Dublin Core™ Metadata Element Set Fact Sheet

Compiled by Ryan Spellman | 2021-09-11 | Logo Credit: Dublin Core Metadata Initiative (2019)

Brief History

The Dublin Core Metadata Initiative first began to take shape in 1994. Around this time, SoftQuad's Yuri Rubinsky, Online Computer Library Center's (OCLC) Stuart Weibel and Eric Miller, along with OCLC director Terry Noreault and National Center for Supercomputing Applications' (NCSA) director Joseph Hardin, began having informal conversations about a mutual concern over difficulties finding resources on the Web (Dublin Core Metadata Initiative, n.d.). These conversations led to an OCLC/NCSA workshop the flowing year, and it was then that Dublin Core (DC) metadata was born, receiving its namesake from the location of the workshop, Dublin, Ohio (Dublin Core Metadata Initiative, n.d.).

With a focus on simplicity, compatibility, and extensibility, the results from this initial workshop were eventually refined into the Dublin Core Metadata Element Set Version 1.1 (DCMES) (Zeng & Qin, 2016). DCMES is a flat-structure, 15-core metadata element set that is often referred to as *Dublin Core*, *DC*, *simple Dublin Core*, or *15 Dublin Core elements* (Zeng & Qin, 2016).

DCMI continued to develop extension vocabularies for the core 15 elements of DC. These extensions, combined with DC, are collectively referred to as *DCMI Metadata Terms*, or simply *Dublin Core terms*. *Dublin Core terms* utilizes RDF vocabularies and was designed with application profiles in mind, meaning it was designed to work in conjunction with other compatible vocabularies (Dublin Core Metadata Initiative, 2020).

DCMI Approved Namespace URIs

Table 1
Dublin Core and Dublin Core Terms URIs, descriptions, and prefixes

URI	Description	Prefix
http://purl.org/dc/elements/1.1/	The Dublin Core™ Metadata Element Set, Version 1.1 (original 15 elements)	**dc**
http://purl.org/dc/terms/	All DCMI properties, classes and encoding schemes (unless indicated below)	**dcterms** *or* **dct**

Note. URIs and descriptions taken from Dublin Core Metadata Initiative (2007), prefix information from Zeng & Qin (2016).

DCMI 15 Dublin Core Elements

Table 2

List of Dublin Core basic elements, divided into categories of Content, Intellectual Property, and Instantiation.

Content	Intellectual Property	Instantiation
Coverage	Contributor	Date
Description	Creator	Format
Relation	Publisher	Identifier
Source	Rights	Language
Subject		
Title		
Type		

Note. Element list and categorization based on layout by Zeng & Qin (2016).

Data Values: DCMI Vocabulary Encoding Schemes

Table 3

List of Dublin Core vocabulary encoding schemes identified by label with description and URI.

Vocabulary Encoding Schemes	URI
DCMI Type Vocabulary The set of classes specified by the DCMI Type Vocabulary, used to categorize the nature or genre of the resource.	http://purl.org/dc/terms/DCMIType
DDC The set of conceptual resources specified by the Dewey Decimal Classification.	http://purl.org/dc/terms/DDC
IMT The set of media types specified by the Internet Assigned Numbers Authority.	http://purl.org/dc/terms/IMT
LCC The set of conceptual resources specified by the Library of Congress Classification.	http://purl.org/dc/terms/LCC
LCSH The set of labeled concepts specified by the Library of Congress Subject Headings.	http://purl.org/dc/terms/LCSH
MeSH The set of labeled concepts specified by the Medical Subject Headings.	http://purl.org/dc/terms/MESH

NLM The set of conceptual resources specified by the National Library of Medicine Classification.	http://purl.org/dc/terms/NLM
TGN The set of places specified by the Getty Thesaurus of Geographic Names.	http://purl.org/dc/terms/TGN
UDC The set of conceptual resources specified by the Universal Decimal Classification.	http://purl.org/dc/terms/UDC

Note. Vocabulary encoding scheme information taken from Dublin Core Metadata Initiative (2020).

Data Values: DCMI Syntax Encoding Schemes

Table 4
List of Dublin Core syntax encoding schemes identified by term name with description and URI.

Syntax Encoding Schemes	URI
DCMI Box The set of regions in space defined by their geographic coordinates according to the DCMI Box Encoding Scheme.	http://purl.org/dc/terms/Box
ISO 3166 The set of codes listed in ISO 3166-1 for the representation of names of countries.	http://purl.org/dc/terms/ISO3166
ISO 639-2 The three-letter alphabetic codes listed in ISO639-2 for the representation of names of languages.	http://purl.org/dc/terms/ISO639-2
ISO 639-3 The set of three-letter codes listed in ISO 639-3 for the representation of names of languages.	http://purl.org/dc/terms/ISO639-3
Period The set of time intervals defined by their limits according to the DCMI Period Encoding Scheme.	http://purl.org/dc/terms/Period
DCMI Point The set of points in space defined by their geographic coordinates according to the DCMI Point Encoding Scheme.	http://purl.org/dc/terms/Point
RFC 1766 The set of tags, constructed according to RFC 1766, for the identification of languages.	http://purl.org/dc/terms/RFC1766
RFC 3066 The set of tags constructed according to RFC 3066 for the identification of languages.	http://purl.org/dc/terms/RFC3066

RFC 4646 The set of tags constructed according to RFC 4646 for the identification of languages.	http://purl.org/dc/terms/RFC4646
RFC 5646 The set of tags constructed according to RFC 5646 for the identification of languages.	http://purl.org/dc/terms/RFC5646
URI The set of identifiers constructed according to the generic syntax for Uniform Resource Identifiers as specified by the Internet Engineering Task Force.	http://purl.org/dc/terms/URI
W3C-DTF The set of dates and times constructed according to the W3C Date and Time Formats Specification.	http://purl.org/dc/terms/W3CDTF

Note. Syntax encoding scheme information taken from Dublin Core Metadata Initiative (2020).

