Information technology — Information Resource Dictionary System (IRDS) framework

Technologies de l'information — Cadre pour le gestionnaire de ressources du système d'information (IRDS)
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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75% of the national bodies casting a vote.

International Standard ISO/IEC 10027 was prepared by Technical Committee ISO/IEC JTC 1, Information Technology.

Information technology — Information Resource Dictionary System (IRDS) framework

1 Scope

This International Standard describes the framework for a number of International Standards that specify a specialised information system, called an Information Resource Dictionary System (IRDS). An IRDS is used to control and document an enterprise's information resources.

This International Standard defines the data levels relevant to an IRDS. It defines the IRDS interfaces which are prescribed by other International Standards in the IRDS family of standards. It also defines the kinds of data content that are prescribed by other International Standards in the family.

2 Normative references

The following International Standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All International Standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the International Standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards.


ISO/IEC 9075:1989 Information processing systems - Database Language SQL with integrity enhancement.

3 Definitions

Definitions in this clause are those IRDS definitions used in this Framework. These definitions are referenced in other International Standards where they are used. Further International Standards may define additional terminology.

When each term listed in this clause is introduced in a later clause of this International Standard, it is printed in bold type.

3.1 Term defined in ISO 7498 and used in this International Standard

The following term is defined and used in the OSI Reference Model. It is used in the same way in this IRDS Framework International Standard.

3.1.1 real system.

3.2 Terms originally defined in ISO 7498 and adapted for use in this International Standard

The following terms were originally defined and used in the OSI Reference Model and other OSI International Standards. Their use in this IRDS Framework is based on that in the OSI International Standards, but a revised definition is preferred.

Some terms are prefixed in OSI with "(N)-" to indicate the layer. Since the IRDS Framework does not have a formal layer concept the prefix is omitted.

3.2.1 server: A role filled by a processor when it provides services to another processor.

3.2.2 service: A capability provided by a processor to other processors.

3.3 Terms defined in this International Standard

For the purpose of this International Standard the following terms apply.

3.3.1 access control: A capability to restrict the use of services accessing data to users who have been previously authorised.

3.3.2 application level: The data level on which instances of application data are recorded.

3.3.3 application level pair: The term used to describe both the application level and its schema at the IRD level.

3.3.4 application schema: A set of definitions which control what may exist at any time in an application.

3.3.5 auditing: A process of checking that previously made changes to a collection of data have been made correctly and by an appropriately authorised user at an appropriate time.

3.3.6 client: A user requesting the services provided at an interface of a server.

3.3.7 constraint: A statement of one or more valid states of some part of a database, based on the conditions which values in the database must satisfy at any time.

3.3.8 data container: A conceptual area of storage in which data instances can be recorded.