

**PRISM:**  
**Publishing Requirements for Industry Standard Metadata**

PRISM Specification: Modular: Version 1.3

**The PRISM Controlled Vocabulary Namespace**

2005 10 01

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## 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\\_controlled\\_vocabulary\\_namespace\\_13.pdf](http://www.prismstandard.org/specifications/1.2/modularized/PRISM_controlled_vocabulary_namespace_13.pdf)

### 1.3 Version History

<b>Version Number</b>	<b>Release Date</b>	<b>Editor</b>	<b>Description</b>
1.2	1/26/05	McConnell	Converted from unmodularized PRISM spec v 1.2
1.3 Draft A	6/28/06	Kennedy	Clarify element defs and examples, Add RDF discussion
1.3 Draft B	7/14/05	Kennedy	Following Comments by Ron Daniel
Final	10/01/05	Kennedy	Resolve industry comments



## 2 PRISM Documentation Structure

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.

### 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:

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

**Note:** *This document describes element models and provides examples for profile 2 PRISM Compliance [PRISMCOMP] that documents encoding content using the PRISM Profile of RDF. Profile 1 PRISM (well formed XML, with no requirement for RDF), is described separately in Guide to the PRISM Aggregator Document Type Definition (DTD) V. 1.1. [PAMGUIDE].*

#### 3.2 About RDF

The Resource Description Framework (RDF) is a language for representing information about resources in the World Wide Web but can be used to represent information about any resource that can be identified with a URI, or *Uniform Resource Identifier*. It is particularly useful for representing metadata about resources, such as the title, author modification date of a digital asset and copyright and licensing information for a resource. RDF describes resources in terms of simple properties and property values.

The underlying structure of any expression in RDF is a triple consisting of a Subject, a Predicate and an Object. A set of such triples is called an RDF graph. Figure 1 shows a node and directed-arc diagram of a single triple.



Figure 1.0 RDF Graph

The Predicate specifies a characteristic or property of the Subject. The Object provides the value for the property. For example: The “Big Book of Poems” was authored/created by “D. Kennedy”. Here the Subject is the Big Book of Poems. The Predicate or Property we are describing is “was created by” and the value of the property, or Object, is “D. Kennedy”.



Figure 2.0 Sample RDF Graph

Subject nodes and predicates must be URIs. An object node may be a URI reference, a literal, or blank (having no separate form of object identification itself).

When expressing RDF in XML, we express the nodes, properties and property values with XML elements and attributes. When using XML to represent RDF triples, there is far greater flexibility in tagging than we are used to

when we define XML elements and attributes with an XML DTD. RDF is designed to represent information in a minimally constraining, flexible way. The impact of combining XML with RDF is that several XML representation models can exist for the same RDF Graph. In other words, the content model and attributes can vary in a way that is not easy to define using an XML DTD. This is a bit foreign to those from a strict XML world where elements have one fixed content model and attribute definition. And it makes writing documentation for XML/RDF elements and attributes quite challenging.

Consider the following options that RDF offers when expressed as XML:

### 3.3 Specifying Nodes

A URI reference, a literal, or a hierarchy of elements can be used to indicate what a node represents or is used to give the node a value. The tagging of the graph in XML differs depending upon our model for providing Node property values:

---

```
<dc:description>Browse our catalog of desktop and  
notebook computers to find one just right for you.</dc:description>
```

---

*Example 1.0 Literal provides Node value for the dc:description property*

---

```
<dc:description rdf:resource=  
"http://www2.rhbnc.ac.uk/Music/Archive/Disserts/attinell.html"/>
```

---

*Example 2.0 URI Reference provides Node value for the dc:description property*

#### 3.3.1 URI References

RDF allows property values to be represented by a literal or by a URI. Each representation has different characteristics, so it is important to know about those characteristics in order to make the right design choice. The advantage of URIs over literals is their lack of ambiguity. Literals however are often simpler and more convenient. But either option is valid and is documented in the PRISM Specification.

