
**Information technology — Software
asset management —**

**Part 5:
Overview and vocabulary**

Technologies de l'information — Gestion de biens de logiciel —

Partie 5: Vue d'ensemble et vocabulaire

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ISO/IEC 19770-5:2013

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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.

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

The main task of the joint technical committee 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 drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 19770-5 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Software and systems engineering*.

ISO/IEC 19770 consists of the following parts, under the general title *Information technology — Software asset management*:

Part 1: Processes and tiered assessment of conformance

Part 2: Software identification tag [ISO/IEC 19770-5:2013](https://standards.iteh.ai/catalog/standards/sist/180b615a-36e9-40ad-8830-c0e4e0b0862/iso-iec-19770-5-2013)

Part 5: Overview and vocabulary <https://standards.iteh.ai/catalog/standards/sist/180b615a-36e9-40ad-8830-c0e4e0b0862/iso-iec-19770-5-2013>

The following parts are under preparation:

Part 3: Software entitlement tag

Part 7: Tag management

Guidelines for mapping of industry SAM practices with the ISO/IEC 19770 family of standards and *Guidelines for the application of ISO/IEC 19770-1 for small organizations* will form the subjects of future Parts 8 and 11, respectively.

0 Introduction

0.1 Overview

International Standards in the ISO/IEC 19770 family of standards for software asset management (SAM) address both the processes and technology for managing software assets and related IT assets. Because IT is an essential enabler for almost all activity in today's world, these standards must integrate tightly into all of IT. For example, from a process perspective, SAM standards must be able to be used with all Management System Standards, because software and software management are essential components of any modern Management System. From a technology perspective, SAM standards for information structures provide not only for data interoperability of software management data, but also provide the basis for many related benefits such as more effective security in the use of software. SAM standards for information structures also facilitate significant automation of IT functionality, such as improved authentication of software and linking to national vulnerability databases for more automated exposure identification and mitigation.

0.2 SAM family of standards

The ISO/IEC 19770 family of standards is intended to assist organizations of all types to implement and operate a software asset management system using both process and technology. The ISO/IEC 19770 family of standards consists of the parts listed in the Foreword.

NOTE ISO/IEC 19770-4, ISO/IEC 19770-6, ISO/IEC 19770-9 and ISO/IEC 19770-10 are either related to projects that have been withdrawn, or are reserved for future use.

0.3 Purpose of this part of ISO/IEC 19770

This part of ISO/IEC 19770 provides an overview of software asset management, which is the subject of the ISO/IEC 19770 family of standards, and defines related terms.

This part of ISO/IEC 19770 is divided into the following clauses:

- [Clause 1](#) is the scope;
- [Clause 2](#) describes the normative references;
- [Clause 3](#) describes the terms, definitions, symbols, and abbreviations used in this standard;
- [Clause 4](#) introduces software asset management, describes the alignment of SAM standards with other ISO and ISO/IEC standards, and defines principles of SAM processes and data structures;
- [Clause 5](#) gives an overview of the SAM standards family;

The terms and definitions provided in this part of ISO/IEC 19770:

- a) cover commonly used terms and definitions in the ISO/IEC 19770 family of standards;
- b) will not cover all terms and definitions applied within the ISO/IEC 19770 family of standards; and
- c) do not limit the ISO/IEC 19770 family of standards in defining terms for their own use.

To reflect the changing status of the SAM family of standards, this part of ISO/IEC 19770 is expected to be updated on a more frequent basis than would normally be the case for other ISO/IEC standards.

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Information technology — Software asset management —

Part 5: Overview and vocabulary

1 Scope

This part of ISO/IEC 19770 provides:

- a) an overview of the ISO/IEC 19770 family of standards;
- b) an introduction to software asset management (SAM);
- c) a brief description of the foundation principles and approaches on which SAM is based; and
- d) consistent terms and definitions for use throughout the ISO/IEC 19770 family of standards.

This part of ISO/IEC 19770 is applicable to all types of organization (e.g. commercial enterprises, government agencies, and non-profit organizations).

