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Systems and software engineering — Content management for product life-cycle, user and service management documentation

Ingénierie des systèmes et du logiciel — Gestion de contenu relatif a la documentation du cycle de vie du produit, de l'utilisateur, et de la gestion de service



ISO/IEC/IEEE 26531:2015(E)

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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.

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

The main task of ISO/IEC JTC 1 is to prepare International Standards. 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.

Attention is called to the possibility that implementation of this standard may require the use of subject matter covered by patent rights. By publication of this standard, no position is taken with respect to the existence or validity of any patent rights in connection therewith. ISO/IEEE is not responsible for identifying essential patents or patent claims for which a license may be required, for conducting inquiries into the legal validity or scope of patents or patent claims or determining whether any licensing terms or conditions provided in connection with submission of a Letter of Assurance or a Patent Statement and Licensing Declaration Form, if any, or in any licensing agreements are reasonable or non-discriminatory. Users of this standard are expressly advised that determination of the validity of any patent rights, and the risk of infringement of such rights, is entirely their own responsibility. Further information may be obtained from ISO or the IEEE Standards Association.

ISO/IEC/IEEE 26531 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information Technology*, Subcommittee SC 7, *Systems and Software Engineering* in cooperation with the Systems and Software Engineering Standards Committee of the IEEE Computer Society, under the Partner Standards Development Organization cooperation agreement between ISO and IEEE.

Introduction

This International Standard was developed to assist users of ISO/IEC/IEEE 15288:2008, Systems and software engineering – System life cycle processes, ISO/IEC/IEEE 12207:2008, Systems and software engineering – Software life cycle processes, or ISO/IEC 20000-1:2011 (IEEE Std 20000-1-2013), Information technology – Service management – Part 1: Service management system requirements, in the management of the content used in product life-cycle, user, and service management documentation. The accurate description of the requirements for content management helps documentation meet the needs of its users and be efficiently produced.

This International Standard is independent of the software tools that may be used to manage documentation content and applies to both printed documentation and on-screen documentation.

Content management allows an organization to control the storage and retrieval of content objects, track content revisions, maintain a content audit trail, and enable a collaborative environment. Component content management supports the reuse of content objects among deliverables and supports multiple deliverable formats.

A consequence of content management is increased collaboration on content development across the enterprise. Technical authors, instructional designers, support staff, and others may develop a body of content together that is written once and supports many needs.

Documentation is often regarded as something done after the software has been implemented. However, for high-quality software documentation, its development should be regarded as an integral part of the software life cycle. In fact, quality documentation or information management services are important enough to require specific planning.

This International Standard is consistent with ISO/IEC/IEEE 15288, System and Software Engineering – System life cycle processes, and ISO/IEC/IEEE 12207, Systems and software engineering – Software life cycle processes, as an implementation of the Information Management Process. This standard is not a management system standard.

This International Standard is intended for use in all types of organizations, whether they have a dedicated documentation department or not. It may be used as a basis for local standards and procedures. Readers are assumed to have experience or knowledge of general processes for information management, project management, and document development.

This International Standard is intended for managing technical content which is included in:

- User information such as topic collections, manuals, guides, multimedia, user assistance displayed with software, style guides, and other content that supports the effective use of a system or software product.
- Product life cycle information such as design documents, use cases, personas, project management plans, feature requests, and testing plans.
- Service management items such as service level agreements, records, policies, procedures, and other documents.

The order of clauses in this International Standard does not imply that the content management activities should be performed in this order, nor that documentation should be developed in this order or presented to the organization in this order.

In each clause, the requirements are independent of media and document creation and management specifications.

Systems and software engineering — Content management for product life-cycle, user and service management documentation

1 Scope

This standard states requirements for efficient development and management of content produced

- throughout the life-cycle of a system and software product;
- for the provision of user documentation for systems and software;
- for the management of IT services.

This standard is independent of the tools, protocols, and systems used for content management. It does not address configuration management of software assets.

The content to be managed with this standard includes

- user information such as topic collections, manuals, guides, embedded user assistance, style guides, videos and other media, and other content that supports the effective use of a system or software product;
- product life cycle information such as design documents, use cases, personas, project management plans, feature requests, models, scripts, testing plans, test scripts, defect reports;
- service management items such as service-level agreements, records, policies, procedures, and other documents.

The purpose of this standard is to define a process for content management and the requirements of a component content management system through which content is gathered, managed, and published, including the requirements of a system that is supported by an electronic database. Such a database should support documents or topics and content units that may be assembled to produce complete documents for print, electronic output, or content collections published through electronic media. This database is defined as a Component Content Management System (CCMS), which differs from a document management system. The objective of component content management is to create content objects once and use them through linking mechanisms in multiple output formats, including but not limited to documents.

The intended users of this International Standard are managers and developers of information (technical documentation) and acquirers and suppliers of content management systems. Any organization that develops content, regardless of size, can benefit from maintaining an effective content management solution and following best practices for the development and management of technical content.

Systems conforming to this standard can fulfill business needs for content development and management, especially the need for a single source of authoritative information. Content objects that are unique and are maintained as independent database objects are efficient to review, approve, and update; may be combined to produce multiple deliverables; and are cost-effective to translate.

This standard is not a management system standard.

The content management process presented in clauses 6 through 11 of this International Standard is a specialization (lower-level process) of the Information Management process required in ISO/IEC/IEEE 15288:2008 and ISO/IEC/IEEE 12207:2008.

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2 Conformance

This International Standard may be used as a conformance or a guidance document for projects and organizations claiming conformance to ISO/IEC/IEEE 15288:2008, Systems and software engineering – System life cycle processes, or ISO/IEC/IEEE 12207:2008 Systems and software engineering – Software life cycle processes.

Throughout this International Standard, "shall" is used to express a provision that is binding, "should" to express a recommendation among other possibilities, and "may" to indicate a course of action permissible within the limits of this International Standard.

Use of the nomenclature of this International Standard for the parts of documentation, such as topics, content units, modules, is not required to claim conformance.

This International Standard may be included or referenced in contracts or similar agreements when the parties (called the acquirer and the supplier) agree that the supplier will deliver services and systems in accordance with the standard. This International Standard may also be adopted as an in-house standard by a project or organization that decides to acquire documentation from another part of the organization in accordance with the standard.

3 Normative references

There are no Normative References applicable to this standard.