#### 3.3.2 Literals

To complicate matters even further, there are different types of literals in RDF. These must be coded differently in XML and an RDF processor will handle them differently. To start with, literals may be *plain* or *typed*:

##### 3.3.2.1 Plain Literals

A **plain literal** is a string combined with an optional language tag (xml:lang). This may be used for plain text in a natural language. As recommended in the RDF formal semantics [[RDF-SEMANTICS](#)], these plain literals are self-denoting. This means that we do not have to specify a plain literal to an RDF processor; it simply assumes it is dealing with this literal type.

##### 3.3.2.2 Typed Literal

A **typed literal** is a string combined with a datatype URI. It denotes the member of the identified datatype's value space obtained by applying the lexical-to-value mapping to the literal string.

Datatypes are used by RDF in the representation of values such as integers, floating point numbers and dates. There is no built-in concept of numbers or dates or other common values in RDF. Rather, RDF defers to datatypes that are defined separately, and identified with URI references. The predefined XML Schema datatypes [[XML-SCHEMA2](#)] are widely used for this purpose.

---

```
<rdf:Description rdf:about="story.xml">  
  
<prism:embargoDate rdf:datatype="http://www.w3.org/TR/2004/REC-xmlschema-2-  
20041028/#dateTime">2001-03-09:00:00:01</prism:embargoDate>  
  
</rdf:Description>
```

---

Example 3.0 Typed literal for prism:embargoDate

3.3.2.3 XML Literals

Some literals contain XML markup. **XML literals** is a string combined with a `rdf:parseType="literal"` attribute that indicates a fragment of XML is embedded. This signals the RDF processor to handle the literal as an XML fragment.

```
<dc:description rdf:parseType="Literal">
  Describes the infamous criminal and gunfighter,
  <em>Billy the Kid</em>.
</dc:description>
```

Example 4.0 Using an XML Literal

3.3.3 Nodes Made of Elements

A third kind of node is known as a **blank node**. This is a node that does not have properties specified with a URI or a literal, but is made up of other elements that themselves have properties.

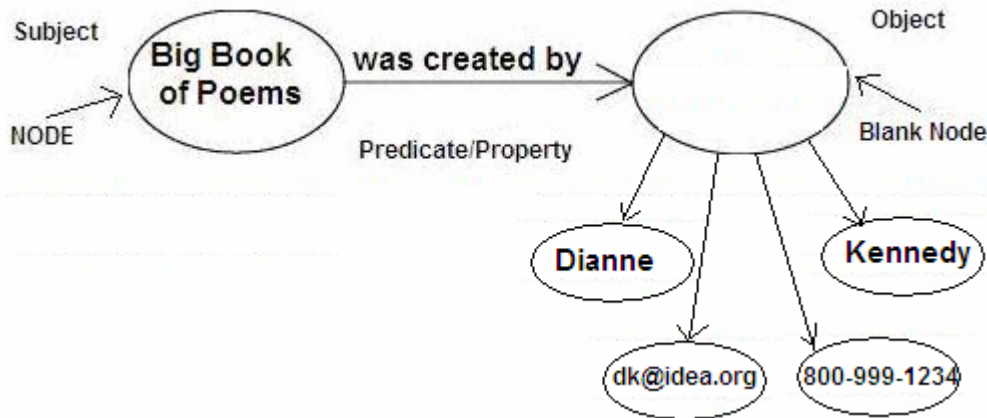


Figure 3.0 RDF Graph with a Blank Node

A blank node must have the `rdf:parseType="Resource"` attribute on the containing property element to turn the property element into a property-and-node element, which can itself have both property elements and property attributes.

```
<dc:rights rdf:parseType="Resource">
  <prism:expirationDate>2001-04-09</prism:expirationDate>
  <prism:embargoDate>2001-05-09</prism:embargoDate>
</dc:rights>
```

Example 5.0 Blank Node with `rdf:parseType="Resource"` attribute

3.4 Grouped Property Values

There is often a need to describe **groups** of things as a property value. If the "Big Poetry Book" was created by several authors, how could we indicate that? RDF provides several predefined (built-in) types and properties that can be used to describe a group of property values. XMP [XMP] uses these mechanisms when multiple field values are to be entered. If there are multiple values for a metadata field for the resource PRISM recommends listing the multiple values inside a single PRISM element using the RDF Bag, Alt or Seq containers to be compatible with XMP.

