PRISM:

Publishing Requirements for Industry Standard Metadata

PRISM Specification: Modular: Version 1.2

The PRISM Rights Language Namespace

2005 02 26

Copyright and Legal Notices

Table of Contents

1 Status

1.1 Document Status

The status of this document is:

✓	Draft
✓	Released for Public Comment
✓	Released

1.2 Document Location

The location of this document is:

http://www.prismstandard.org/ specifications/1.2/modularized/PRISM_rights_namespace_12.pdf

1.3 Version History

Version Number	***Release Date***	***Editor***	***Description***
1.2	1/26/05	McConnell	Converted from unmodularized PRISM spec v 1.2

2 PRISM Documentation Structure

As of this release, PRISM is described in a set of formal, modularized documents that, taken together, represent "the PRISM Specification." Together these documents comprise the PRISM Documentation Package.

The initial release of the modularized PRISM Documentation Package, is the equivalent of the single document PRISM 1.2 Specification that was approved in December 2004. Moving forward, the monolithic PRISM Specification will no longer be maintained. All revisions will be made to individual documents in the PRISM Documentation Package, with each being versioned separately. Over time, new documents may also be added to the documentation set that makes up the PRISM Specification..

2.1 Normative and Non-normative Sections

Documents in the PRISM Documentation Package may contain both normative and non-normative material; normative material describes element names, attributes, formats, and the contents of elements that is required in order for content or systems to comply with the PRISM Specification. Non-normative material explains, expands on, or clarifies the normative material, but it does not represent requirements for compliance. Normative material in the PRISM Documentation Package is explicitly identified as such; any material not identified as normative can be assumed to be non-normative.

2.1.1 Requirement Wording Note

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [RFC-2119]. The PRISM Specification also uses the normative term, "STRONGLY ENCOURAGES," which should be understood as a requirement equivalent to MUST in all but the most extraordinary circumstances.

Capitalization is significant; lower-case uses of the key words are intended to be interpreted in their normal, informal, English language way.

2.2 The PRISM Documentation Package

The PRISM Documentation Package consists of:

Document	***Description***
PRISM Introduction [PRISMINT]	Overview, background, purpose and scope of PRISM; examples; contains no normative material.
PRISM Compliance [PRISMCOMP]	Describes two profiles of PRISM compliance for content and systems; includes normative material.
The PRISM Namespace [PRISMPRISMNS]	Describes the elements contained in the PRISM namespace; includes normative material.
The PRISM Subset of the Dublin Core Namespace [PRISMDCNS]	Describes the elements from the Dublin Core namespace that are included in PRISM; includes normative material.
The PRISM Rights Language Namespace [PRISMRLNS]	Describes the elements contained in the PRISM Rights Language Namespace; includes normative material.
The PRISM Inline Markup Namespace [PRISMIMNS]	Describes the elements contained in the PRISM Inline Markup Namespace; includes normative material.
The PRISM Controlled Vocabulary Namespace [PRISMCVNS]	Describes the elements contained in the PRISM Controlled Vocabulary Namespace; includes normative material.
The PRISM Aggregator Message Namespace [PRISMAMNS]	Describes the elements contained in the PRISM Aggregator Message Namespace; includes normative material.

Table 1.0: PRISM Documentation Package

2.2.1 Additional PRISM Documentation

The PRISM Aggregator Message (PAM), a DTD-based application of PRISM, adds a small namespace of its own, formally described in [PRISMAMNS]. The structure and use of PAM are described separately in Guide to the PRISM Aggregator Document Type Definition (DTD) V. 1.1. [PAMGUIDE]

2.2.2 Access to PRISM Documentation

The PRISM Documentation Package, the PAM Guide (see above), the PAM DTD, and a range of other information concerning PRISM are all publicly and freely available on the PRISM website, www.prismstandard.org.

3 Introduction

3.1 Purpose and Scope

The purpose of this document is to describe the basic metadata elements that the PRISM Working Group has defined and included in the PRISM Rights Language namespace. All of section 4 of this document is normative.

All the element definitions appear in a uniform format. Each element definition begins with two fields – the Name and the Identifier of the element. The Name is a human-readable string that can be translated into different languages. Also, note that PRISM does NOT require that users be presented with the same labels. The Identifier is a protocol element. It is an XML element type and MUST be given as shown, modulo the normal allowance for variations in the namespace prefix used.

4 Element Definitions: The PRISM Rights Language Namespace

Some of the content models used in this section provide content models that use parameter entity references. Those parameter entities and their meaning are:

Parameter Entity	***Definition***
%AuthorityReference;	An attribute, “rdf:resource”, whose value is a URI referring to a term in a controlled vocabulary.
%content.mix;	Typical mix of elements for representing content, such as #PCDATA, <p>, <bold>, <quote>, etc. The details of the parameter entity will depend on the context in which the PRISM namespace is being used.
%ResourceReference;	An attribute, “rdf:resource”, whose value is a URI reference to a resource. The set of AuthorityReferences is a subset of the set of ResourceReferences.
%TimeSpecification;	A string specifying a date and time according to the W3C profile of ISO 8601 (e.g., YYYY-MM-DDThh:mm:ss.ssTZD) Note that this includes time zone data which may be important (see PRISM:publicationDate)[W3C-NOTE-datetime].

