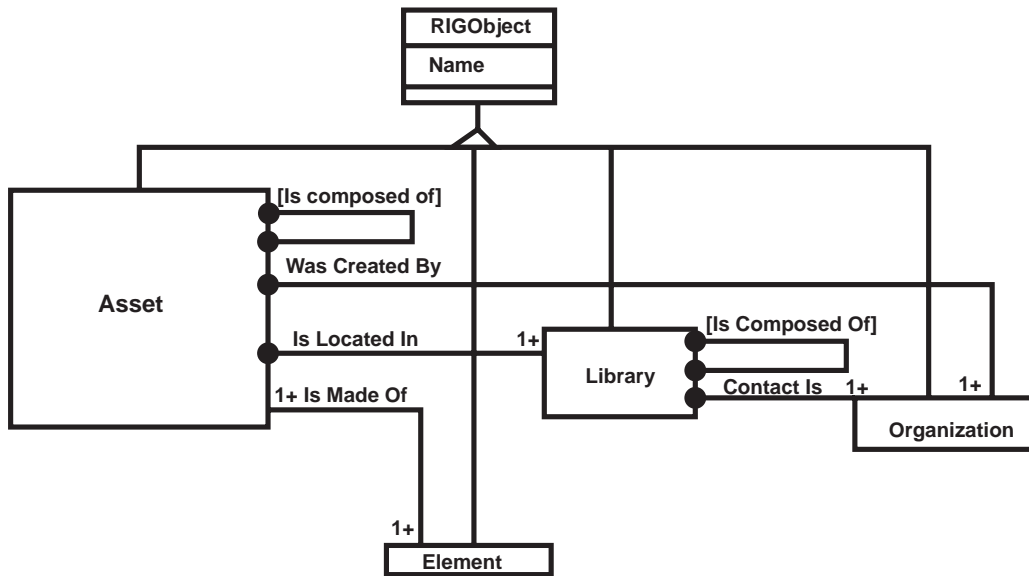


Figure 2—BIDM relationship and classes

5.3 RightsCategory

A **RightsCategory** is an object that is a rights management category (e.g., distribution) defined by a Rights Policy. A Rights Category is assigned following a Rights Assessment. A Rights Category further defines the accessibility of a particular Asset. Public domain, Shareware, and Export restricted are examples of rights categories. The Rights Category is licensed by a single Licensing Term that is a subclass of the class **Element**.

5.4 RightsPolicy

A **RightsPolicy** is an object that describes a reuse library's process for rights management. A rights policy is created by an organization. This policy is the governing document of an organization that outlines instances of the Rights Category, which is defined in 5.3. Rights policies created by different organizations are recorded in separate rights policy objects. Rights policies created at different times are recorded in different rights policy objects.

5.5 Intellectual property data model

This subclause presents the detailed specification of the intellectual property data model that shall be applied by conforming reuse libraries. The intellectual property data model is shown in Figure 3. The BIDM classes RIGObject, Asset, Element, Library, and Organization are included with the BIDM relationships. For brevity, the BIDM attributes are not shown. The following new classes are defined to support intellectual property rights information:

- a) LicensingTerms
- b) RightsAssessment
- c) RightsCategory
- d) RightsPolicy

The templates for these new intellectual property data-model classes are provided in 5.5.1. The templates for their attributes and relationships are given in 5.5.2 and 5.5.3, respectively. The template specifications follow the template descriptions used for the BIDM, which are modeled after the CDIF EIA/IS-81 [B1].