2 Normative references

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

2.1 Approved references

ISO/IEC/IEEE 24765, *Systems and software engineering — Vocabulary*¹⁾

2.2 References under development

ISO 55000, *Asset management — Overview, principles and terminology*²⁾

2.3 World Wide Web Consortium (W3C) references

Extensible Markup Language (XML) 1.1 (Second Edition), W3C Recommendation, <http://www.w3.org/TR/2008/REC-xml-20081126/>

XML Schema Definition Language (XSD) 1.1 Part 1: Structures, W3C Recommendation, <http://www.w3.org/TR/xmlschema11-1/>

XML Schema Definition Language (XSD) 1.1 Part 2: Datatypes, W3C Recommendation, <http://www.w3.org/TR/xmlschema11-2/>

2.4 Internet Engineering Task Force (IETF) references

RFC 1034, *Domain Names – Concepts and Facilities*, November 1987, <http://tools.ietf.org/html/rfc1034>

1) ISO/IEC/IEEE 24765 is a “snapshot” of the SEVOCAB (systems and software engineering vocabulary) database, which is available at: <http://www.computer.org/sevocab>

2) To be published.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply. The definitions are subdivided into functional groupings for ease of reference.

3.1 General terms and definitions

3.1.1

asset

something that has potential or actual value to an organization

Note 1 to entry: Value can be tangible or intangible, financial or non-financial, and includes consideration of risks and liabilities. It can be positive or negative at different stages of the asset's life.

Note 2 to entry: For most organizations, physical assets usually refer to equipment, inventory and properties owned by the organization. Physical assets are the opposite of intangible assets, which are non-physical assets such as leases, brands, digital assets, use rights, licences, intellectual property rights, reputation or agreements.

Note 3 to entry: A grouping of assets referred to as an asset system could also be considered as an asset.

[SOURCE: ISO 55000:—, 3.2.1]

3.1.2

asset management

coordinated activities of an organization to realize value from *assets* (3.1.1)

[SOURCE: ISO 55000:—, 3.3.1, modified — The Note has been deleted.]

3.1.3

baseline

formally approved version of a *configuration item* (3.2.1), regardless of media, formally designated and fixed at a specific time during the configuration item's life cycle

[SOURCE: ISO/IEC/IEEE 24765:2010, 3.240, definition 2]

3.1.4

bundle

grouping of products which is the result of a marketing/licensing strategy to sell entitlements to multiple products as one purchased item

Note 1 to entry: A bundle can be referred to as a "suite", if the products are closely related and typically integrated (such as an office suite containing a spreadsheet, word processor, presentation and other related items).

Note 2 to entry: Bundles can also refer to software titles that are less closely related such as a game, a virus scanner and a utility "bundled" together with a new computer, or to groups of entitlements, such as multiple entitlements for a backup software product.

3.1.5

computing device

functional unit that can perform substantial computations, including numerous arithmetic operations and logic operations with or without human intervention

Note 1 to entry: A computing device can consist of a stand-alone unit, or several interconnected units. It can also be a device that provides a specific set of functions, such as a phone or a personal organizer, or more general functions such as a laptop or desktop computer.

[SOURCE: ISO/IEC/IEEE 24765:2010, 3.513 (computer), modified — "with or" has been added to the definition.]

3.1.6**corporate board or equivalent body**

person or group of people who assumes legal responsibility for conducting or controlling an organization at the highest level

3.1.7**customer**

organization or person that receives a product or service

[SOURCE: ISO/IEC/IEEE 24765:2010, 3.696, definition 1]

3.1.8**end-user**

person or persons who will ultimately be using the system for its intended purpose

Note 1 to entry: In the ISO/IEC 19770 family of standards, an end user will generally be defined in terms of a specific *software component* (3.1.15) of a system.

[SOURCE: ISO/IEC/IEEE 24765:2010, 3.696 (end user), definition 1, modified — Note 1 to entry has been added.]

3.1.9**license compliance audit**

audit that reconciles license-related information from multiple information sources, such as entitlement consumption against entitlement rights

Note 1 to entry: For a formal definition of audit, see Annex SL of the ISO/IEC Directives, Part 1 and Consolidated ISO Supplement.

3.1.10**license model**

class of licenses with common characteristics

Note 1 to entry: Examples of license models can be site license, OEM License, and per-computer.

3.1.11**platform**

type of computer or hardware device and/or associated operating system, or a virtual environment, on which software can be installed or run

Note 1 to entry: A platform is distinct from the unique instances of that platform, which are typically referred to as devices or instances.