Data Content Best Practices, Examples, and Encoding Schemes

Table 5
The core 15 elements of DC and examples to illustrate best practices.

Element	Best Practice & *Examples*	Encoding Schemes
contributor	Most general element for those responsible for resource. Use when primary responsibility is not known or irrelevant. ------ *Contributor="Athens County Children's Services"*	
coverage	*Select a value from a controlled vocabulary where appropriate, depending on coverage type (spatial versus temporal).* ------ *Coverage="1995-1996"* *Coverage="Boston, MA"* *Coverage="17th century"* *Coverage="Upstate New York"*	**Spatial** DCMI Point ISO 3166 DCMI Box TNG **Temporal** DCMI Period W3C-DTF

creator	List creators separately, in the same order as on the publication. List surname or family name first, followed by forename or given name. List name as it appears is unsure. For organizations, list them in order or largest to smallest of heirarchy with full stop and space between (if unsure, list as appears). If creator and publisher are the same, do not repeat value in publisher element. ------ *Creator="Shakespeare, William"* *Creator="Wen Lee"* *Creator="Hubble Telescope"*	
date	If no full date is available, year and month (YYYY-MM) or simply year (YYYY) is allowed. ------ *Date="1998-02-16"* *Date="1998-02"* *Date="1998"*	DCMI Period W3C-DTF
description	Use full sentences. Do not include HTML or other structural markup. Can be copied from abstract or other descriptive resource from the entity. ------ *Description="Illustrated guide to airport markings and lighting signals, with particular reference to SMGCS (Surface Movement Guidance and Control System) for airports with low visibility conditions."*	
format	Select a value from controlled vocabulary. Use separate iterations of element when multiple format categories exist. Media type or dimesions (including file size, duration, etc.) are acceptable. ------ *Format="image/gif"* *Format="40 x 512 pixels"* *Format="bronze"* *Format="22 in."*	IMT
identifier	Not for identification of metadata record. Use string or number that conforms to formal identification system such as URL, DOI, URL, or ISBN. ------ *Identifier="http://purl.oclc.org/metadata/dublin_core/"* *Identifier="ISBN:0385424728"*	URI

language	Make new iteration of element for additional languages. Best practice is to use language tags as defined by RFC 3066 / ISO 639-2.	ISO 639-2 RFC 3066
	------ *Language="en"* *Language="fr"* *Language="Primarily English, with some abstracts also in French."* *Language="en-US"*	
publisher	Person, organization or service responsible for the availability of resource. Do not repeat name in this element if it is the same as creator. If unsure about the responsibility, use contributor element. In general, publisher element is for organizations, creator element is for individuals. ------ *Publisher="University of South Where"* *Publisher="Funky Websites, Inc."*	
relation	Use a string or number that aligns with a formal identification system. ------ *Relation="Anglo-American Cataloging Rules, 2nd edition"*	URI
rights	Use for a rights statement, URL pointing to statement, or combination. ------ *Rights="Access limited to members"* *Rights="http://cs-tr.cs.cornell.edu/Dienst/ Repository/2.0/Terms"*	
source	Use a string or number that aligns with a formal identification system. ------ *Source="Image from page 54 of the 1922 edition of Romeo and Juliet"*	URI
subject	Choose unique and significant words. Avoid generalizations. For multiple terms, separate with a semicolon or use additional iterations of element. ------ *Subject="Aircraft leasing and renting"* *Subject="Dogs"* *Subject="Olympic skiing"*	LCSH MeSH DDC LCC UDC

title	The name by which the entity is formerly known. ------ *Title="The Sound of Music"* *Title="Green on Greens"*	
type	Include at least one term from DCMIType vocabulary to benefit interoperability. If there are multiple types, such as text and sound, then include a type element for each. ------ *Type="Image"* *Type="Sound"* *Type="Text"*	DCMI Type Vocabulary

Note. Encoding scheme recommendations taken from Dublin Core Metadata Initiative (2005), best practices and examples taken from Dublin Core Metadata Initiative (2003).

DCMI Resources

Dublin Core User Guide
https://www.dublincore.org/resources/userguide/

DCMI Glossary
https://www.dublincore.org/resources/glossary/

DCMI Metadata Terms
https://www.dublincore.org/specifications/dublin-core/dcmi-terms/

Dublin Core XML Schemas
https://www.dublincore.org/schemas/xmls/

DCMI Metadata in RDF Schema Language
https://www.dublincore.org/schemas/rdfs/

DCMI Namespace Policy
https://www.dublincore.org/specifications/dublin-core/dcmi-namespace/

DCMI: Creating Metadata
https://www.dublincore.org/resources/userguide/creating_metadata/

DCMI: Publishing Metadata: How to use DCMI Metadata as linked data
https://www.dublincore.org/resources/userguide/publishing_metadata/

References

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https://www.dublincore.org/about/history

Dublin Core Metadata Initiative. (2003, August 26). *Using Dublin Core – The elements.*

https://www.dublincore.org/specifications/dublin-core/usageguide/qualifiers/

Dublin Core Metadata Initiative. (2005, November 7). *Using Dublin Core – Dublin Core qualifiers.*

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https://www.dublincore.org/specifications/dublin-core/ dcmi-namespace/

Dublin Core Metadata Initiative. (2020, January 20). *DCMI metadata terms*.

https://www.dublincore.org/specifications/dublin-core/dcmi-terms/

Zeng, M. L., & Qin, J. (2016). *Metadata* (2nd ed.). ALA Neal-Schuman.