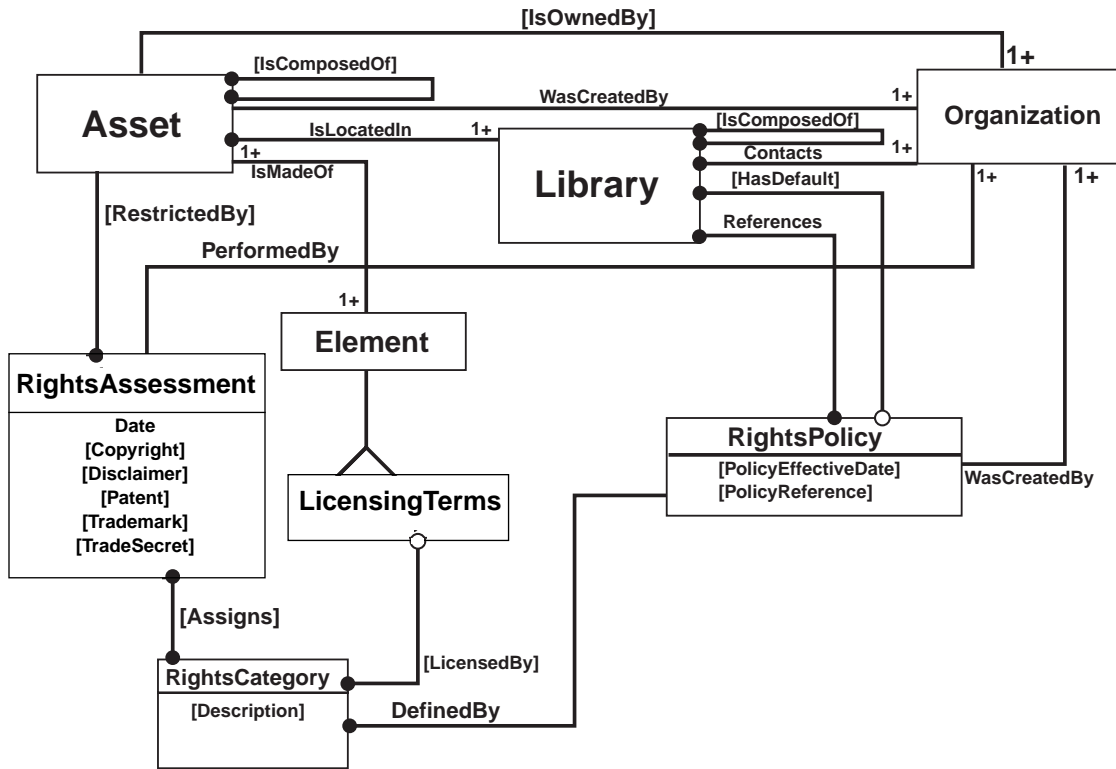


Figure 3—Intellectual property rights data model

5.5.1 Intellectual property data model classes

Name	:	LicensingTerms
SubClassOf	:	Element
SuperClassOf	:	None
Description	:	Licensing terms for an asset or rights category
Usage	:	One LicensingTerms entity per license agreement form
Inherited Attributes	:	Name, ElementType, Media
Local Attributes	:	None
Inherited Relationships	:	None
Local Relationships	:	None

Name	:	RightsAssessment
SubClassOf	:	RIGObject
SuperClassOf	:	None
Description	:	A statement of the intellectual property rights of an asset
Usage	:	Records the outcome of an intellectual property rights assessment performed on an asset
Inherited Attributes	:	Name
Local Attributes	:	Date, Copyright, Disclaimer, Patent, Trademark, Trade Secrets
Inherited Relationships	:	None
Local Relationships	:	Assigns, PerformedBy

Name	:	RightsCategory
SubClassOf	:	RIGObject
SuperClassOf	:	None
Description	:	A rights management (e.g., distribution) category defined by a RightsPolicy
Usage	:	One RightsCategory entity per category defined
Inherited Attributes	:	Name
Local Attributes	:	Description
Inherited Relationships	:	None
Local Relationships	:	DefinedBy, LicensedBy

Name	:	RightsPolicy
SubClassOf	:	RIGObject
SuperClassOf	:	None
Description	:	A statement of a reuse library's policy for rights management
Usage	:	Each rights policy used by a library is represented by a separate RightsPolicy entity
Inherited Attributes	:	Name
Local Attributes	:	PolicyEffectiveDate, PolicyReference
Inherited Relationships	:	None
Local Relationships	:	WasCreatedBy

5.5.2 Intellectual property data model attributes

AttributeName	:	Date
Description	:	Date the rights assessment was completed
Class	:	RightsAssessment
Single/Multiple	:	Single
DataType	:	Date
IsOptional	:	False

AttributeName	:	Copyright
Description	:	Copyright statement for the asset
Class	:	RightsAssessment
Single/Multiple	:	Single
DataType	:	Text
IsOptional	:	True

AttributeName	:	Disclaimer
Description	:	Disclaimer statement for the asset
Class	:	RightsAssessment
Single/Multiple	:	Single
DataType	:	Text
IsOptional	:	True

AttributeName	:	Patent
Description	:	Statement of a patent held on the asset or a part of the asset
Class	:	RightsAssessment
Single/Multiple	:	Multiple
DataType	:	Text
IsOptional	:	True

AttributeName	:	Trademark
Description	:	Statement of a trademark associated with the asset
Class	:	RightsAssessment
Single/Multiple	:	Multiple
DataType	:	Text
IsOptional	:	True

AttributeName	:	TradeSecret
Description	:	Statement of a trade secret associated with the asset
Class	:	RightsAssessment
Single/Multiple	:	Multiple
DataType	:	Text
IsOptional	:	True

AttributeName	:	Description
Description	:	Text description of the RightsCategory
Class	:	RightsCategory
Single/Multiple	:	Single
DataType	:	Text
IsOptional	:	True

AttributeName	:	PolicyEffectiveDate
Description	:	Date the RightsPolicy was made effective for the Library
Class	:	RightsPolicy
Single/Multiple	:	Single
DataType	:	Date
IsOptional	:	True

AttributeName	:	PolicyReference
Description	:	References to documents or standards that define the RightsPolicy
Class	:	RightsPolicy
Single/Multiple	:	Multiple
DataType	:	Text
IsOptional	:	True

