What is the CIDOC CRM?

The CIDOC Conceptual Reference Model (CRM) is a theoretical and practical tool for information integration in the field of cultural heritage. It can help researchers, administrators and the public explore complex questions with regards to our past across diverse and dispersed datasets. The CIDOC CRM achieves this by providing definitions and a formal structure for describing the implicit and explicit concepts and relationships used in cultural heritage documentation and of general interest for querying and exploring such data. Such models are also known as formal ontologies. These formal descriptions allows the integration of data from multiple sources in a software and schema agnostic fashion.

The CIDOC CRM has been developed in a manner that is intended to promote a shared understanding of cultural heritage information by providing a common and extensible semantic framework that any cultural heritage information can be mapped to. It is intended to be a common language for domain experts and implementers to formulate requirements for information systems and to serve as a guide for good practice of conceptual modelling. In this way, it can provide the "semantic glue" needed to mediate between different sources of cultural heritage information, such as that published by museums, libraries and archives.

The CIDOC CRM is the result of over 20 years of development and maintenance work by the CIDOC Documentation Standards Working Group and CIDOC CRM SIG which are working groups of CIDOC. Since 9/12/2006, it has been recognized as an official ISO standard. This status was renewed in 2014 and can be found at ISO 21127:2014.

The CIDOC CRM is a living standard that is designed in such a way as to provide both high level information retrieval and the formulation and documentation of very specific data points and questions. The CIDOC CRM thus consists of the CRMbase standard which provides the basic classes and relations devised for the cultural heritage world. This base ontology is complimented by a series of modular extensions to the basic model. Such extensions are designed to support different types of specialized research questions and documentation such as bibliographic documentation or geoinformatics. The CIDOC CRM extensions are developed in partnership with the research communities in question. These extensions are formulated in a manner that is harmonized with the base ontology such that data expressed in any extension is compatible with the base system of concepts and relations. This harmonized development process leads to a high level of information integrity and integration not available in other information systems.

How can I use the CIDOC CRM

The CIDOC CRM is, first of all, an intellectual system for organizing and integrating cultural heritage data. This system is officially expressed in specification documents. These documents are available in the resource section of this website. These are the official reference documents for the CIDOC CRM and are actively maintained by the CIDOC CRM SIG and updated according to user needs and the organic growth of the standard.

Using CIDOC CRM in practical data integration scenarios can be achieved in a number of ways. In information integration scenarios it can be used to implementat of RDF or OWL based knowledge bases to the implementation of cross database query interpreters. It can also be used as an intellectual guide in order to build more effective traditional relational databases.

In order to begin the adoption of CIDOC CRM in different use scenarios, potential adopters are encouraged to consult the teaching section of this website to consult the available tutorials and information there. There are also a series of FAQ documents designed to help answer well known questions of CRM adopters. Potential users/members of the CRM community are also welcomed to contact the CIDOC CRM SIG for advice and information. If you are already using CIDOC CRM and have questions or issues that are not resolved by the documentation and tutorials, you may always join the CIDOC CRM SIG mailing list and post questions there on specific topics. The results of past questions and issues are collected on the website here and form a useful archive to consult in order to answer previously asked questions.

As mentioned above, the CIDOC CRM now encompasses both the basic standard, CRMbase, as well as a family of modular extensions. Each of these extensions has its own specific website to support its use in the same manner as above. To see the present list of extensions, please click here.

Who we are

CIDOC CRM is developed by the CIDOC CRM Special Interest Group. This is a volunteer community dedicated to the development and maintenance of a common standard for integrating cultural heritage data. The SIG works under the aegis of CIDOC, the International Council for Documentation, which, in turn, is a committee of the International Council of Museums (ICOM). Membership in the CIDOC CRM SIG is on an institutional basis and its membership includes private and public institutions associated with the research and documentation of the human past. The work of the SIG is done on a volunteer basis and funding comes from the contributions in kind of the member institutions in supporting the work of their staff in contributing to this project. The SIG meets three or four times a year, the meetings being hosted by the member institutions of the SIG. As an active working group of ICOM, the SIG also participate in the annual CIDOC conference and the triannual meetings of ICOM. The present membership of the CIDOC CRM SIG can be consulted here.