First, RDF provides a **container vocabulary** consisting of three predefined types (together with some associated predefined properties). A **container** is a resource that contains a group of values. Containers include:

### 3.4.1 RDF Bag

A Bag (a resource having type `rdf:Bag`) represents a group of property values where there is no significance in the order of the members. A Bag might be used to describe a group of authors in which the order of entry or processing does not matter.

### 3.4.2 RDF Sequence

A Sequence or Seq (a resource having type `rdf:Seq`) represents a group of property values where the order of the members is significant. For example, a Sequence might be used to describe a group that must be maintained in alphabetical order.

### 3.4.3 RDF Alternative

An Alternative or Alt (a resource having type `rdf:Alt`) represents a group of property values that are *alternatives* (typically for a single value of a property). For example, an Alt might be used to describe alternative names for an author.

The members of the container can be described by defining a **container membership property** for each member.. These container membership properties may have names of the form `rdf:_n`, where *n* is a decimal integer greater than zero, with no leading zeros, e.g., `rdf:_1`, `rdf:_2`, `rdf:_3`, and so on, and are used specifically for describing the members of containers. Or the container membership properties may have names of the form `rdf:li` (list item) for the convenience of not having to explicitly number each membership property

Grouped Property Values are not used in any examples within this document. Note, however, that these RDF structures may be used with metadata fields defined for the `prism:` namespace. See Example 6.0.

---

```
<?xml version="1.0"?>
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:prism="http://prismstandard.org/namespaces/1.2/basic/">
  <rdf:Description rdf:about="http://example.org/courses/6.001">
<prism:category>
  <rdf:Bag>
<rdf:li> category.xml#newsBulletin</rdf:li>
<rdf:li> category.xml#electionResults </rdf:li>
  </rdf:Bag>
</prism:category>
  </rdf:Description>
</rdf:RDF>
```

---

*Example 6.0 RDF Container Elements*

## 4 PRISM XML/RDF Element and Attribute Definitions

XML/RDF content and attribute models are defined with keywords in Table 3.0 for use in documenting the XML/RDF Element and Attributes within PRISM.

Representation	Definition
URI Resource	This specifies that the property element (that is, the element specifying a particular property of the subject) is EMPTY and that the value is specified using a URI Resource attribute value.
Authority Reference	This specifies that the property value is specified using a kind of URI Reference where the attribute, "rdf:resource", has a value that is a URI referring to a term in a controlled vocabulary.
Resource Reference	This specifies the requirement of the attribute, "rdf:resource", whose value is a URI reference to a resource. The set of AuthorityReferences is a subset of the set of ResourceReferences.
Plain Literal	This specifies that a plain literal will be used to provide the property value within an element.
Enumerated Literal	This specifies that a plain literal with specifically enumerated values will be used to provide the property value within an element. Note that RDF does not support the concept of an enumerated literal, but XSD, RNG, and DTD attribute specifications do.
XML Literal	This specifies that an XML literal content model will be used to specify the property value within an element. In this case, the rdf:parseType must be specified as "Literal"
Typed Literal	This specifies that a typed literal is being used to specify the property value within an element. The attribute rdf:datatype must be specified to indicate the datatype of the element content
Resource Node	This specifies that the property element contains other property element nodes. The attribute rdf:parseType must be specified to be "Resource"

*Table 3.0 Keywords for XML/RDF Element and Attribute Definitions*

### 4.1 PRISM Controlled Vocabulary Namespace

The PRISM Controlled Vocabulary provides a mechanism for describing and conveying all or a portion of a controlled vocabulary or authority file. This may be used to define entire new taxonomies, or it may be used to optimize the final speed of the system by caching useful information from externally-held vocabularies.

