

Developments and Initiatives

Metadata: a worldwide library effort

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Metadata Resources

The World Summit on the Information Society held in Geneva in December, 2003, spotlighted the urgency of building and supporting an information and communications infrastructure to reach the goal of: open access and equal access to information. The vision inspiring the 11 000 delegates to the Summit called for an Information Society "where everyone can create, access, utilize and share information and knowledge, enabling individuals, communities and peoples to achieve their full potential." Information is power!

Information systems are built on standards. One of ISO's newest standards – ISO 15836, the *Dublin Core Metadata Element Set* – is already serving as the glue for an information infrastructure that empowers government, business, and the individual.

ISO 15836 or "The Dublin Core" was advanced using the Fast Track Process through ISO Technical Committee 46, *Information and documentation*, Subcommittee 4 *Technical*

Dublin Core website:
<http://dublincore.org>

Dublin Core documents are translated into twenty-three languages. A list of these translations is at:

[http://dublincore.org/
resources/translations/](http://dublincore.org/resources/translations/)

Metadata Made Simpler and
Metadata Demystified: A Guide for Publishers are introductions to the topic available for free-download from the NISO website:

[http://www.niso.org/
standards/std_
resources.html#tr](http://www.niso.org/standards/std_resources.html#tr)

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Interoperability and approved in October 2003. The standard is based on ANSI/NISO Z39.85-2001, originally developed in the USA. It defines a basic set of data elements that will help resource discovery, that is, finding information on the Web.

Metadata is often called "information about information," or "data about data." The information captured on the traditional library catalogue card (title, author, etc.) is one example of metadata. Today, metadata describing all kinds of information products is increasingly important to any search for information no matter if that search is for pleasure, learning or business. By capturing the essence of an information item in a metadata description in a standard way, a publishing house can share the content in its information products through digital media such as the Web, for example. Using standardized metadata benefits all information users as it makes information easier to search, to find, and to share.

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The Core of the strength

The strength of the Dublin Core standard, ISO 15836, is its very basic approach. The standard simply defines fifteen optional metadata elements for describing cross-genre, cross-disciplinary information resources. These elements are: title, creator, subject, description, publisher, contributor, date, type, format, identifier, sources, language, relation, coverage, and rights.

"Information systems are built on standards."

Developed and tested in the bibliographic community in the mid-1990s, the utility of the Dublin Core Metadata Set was quickly recognized internationally. It has now been translated into 25 different languages and seven national governments have adopted the Dublin Core element set as the national metadata standard for government resources. Dublin Core metadata is the basis for description used by corporations and nongovernmental agencies including the World Health Organization, the United Nations Environmental Program, the European Environmental agency, and the Food and Agriculture Organization. In addition, it has completed various stages of standardization in the Internet Engineering Task Force, through European agreements, and nationally in Norway, Denmark, Japan, Australia, and the USA. The Dublin Core standard has also been incorporated into other standards, including the PRISM metadata standard (PRISM is an XML metadata vocabulary for magazine and journal content), the Electronic Thesis and Dissertation metadata standard, and the Standards Metadata Element Set (even standards need metadata!)

The ISO Dublin Core standard will be maintained by the Dublin Core Metadata Initiative (DCMI), which is supported by the OCLC (Online Computer Library Center), the leading global library cooperative. Founded in 1967, OCLC is a nonprofit, membership, computer library service

and research organization dedicated to furthering access to the world's information and reducing information costs headquartered in Dublin, Ohio, USA. The mission of DCMI is to make it easier to find resources using the Internet through the development of international, interoperable metadata standards and frameworks. DCMI participants reflect a diversity of backgrounds drawing on expertise in archives and museum information systems, automation services, knowledge management technology, content management systems, government document repositories, publishing and syndication services, libraries, and educational institutions and distance learning. The DCMI (Dublin Core Metadata Initiative) will serve as the maintenance agency for ISO 15836. Mr. Stuart Weibel is the Director of the maintenance agency and will be assisted by an Advisory Board. In this role, the DCMI is committed to an open consensus-building process.

Anyone can join the mailing lists that support DCMI working groups and anyone can attend the Dublin Core conferences. Through its Affiliate Programme, DCMI provides an avenue to strengthen the links among regional communities of practice and the global initiative, and offers a means for distributing the governance and support for the initiative to reflect its truly international, cross-disciplinary constituents.

As the information universe expands, being able to find, to link to, to reuse, and to share information resources becomes more complex. Through standards such as ISO 15836 leaders in standards development aim to reduce this complexity and create new opportunities for access. ■

About the authors



Stuart L. Weibel, Ph.D., is Senior Research Scientist in the Office of Research of OCLC, Inc., a worldwide library cooperative. His research interests include

automated cataloging, automated document structure analysis, electronic publishing, persistent identifiers, and metadata. Stuart Weibel is a founding member of the International World Wide Web Conference Committee and has served on programme and organizational committees for the Internet Society, the European Conference on Digital Libraries, the Joint Conference on Digital Libraries, and the International Conference on Asian Digital Libraries.



Patricia Harris is the Executive Director of the National Information Standards Organization (www.niso.org) a nongovernmental, nonprofit organization

based in the USA, that develops and promotes technical standards used by publishers, information services, and libraries. Under her leadership the organization's membership has doubled, the organization's scope has expanded to embrace digital content, its budget has grown four-fold, and NISO has launched a print and electronic publications programme. Patricia Harris is the secretary of the ISO's Technical Committee 46 Subcommittee SC 4, *Technical Interoperability*.