Table 2: Entities Used as Abbreviations in Element Definitions

4.1 PRISM Rights Language Namespace

The PRISM WG put only the most commonly-needed rights elements into the PRISM namespace. For more involved treatment of rights and permissions in PRISM descriptions, elements from another namespace must be used. Because of the considerable activity around specifying rights and permissions, the PRISM Working Group could not recommend an existing standard to follow, as they were able to do with XML, RDF, and the Dublin Core. Therefore the working group has defined a small, simple, extensible language for expressing common rights and permissions. That language is known as the PRISM Rights Language (PRL). This section specifies that language. Note that implementations of PRISM MAY also implement PRL, but it is not mandatory. The PRISM Working Group expects PRL to be supplanted in time, once the activity around many different rights languages has settled down.

This portion of the specification will probably be made into a separate document before the 1.2 version of the PRISM Specification is finalized.

4.1.1 Processing Model

Collections of PRL statements are known as PRL expressions. The purpose of a PRL expression is to determine if a person or organization may or may not make use of a resource in a particular way. PRL expressions evaluate to a Boolean value that indicates if a particular use is allowed (if the expression evaluates to true) or not (if the expression evaluates to false).

PRL evaluation is described in RDF domain, not in the XML syntax domain. Note that PRL expressions do not describe the resource directly. They describe the real or virtual agreement under which the sender and receiver are operating. PRL expressions consist of one or more clauses. A clause, in the RDF domain, is a resource that represents a real or virtual clause in the agreement between the sender and receiver. It is the RDF subject of statements that convey the intent of the clause. In PRISM descriptions, PRL expressions MUST appear only within the scope of a dc:rights element. The dc:rights statement contains the clause, or an rdf:Bag element if there are multiple clauses.

Each clause has a possibly empty set of usage statements and a possibly empty set of condition statements. If no usage is specified, the default usage is #use. (#use will be defined later in this section). If no conditions are specified, the default condition evaluates to ‘true’.

Conditions evaluate to Boolean true or false. Conditions are expressed in XML using elements from the PRL namespace, such as prl:geographic and prl:industry. Two elements from the PRISM namespace, prism:embargoDate and prism:expirationDate, also express PRL conditions. To evaluate a condition, a comparison is made between the value(s) supplied in the XML element and the current state of the system or the intended use of content. The exact nature of the comparison depends on the condition being tested. True values mean that the condition applies. For example, the prism:embargoDate condition evaluates to 'true' if the current system date and time is greater than or equal to the date and time specified in that element's content. The prl:industry condition evaluates to 'true' if the content is intended to be used in the specified industry. This specification does not define how the current state of the system and the intended use(s) of the content are made available for evaluating the conditions.

Usages do not evaluate to Booleans. Instead, they evaluate to a set of URI references (which is typically of length 1). The URI references govern what the receiving system can do with the described resource. PRL defines only the four URI references shown in [PRISMCOMP], Rights and Usage Vocabularies. Others can be defined, but this is expected to be an exceedingly rare form of extension.

To evaluate a clause, the logical AND of the conditions in the clause is computed. If that is false, the clause evaluates to the PRL usage #notApplicable. If the logical AND is true, the set of usages in the clause is evaluated and returned as the value of the clause.

To evaluate a PRL expression, all the clauses are evaluated and their results are merged according to the following rules, which MUST be applied in the following order:

1. U, the UNION of the sets of URI references is computed. If multiple PRL expressions exist because the described resource had multiple dc:rights elements, those usages are also included in the computation of U.
2. If #none is a member of U, the expression evaluates to false.
3. Any special rules needed by extension elements are applied.
4. If #use is a member of U, the expression evaluates to true .

If the PRL expression evaluates to true, the resource may be used. If it evaluates to false, it may not be used. Typically, human intervention at runtime will be needed to convert the URI references, such as #permissionsUnkown, to a Boolean value.

Note that because PRL defines both #none and #use, the NOT operator is not needed.

PRL can be extended by defining new conditions and usages in other namespaces. Conditions MUST be defined to return a Boolean where true means the condition applies to the current state of the system or intended use of the content. Also, the conditions MUST be side-effect-free. Usages MUST return a URI reference. Another extension mechanism exists in PRL. The content model of the prl:usage element allows text content. When text content is given, implementations MUST convert it to a URI reference. This specification does not specify how that is to happen, however, a common means of doing so is expected to be showing the text to a user and asking them if the result should be #use or #none.

4.1.2 prl:geography

Name	Geography (as condition on use of a resource)
Identifier	prl:geography
Definition	Name of, or authority file reference to, a geographic region of interest.
Comment	Recommended practice is to use the ISO 3166-1 and 3166-2 country and region codes.
Attributes	%AuthorityReference; if content EMPTY
Model	(%content.mix;) or EMPTY
Occurs In	PRL clauses, which are contained in or referred to by a dc:rights element.

Example	`<prl:geography>Oklahoma</prl:geography>`
	`<prl:geography rdf:resource=`
	`  ″http://prismstandard.org/vocabs/ISO-3166/GB″/>`

4.1.3 prl:industry

Name	Industry (as condition on use of a resource)
Identifier	prl:industry
Definition	Name of, or authority file reference to, an industry or industrial sector of interest.
Comment	Recommended practice is to specify the industry sector using the NAICS industrial classification system.
Attributes	%AuthorityReference; if content EMPTY
Model	%content.mix;
Occurs In	PRL clauses, which are contained in or referred to by a dc:rights element.
Example	`</prl:industry>Cellular radiotelephone service` `</prl:industry>`

4.1.4 prl:usage

Name	Resource Usage
Identifier	prism:usage
Definition	Authority reference or human-readable description of a use that is allowed or restricted. Authority references SHOULD reference values from [PRISMCOMP] Table 4 Predefined Usages.
Comment	
Attributes	%AuthorityReference; if content EMPTY
Model	%content.mix ;or EMPTY
Occurs In	
Example	`<prl:usage>May not use on keychains or coffee mugs.</prl:usage>`

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