#### 4.1.1 pcv:broaderTerm

Name	Broader Term
Identifier	pcv:broaderTerm
Definition	Links to a broader (more general) taxon in the vocabulary. For example, from a taxon for 'dog' to one for 'mammal'.
Comment	<p>This element is used to show relationships between entries (aka terms or taxons) in a controlled vocabulary. That is why they are defined using rdf:resource. Identifiers must be declared for the terms being related and for those identifiers are when referring to the terms.</p> <p>Implementers should note that more than one pcv:broaderTerm link IS ALLOWED. This means that polyhierarchic structures are possible. However, cycles of pcv:broaderTerms are forbidden.</p> <p>For profile 2 PRISM, if there is more than one label with different values for xml:lang , PRISM recommends listing the multiple locations inside one pvc:label element using the RDF container rdf:Seq, rdf:Bag, or rdf:Alt to be XMP compatible. For profile 1, just repeat the pvc:label element multiple times.</p>
Element Content	URI Resource (no element content)
Attributes	Resource Reference.(rdf:resource)
Occurs In	pcv:Descriptor
Occurrence	May occur 0 or many times
Example	<pre>&lt;pcv:Descriptor rdf:about="#Astrophysics"&gt; &lt;pcv:label&gt;Astrophysics&lt;/pcv:label&gt; &lt;pcv:broaderTerm rdf:resource="#Physics" /&gt; &lt;pcv:narrowerTerm rdf:resource="#Cosmology" /&gt; &lt;pcv:synonym&gt;celestial mechanics&lt;/pcv:synonym&gt; &lt;pcv:definition&gt;Includes cosmology; space plasmas; and interstellar and interplanetary gases and dust.&lt;/pcv:definition&gt; &lt;pcv:code&gt;84&lt;/pcv:code&gt; &lt;/pcv:Descriptor&gt;</pre>

#### 4.1.2 pcv:code

Name	Code
Identifier	pcv:code
Definition	Provides a unique machine-readable identifier for the term within the vocabulary.
Comment	This is usually an alphanumeric code, or a purely numeric one. However, markup is still allowed because of BiDi and ruby considerations.
<b>Model #1</b>	
Element Content	Plain Literal
Attributes	xml:lang (optional) designed for identifying the human language used
<b>Model #2</b>	
Element Content	XML Literal
Attributes	rdf:parseType="Literal" xml:lang (optional) designed for identifying the human language used
Occurs In	pcv:Descriptor
Example	<pre>Model #1 &lt;pcv:code&gt;3245&lt;/pcv:code&gt;  Model #2 &lt;pcv:code rdf:parseType="Literal"&gt;32&amp;amp;75&lt;/pcv:code&gt;</pre>

#### 4.1.3 pcv:definition

Name	Definition
Identifier	pcv:definition
Definition	Provides a human-readable definition for the item in the vocabulary.
Comment	<p>Multiple definitions for the same term can be given, but PRISM recommended practice is only to do so when it has different values of the xml:lang attribute.</p> <p>For profile 2, if there is more than one definition with different values for xml:lang , PRISM recommends listing the multiple locations inside one prl:geography element using the RDF container rdf:Alt to be XMP compatible. For profile 1, just repeat the pcv:definition element multiple times.</p> <p>Definitions are a place where embedded markup is very likely - paragraph breaks being especially common. For such embedded markup, recommended practice is to use elements from the XHTML namespace. The rdf:parseType attribute MUST be given the value of 'Literal' when embedded markup is used.</p>
<b>Model #1</b>	
Element Content	Plain Literal
Attributes	xml:lang (optional) designed for identifying the human language used
<b>Model #2</b>	
Element Content	XML Literal
Attributes	rdf:parseType="Literal" xml:lang (optional) designed for identifying the human language used
Occurs In	pcv:Descriptor
Example	<pre> Model #1 &lt;pcv:definition&gt;describes a class of animals that breathe, give birth to young, and have hair or fur&lt;/pcv:definition&gt;  Model #2 &lt;pcv:definition rdf:parseType="Literal"&gt; &lt;em&gt;Mammal&lt;/em&gt; describes the class of animals which: &lt;ol&gt; &lt;li&gt;breathe air&lt;/li&gt; &lt;li&gt;give birth to live young&lt;/li&gt; &lt;li&gt;have hair&lt;/li&gt; &lt;/ol&gt; &lt;/pcv:definition&gt;           </pre>