5.5.3 Intellectual property data model relationships

RelationshipName	:	Assigns
Description	:	Relates a RightsCategory(s) to a RightsAssessment. A rights assessment assigns to the Asset a particular category of accessibility (e.g., Shareware)
SourceClass	:	RightsAssessment
DestinationClass	:	RightsCategory
MinDestinationCard	:	0
MaxDestinationCard	:	N
MinSourceCard	:	0
MaxSourceCard	:	N

RelationshipName	:	DefinedBy
Description	:	Relates a RightsCategory to a RightsPolicy. The governing rights policy of an organization determines the accessibility of the Asset and thus defines the rights category
SourceClass	:	RightsCategory
DestinationClass	:	RightsPolicy
MinDestinationCard	:	1
MaxDestinationCard	:	1
MinSourceCard	:	0
MaxSourceCard	:	N

RelationshipName	:	HasDefault
Description	:	Relates a library to its default RightsPolicy
SourceClass	:	Library
DestinationClass	:	RightsPolicy
MinDestinationCard	:	0
MaxDestinationCard	:	1
MinSourceCard	:	0
MaxSourceCard	:	N

RelationshipName	:	IsOwnedBy
Description	:	Relates an Asset to an Organization. It shows what organization or organizations own the Asset determined by the rights assessment
SourceClass	:	Asset
DestinationClass	:	Organization
MinDestinationCard	:	0
MaxDestinationCard	:	N
MinSourceCard	:	0
MaxSourceCard	:	N

RelationshipName	:	LicensedBy
Description	:	Relates LicensingTerms to a RightsCategory. The rights category of an asset is licensed by particular terms specified in the LicensingTerms subclass
SourceClass	:	RightsCategory
DestinationClass	:	LicensingTerms
MinDestinationCard	:	0
MaxDestinationCard	:	1
MinSourceCard	:	0
MaxSourceCard	:	N

RelationshipName	:	PerformedBy
Description	:	Relates the rights assessment of an Asset to the Organization that is responsible for that assessment.
SourceClass	:	Rights Assessment
DestinationClass	:	Organization
MinDestinationCard	:	1
MaxDestinationCard	:	N
MinSourceCard	:	0
MaxSourceCard	:	N

RelationshipName	:	References
Description	:	Relates the Library to a RightsPolicy applied to assets cataloged by the library.
SourceClass	:	Library
DestinationClass	:	RightsPolicy
MinDestinationCard	:	0
MaxDestinationCard	:	N
MinSourceCard	:	0
MaxSourceCard	:	N

RelationshipName	:	RestrictedBy
Description	:	Relates an Asset to a RightsAssessment that has been performed on that Asset. The Asset is restricted according to the outlines of assessment applied to it
SourceClass	:	Asset
DestinationClass	:	RightsAssessment
MinDestinationCard	:	0
MaxDestinationCard	:	N
MinSourceCard	:	1
MaxSourceCard	:	1

RelationshipName	:	WasCreatedBy
Description	:	Relates Organization and RightsPolicy. It shows what organizations originated or produced a rights policy.
SourceClass	:	RightsPolicy
DestinationClass	:	Organization
MinDestinationCard	:	1
MaxDestinationCard	:	N
MinSourceCard	:	0
MaxSourceCard	:	N

Annex A

(informative)

Bibliography

[B1] EIA/IS-81, CASE Data Interchange Format (CDIF)—Framework for Modeling and Extensibility, July 1991.³

[B2] CFR 15 Parts 768–799, Commerce and Foreign Trade.⁴

[B3] CFR 22 Parts 120–130, Foreign Relations.

[B4] CFR 31 Parts 500–585, Money and Finance: Treasury.

[B5] National Research Council, Computer Science and Telecommunications Board, *Intellectual Property Issues in Software*. Washington, D.C.: National Academy Press, 1991.

[B6] Pooley, James H. A., *Trade Secrets*. New York: American Management Association, 1987.

[B7] Rumbaugh, J., Blaha, M., Premerlani, W., Eddy, F., and Lorenzen, W., *Object-Oriented Modeling and Design*. Englewood Cliffs, N.J.: Prentice-Hall, 1991.

[B8] U.S. Copyright Act 17 USC Chapters 1–8.⁵

[B9] U.S. Copyright Act 35 USC Section 287.

[B10] U.S. Department of Commerce, Bureau of Export Administration, *Federal Register Rules and Regulations, Export Administration Regulation—Simplification of Export Administration Regulations—Final Rule*, vol. 61, no. 58, March 25, 1996.

³EIA publications are available from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado 80112, USA (<http://global.ihs.com/>).

⁴CFR publications are available from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 37082, Washington, DC 20013-7082, USA.

⁵U.S. Regulatory Guides are available from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 37082, Washington, DC 20013-7082, USA.