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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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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

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

This second edition cancels and replaces the first edition (ISO 13008:2012), which has been technically revised.

The main changes are as follows:

— the terms and definitions have been updated;

— additional drivers for conversion/migration have been added;

— conversion and migration requirements have been clarified;

— the Bibliography has been updated.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document 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.

Due to the rapid pace of technological change, and digital preservation requirements, 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. While this document 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. There is no single, one-size-fits-all preservation method. 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 works 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 15489-1:2016, 5.2.2. This document outlines the program components, planning issues, records management 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. In cases where conversion and migration are carried out at the same time, all requirements and guidance in this document apply.

From the outset, note that it is not necessary to adopt all of the procedures recommended in this document 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 electronic document and records management systems (EDRMS)".

Before starting a conversion or migration project, individuals designated as "key" to the process need to be aware of records management requirements. The term "records management criteria/requirements" in records and information management means an adherence to a set of principles that relate to record integrity, authenticity, reliability and usability and, where appropriate, compliance with relevant legal and regulatory requirements. 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 document is applicable for both ad hoc conversion or migration projects as well as programs for regular and ongoing conversion or migration.