#### 4.1.4 pcv:Descriptor

Name	Descriptor
Identifier	pcv:Descriptor
Definition	Represents an entry, formally called a <i>taxon</i> , in a controlled vocabulary. pcv:Descriptor is the container for all the PCV elements used to define or describe such an entry.
Comment	<p>There are two main uses of pcv:Descriptor, corresponding to the two different attributes. When the rdf:ID attribute is used, the pcv:Descriptor is providing the <i>definition</i> of the taxon. The URI reference used in the rdf:ID attribute should be used by any other elements wishing to refer to the taxon.</p> <p>When the rdf:about attribute is used, pcv:Descriptor is a <i>description</i> of a taxon that is <i>defined</i> elsewhere. That external definition does NOT have to be made using the PCV elements.</p>
Element Content	Blank Node (made up of other elements from the pcv: namespace)
Attributes	rdf:ID or rdf:about
Example	<pre>&lt;pcv:Descriptor rdf:about="Astrophysics"&gt; &lt;pcv:label&gt;Astrophysics&lt;/pcv:label&gt; &lt;pcv:broaderTerm rdf:resource="#Physics" /&gt; &lt;pcv:narrowerTerm rdf:resource="#Cosmology" /&gt; &lt;pcv:synonym&gt;celestial mechanics&lt;/pcv:synonym&gt; &lt;pcv:definition&gt;Includes cosmology; space plasmas; and interstellar and interplanetary gases and dust.&lt;/pcv:definition&gt; &lt;pcv:code&gt;84&lt;/pcv:code&gt; &lt;/pcv:Descriptor&gt;</pre>

**Note:** PRISM element types are specified in camel case. The exception is that when elements denote Classes in the sense of the RDF Schema [W3C-RDFS], they must begin with an uppercase letter. The only PRISM element to do so is pcv:Descriptor, Because it denotes an RDF Class, it does not require rdf:parseType to be indicated.

#### 4.1.5 pcv:label

Name	Label
Identifier	pcv:label
Definition	Provides a human-readable label for the term in the vocabulary.
Comment	<p>Multiple labels can be provided, but typically this will be done when they bear different xml:lang attributes. Most vocabularies will have only one 'preferred' term for a concept. For example, "Mad Cow Disease" is more properly referred to as "Bovine Spongiform Encephalopathy". The &lt;pcv:label&gt; element SHALL be used for any preferred labels for a concept, whether there are multiple terms in a single language or not. For all alternate labels, use the &lt;pcv:synonym&gt; element.</p> <p>For profile 2 PRISM, if there is more than one label with different values for xml:lang , PRISM recommends listing the multiple locations inside one pvc:label element using the RDF container rdf:Seq, rdf:Bag, or rdf:Alt to be XMP compatible. For profile 1, just repeat the pvc:label element multiple times.</p>
<b>Model #1</b>	
Element Content	Plain Literal
Attributes	xml:lang (optional) designed for identifying the human language used
<b>Model #2</b>	
Element Content	XML Literal
Attributes	rdf:parseType="Literal" xml:lang (optional) designed for identifying the human language used
Occurs In	pvc:Descriptor
Example	<pre>Model #1 &lt;pcv:label&gt;Bovine Spongiform Encephalopathy &lt;/pcv:label&gt;  Model #2 &lt;pcv:label rdf:parseType="Literal"&gt;&lt;diseasename&gt;Bovine Spongiform Encephalopathy&lt;/diseasename&gt;&lt;/pcv:label&gt;</pre>

