INTERNATIONAL STANDARD

ISO
13008

Information and documentation — Digital records conversion and migration process

Information et documentation — Processus de conversion et migration des documents d'activité numériques

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Contents

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 13008 was prepared by Technical Committee ISO/TC 46, *Information and documentation*, Subcommittee SC 11, *Archives/records management*.

Introduction

This International Standard provides guidance for the conversion of records from one format to another and the migration of records from one hardware or software configuration to another. It contains applicable records management requirements, the organizational and business framework for conducting the conversion and migration process, technology planning issues, and monitoring/controls for the process. It also identifies the steps, components and particular methodologies for each of these processes, covering such topics as workflow, testing, version control and validation.

The development of this International Standard was derived from Reference [13].

With the rapid pace of technological change, many records in digital form will, at some point, need to be converted from one format to another, or migrated from one system to another to ensure their continued accessibility and processability.

This is not to suggest that conversion and migration are the only approaches to preserving digital records. Other methods, such as emulation, do exist or are under development. Conversion and migration are, however, two of the more prevalent methods of digital preservation at this time. While this International Standard does not address digital preservation per se, the conversion and migration processes can have an impact on a digital preservation strategy. How an organization chooses to set up the conversion and migration processes (which format to employ, the level of control needed, and so on) largely influences its view of the record. At the time of the development of this International Standard, no single preferred preservation method had been identified. However, institutions recognize the benefit of standardized procedures; many test beds and task forces have been established to explore and research conversion, migration, emulation and refreshment, among other preservation procedures, to determine what should work best.

Conversion and migration represent separate approaches to preserving digital records. It is important to implement them in a managed way to prevent any degradation or loss in the authenticity, reliability, integrity and usability of the records, thus ensuring an "authoritative record" as described in ISO 15489-1:2001, 7.2.2 to 7.2.5. This International Standard outlines the program components, planning issues, recordkeeping requirements and procedures for performing the conversion and migration of digital records so as to preserve their authenticity, reliability, integrity and usability so that they continue to act as evidence of business transactions.

From the outset, note that it is not necessary to adopt all of the procedures recommended in this International Standard to ensure that records management requirements are met. The decision regarding which procedures to adopt depends on such factors as the type of conversion or migration to be performed and the level of risk the organization is willing to accept. In addition, organizations would be well advised to incorporate future planning for further conversion and/or migration of records among requirements for managing enterprise electronic recordkeeping systems.

Before starting a conversion or migration project, individuals designated as "key" to the process need to be aware of records management requirements. The term "recordkeeping criteria/requirements" in records and information management means an adherence to a set of principles that relate to record integrity, authenticity, reliability and usability. Adherence to these principles ensures that record content, context and structure are maintained and that a given record's standing as evidence of business activity is not compromised. The principles apply regardless of how long the record is retained.

This International Standard does not specifically address conversions and migrations as a routine, ongoing business-as-usual work.

Information and documentation — Digital records conversion and migration process

1 Scope

This International Standard specifies the planning issues, requirements and procedures for the conversion and/or migration of digital records (which includes digital objects plus metadata) in order to preserve the authenticity, reliability, integrity and usability of such records as evidence of business transactions. These digital records can be active or residing in a repository.

These procedures do not comprehensively cover:

— backup systems;

— preservation of digital records;

— functionality of trusted digital repositories;

— the process of converting analogue formats to digital formats and vice versa.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 15489-1, *Information and documentation — Records management — Part 1: General*

ISO 23081-2, *Information and documentation — Managing metadata for records — Part 2: Conceptual and implementation issues*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 15489-1 and the following apply.

3.1
access
right, opportunity, means of finding, using, or retrieving information

[ISO 15489-1:2001, definition 3.1]

3.2
attribute
characteristic of an object or entity

NOTE   Adapted from ISO/IEC 11179-3:2003.

3.3
authenticity
record that can be proven to be what it purports to be, to have been created or sent by the person purported to have created or sent it, and to have been created or sent at the time purported

NOTE   This term is further described in ISO 15489-1:2001, 7.2.2.