

Standard for Web Metadata

IRM STANDARD 21, VERSION 1

Title: Web Metadata Standard

Date Issued: June 19, 2002

Effective Date: June 20, 2002

Supersedes:

Applicability:

This standard is applicable to all agency and information resource community executives, managers, and information resource management personnel with responsibilities for the creation and indexing of web content. The standard applies to upper-level or appropriate web pages. It does not apply to lower-level or inappropriate web pages, or pages not indexed by the state search engine. For definitions and guidelines, see *Minnesota Metadata Guidelines for Dublin Core Metadata* (<http://bridges.state.mn.us/bestprac/training.pdf>).

Audience:

gen'l *tech.* *exec.* *other : local gov't*

Purpose of this Standard:

Background: Metadata standards are critical to the management of online records. Web publishing by state agencies creates a search challenge in that while much more accessible, online documents can be lost in a morass of unmanaged and undiscoverable information.

The purpose of the standard is to:

1. Increase relevancy and ranking of search results. Consistent application of metadata to web pages combined with a powerful and tunable search engine provides more precise, relevant, descriptive, and accurate results to searchers.
2. Increase accuracy of the search engine's browseable topic categories. Search engine software allows automatic classification of web pages via the subject/keyword metatag. These browseable topics increase accessibility to state information by grouping web resources into a hierarchy of point-and-click topics that government, business, or public users can easily navigate.
3. Allow retention scheduling of web publications for recordkeeping or archival purposes.

This is a metadata standard only. It does not cover implementation or technical issues.

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Standard Requirements:

The State of Minnesota Web Metadata Standard is based on the Dublin Core Metadata Element Set (DCMES), an American National Standards Institute/National Information Standards Organization standard (ANSI/NISO Z39.85 – 2001). The Dublin Core standard comprises fifteen elements, the semantics of which have been established through consensus by an international, cross-disciplinary group of professionals from the scholarly fields of librarianship, computer science, text encoding, museum and archive management, among others.

The 15 core elements are shown grouped according to function:

Content	Intellectual Property	Instantiation
COVERAGE	CONTRIBUTOR	DATE
DESCRIPTION	CREATOR	FORMAT
TYPE	PUBLISHER	IDENTIFIER
RELATION	RIGHTS	LANGUAGE
SOURCE		
SUBJECT		
TITLE		

Minimum DC elements are: TITLE, SUBJECT(s), DESCRIPTION, DATE(s) (creation, modified)

Highly desirable elements are: CREATOR, PUBLISHER, TYPE, FORMAT, LANGUAGE.

Dublin Core has as its goals the following characteristics:

- *Simplicity of creation and maintenance*
The Dublin Core element set has been kept as small and simple as possible to allow a non-specialist to create simple descriptive records for information resources easily and inexpensively, while providing for effective retrieval of those resources in the networked environment.
- *Commonly understood semantics*
Discovery of information across the vast commons of the Internet is hindered by differences in terminology and descriptive practices from one field of knowledge to the next. The Dublin Core can help the digital tourist find his or her way by supporting a common set of elements, the semantics of which are universally understood and supported.
- *International scope*
The involvement of representatives from almost every continent has ensured that the

development of the standard considers the multilingual and multicultural nature of the electronic information universe. The standard is in use by many international, national, and state government entities.

- *Extensibility*

While balancing the needs for simplicity in describing digital resources with the need for precise retrieval, Dublin Core developers have recognized the importance of providing a mechanism for extending the DC element set for additional discovery needs. This model allows different communities to use the DC elements for core descriptive information that will be usable across the Internet, while allowing domain specific additions that make sense within a more limited arena.

- *Qualifiers*

Qualifiers are defined as attributes that refine or characterize interpretation of an element's content. The Dublin Core Metadata Initiative recognizes two broad classes of qualifiers:

- **Element Refinement.** These qualifiers make the meaning of an element narrower or more specific. A refined element shares the meaning of the unqualified element, but with a more restricted scope.
- **Encoding Scheme.** These qualifiers identify schemes that aid in the interpretation of an element value. These schemes include controlled vocabularies and formal notations or parsing rules.

While not required for compliance with this standard, qualifiers for certain elements may be highly desirable for tracking certain kinds of information. Examples and application of qualifiers as well as the elements themselves can be found in the *Minnesota Metadata Guidelines for Dublin Core Metadata*, available on the Web.

Compliance:

The State of Minnesota Web Metadata Standard is referenced as a current standard in the *Minnesota Enterprise Technical Architecture*, Chapter 4, "Data and Records Management Architecture." State agencies bound by the Architecture should reference that document for compliance requirements. State agencies bound by the North Star Portal requirement must comply with this standard for inclusion of documents. Compliance for the North Star Portal will be monitored through the portal template, which includes the 15 Dublin Core metadata elements, of which 4 are mandatory.

References and Sources of More Information:

American National Standards Institute/National Information Standards Organization. *Dublin Core Metadata Element Set – ANSI/NISO Z39.85*. September 2001.

<http://www.niso.org/standards/resources/Z39-82.pdf>

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Dublin Core Metadata Initiative. *Dublin Core Metadata Element Set*. Version 1.1: Reference Description. July 2001. <http://dublincore.org/documents/dces/>

Minnesota Department of Natural Resources. *State of Minnesota Best Practice Guidelines for Web Metadata*. August 2000. <http://bridges.state.mn.us/bestprac/index.html>

Minnesota Department of Natural Resources. *Minnesota Metadata Guidelines for Dublin Core Metadata*. August 2000. <http://bridges.state.mn.us/bestprac/training.pdf>

Minnesota Office of Technology. *Minnesota Enterprise Technical Architecture*. Revision 1.0. February 2002. <http://www.ot.state.mn.us/architecture/html/>