#### 4.1.6 pcv:narrowerTerm

Name	Narrower Term
Identifier	pcv:narrowerTerm
Definition	Links to a narrower (more specific) concept in the vocabulary. For example, from 'dog' to 'Dalmatian'.
Comment	<p>This element is used to show relationships between entries (aka terms or taxons) in a controlled vocabulary. That is why they are defined using rdf:resource. Identifiers must be declared for the terms being related and for those identifiers are when referring to the terms.</p> <p>Multiple pcv:narrowerTerm links are allowed.  pcv:narrowerTerm and pcv:broaderTerm are the inverse of each other.  Cycles of pcv:narrowerTerms are forbidden.</p> <p>For profile 2, if there is more than one narrowerTerms with different values, PRISM recommends listing the multiple terms inside one pvc:narrowerTerm element using the RDF container rdf:Seq, rdf:Bag, or rdf:Alt to be XMP compatible. For profile 1, just repeat the pvc:narrowerTerm element multiple times.</p>
Element Content	URI Resource (no element content)
Attributes	Resource Reference.(rdf:resource)
Occurs In	pcv:Descriptor
Example	<pre>&lt;pcv:Descriptor rdf:about="Astrophysics"&gt; &lt;pcv:label&gt;Astrophysics&lt;/pcv:label&gt; &lt;pcv:broaderTerm rdf:resource="#Physics" /&gt; &lt;pcv:narrowerTerm rdf:resource="#Cosmology" /&gt; &lt;pcv:synonym&gt;celestial mechanics&lt;/pcv:synonym&gt; &lt;pcv:definition&gt;Includes cosmology; space plasmas; and interstellar and interplanetary gases and dust.&lt;/pcv:definition&gt; &lt;pcv:code&gt;84&lt;/pcv:code&gt; &lt;/pcv:Descriptor&gt;</pre>

#### 4.1.7 pcv:relatedTerm

Name	Related Term
Identifier	pcv:relatedTerm
Definition	Links to a 'related term' in the vocabulary, where the nature of the relation is not specified.
Comment	Where possible, PRISM recommends this element not be used. Elements that specify the relation more precisely are preferred. However, the difficulty in precisely identifying the exact nature of the relationship between obviously related words, such as farm and farmer), are difficult to overestimate. Therefore, pcv:relatedTerm is expected to be used infrequently.
Element Content	URI Resource (no element content)
Attributes	Resource Reference.(rdf:resource)
Occurs In	pcv:Descriptor
Example	<pre>&lt;pcv:Descriptor rdf:about="Astrophysics"&gt; &lt;pcv:label&gt;Astrophysics&lt;/pcv:label&gt; &lt;pcv:broaderTerm rdf:resource="#Physics" /&gt; &lt;pcv:narrowerTerm rdf:resource="#Cosmology"/&gt; &lt;pcv:relatedTerm rdf:resource="#PlasmaPhysics"/&gt; &lt;pcv:synonym&gt;celestial mechanics&lt;/pcv:synonym&gt; &lt;pcv:definition&gt;Includes cosmology; space plasmas; and interstellar and interplanetary gases and dust.&lt;/pcv:definition&gt; &lt;pcv:code&gt;84&lt;/pcv:code&gt; &lt;/pcv:Descriptor&gt;</pre>

#### 4.1.8 pcv:synonym

Name	Synonym
Identifier	pcv:synonym
Definition	Alternate labels (synonyms) for the same vocabulary term. While semantically equivalent, the synonyms are not the preferred terms for the concept. See pcv:label for more on preferred vs. alternate terms. The synonyms are used to increase the likelihood of matching to the proper controlled vocabulary term.
Comment	For profile 2, if there is more than one synonym with different values, PRISM recommends listing the multiple terms inside one pvc:synonym element using the RDF container rdf:Seq, rdf:Bag, or rdf:Alt to be XMP compatible. For profile 1, just repeat the pvc:synonym element multiple times.
Element Content	Plain Literal
Attributes	xml:lang (optional) designed for identifying the human language used
Occurs In	pcv:Descriptor
Example	<pre>&lt;pcv:Descriptor rdf:about="circular_saw"&gt;   &lt;pcv:label&gt;Circular Saws&lt;/pcv:label&gt;   &lt;pcv:synonym&gt;Skillsaw&lt;/pcv:synonym&gt; &lt;/pcv:Descriptor&gt;</pre>

#### 4.1.9 pcv:vocabulary

Name	Vocabulary
Identifier	pcv:vocabulary
Definition	Provides a human-readable string identifying the vocabulary from which the term comes.
Comment	The pcv:vocabulary element is not expected to be used when <i>defining</i> the taxons in a vocabulary. It is expected to be used when providing small, in-line, <i>descriptions</i> of those taxons so that a reader may be able to track down a complete copy if they do not already own one. In the example below the taxon is defined elsewhere (rdf:about is a link to the definition). Here pcv:vocabulary provides a readable definition of what is defined in that taxon.
Element Content	Plain Literal
Attributes	xml:lang (optional) designed for identifying the human language used
Occurs In	Pcv:Descriptor
Example	<pre>&lt;pcv:Descriptor rdf:about="http://loc.gov/LC/QA-76"&gt;   &lt;pcv:vocabulary&gt;Library of Congress Classification&lt;/pcv:vocabulary&gt;   &lt;pcv:code&gt;QA-76&lt;/pcv:code&gt;   &lt;pcv:label&gt;Mathematical software&lt;/pcv:label&gt; &lt;/pcv:Descriptor&gt;</pre>

## 5 Sample Controlled Vocabulary Defined Using the PRISM Controlled Vocabulary Language

The following is an example of how to define a controlled vocabulary using the PRISM Controlled Vocabulary Language. The PRISM Resource Category describes the genre, or the stereotypical form of the *intellectual* content of the resource. Sample genre include obituaries, biographies, and movie reviews. The Resource Category values form a controlled vocabulary for the prism:category element, defined by the PRISM specification.

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
- <!-- PRISM Controlled Vocabulary of content 'categories', also known
as genre. The base URL for this vocabulary is http://prismstandard.org/vocabularies/1.2/category.xml
-->
- <rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
xmlns:pcv="http://prismstandard.org/namespaces/1.2/pcv/">
- <pcv:Descriptor rdf:ID="abstract">
  <pcv:label>abstract</pcv:label>
  <pcv:definition>A section featuring the most important points of a work. [NewsML]</pcv:definition>
</pcv:Descriptor>

- <pcv:Descriptor rdf:ID="acknowledgement">
  <pcv:label>acknowledgement</pcv:label>
  <pcv:definition>Written recognition of acts or achievements. [AAT]</pcv:definition>
</pcv:Descriptor>

- <pcv:Descriptor rdf:ID="advertisement">
  <pcv:label>advertisement</pcv:label>
  <pcv:definition>Piece of material whose presence is paid for. [NewsML]</pcv:definition>
</pcv:Descriptor>
- <pcv:Descriptor rdf:ID="analysis">
  <pcv:label>analysis</pcv:label>
</pcv:Descriptor>

- <pcv:Descriptor rdf:ID="authorBio">
  <pcv:label>authorBio</pcv:label>
  <pcv:definition>Brief text about the author of a work.</pcv:definition>
</pcv:Descriptor>

- <pcv:Descriptor rdf:ID="autobiography">
  <pcv:label>autobiography</pcv:label>
  <pcv:definition>Biography of an individual written by himself or herself. [after
AAT]</pcv:definition>
</pcv:Descriptor>

- <pcv:Descriptor rdf:ID="bibliography">
  <pcv:label>bibliography</pcv:label>
  <pcv:definition>A section describing lists of books or other textual materials arranged in some
logical order giving brief information about the works, such as author, date, publisher, and place of
publication; may be works by a particular author, or on a particular topic. [AAT]</pcv:definition>
</pcv:Descriptor>
:
:
:
</rdf:RDF>
```



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