3.1.12**SAM program scope**

clear statement listing of all parts of the organization and types of software, assets, platforms, etc. covered by a SAM program

3.1.13**software**

all or part of the programs, procedures, rules, and associated documentation of an information processing system

Note 1 to entry: There are multiple definitions of software in use. For the purpose of this part of ISO/IEC 19770, it is typically important to include both executable and non-executable software, such as fonts, graphics, audio and video recordings, templates, dictionaries, documents and information structures such as database records.

[SOURCE: ISO/IEC/IEEE 24765:2010, 3.2741, definition 1, modified – Note 1 to entry has been added]

3.1.14
software asset management
SAM

control and protection of software and related assets within an organization, and control and protection of information about related assets which are needed in order to control and protect software assets

Note 1 to entry: For reference, a corresponding industry definition is “all of the infrastructure and processes necessary for the effective management, control and protection of the software assets within an organization, throughout all stages of their lifecycle”.

3.1.15
software component

entity with discrete structure, such as an assembly or software module, within a system considered at a particular level of analysis

Note 1 to entry: In this part of ISO/IEC 19770, software component refers to a part of a whole, such as a component of a software product, a component of a software identification tag, etc.

3.1.16
software consumer

entity that uses an *entitlement* (3.3.5) of a *software package* (3.1.21)

3.1.17
software creator

person or organization that creates a *software product* (3.1.23) or *package* (3.1.21)

Note 1 to entry: This entity might or might not own the rights to sell or distribute the software

3.1.18
software entitlement

software license use rights as defined through agreements between a *software licensor* (3.1.20) and a *software consumer* (3.1.16)

Note 1 to entry: Effective use rights take into account any contracts and all applicable licenses, including full licenses, upgrade licenses and maintenance agreements.

3.1.19
software license

legal rights to use software in accordance with terms and conditions specified by the *software licensor* (3.1.20)

Note 1 to entry: “Using a software product” can include: accessing, copying, distributing, installing and executing the software product, depending on the license’s terms and conditions.

3.1.20
software licensor

person or organization who holds the rights to issue a software license for a specific software package

3.1.21
software package

complete and documented set of *software* (3.1.13) supplied for a specific application or function

Note 1 to entry: In the ISO/IEC 19770 family of standards, the term software package refers to the set of files associated with a specific set of business functionalities that can be installed on a computing device and has a set of specific licensing requirements. In the ISO/IEC 19770 family of standards, the terms “software product” and “software package” are used synonymously depending on the context of the item described.

3.1.22**software packager**

entity that packages or bundles software created by others

Note 1 to entry: This can be done for example by a value added reseller who bundles a software package to work with an embedded system, or by a software reseller who is licensed to combine a number of different software products into a single bundle.

3.1.23**software product**

complete set of *software* (3.1.13) designed for delivery to a *software consumer* (3.1.16) or *end-user* (3.1.8) that may contain computer programs, procedures and associated documentation and data

Note 1 to entry: In the ISO/IEC 19770 family of standards, the terms “software product” and “software package” are used interchangeably depending on the context of the item described.

3.1.24**software usage**

consumption against a *software entitlement* (3.1.18) measured as defined by the terms and conditions of that entitlement

Note 1 to entry: Depending on the specific terms and conditions, usage can include accessing, copying, distributing, installing and executing software.

3.1.25**stock keeping unit****sku**

identification, usually alphanumeric, of a particular product that allows it to be tracked for inventory and *software entitlement* (3.1.18) purposes

Note 1 to entry: The term “stock keeping unit” is typically associated with unique products for sales purposes, such as software entitlements. It may not correspond uniquely to specific software products, but may instead represent packages of software, and/or specific terms and conditions related to software products such as whether it relates to a full product, upgrade product, or maintenance on an existing product.

3.2 Terms and definitions related to processes**3.2.1****configuration item****CI**

component of an infrastructure or an item which is or will be, under control of configuration management

Note 1 to entry: Configuration items may vary widely in complexity, size and type, ranging from an entire system including all hardware, software and documentation, to a single module or a minor hardware component.

Note 2 to entry: Configuration items are commonly defined as part of service management practice and may vary widely in complexity, size and type, ranging from an entire system including all hardware, software and documentation, to a single module or a minor hardware component.

[SOURCE: ISO/IEC/IEEE 24765:2010, 3.563, definition 3, modified — Note 2 to entry has been added]

3.2.2**definitive software library****DSL**

secure storage environment, formed of physical media or of one or more electronic software repositories, capable of control and protection of definitive authorized versions of all software *configuration items* (3.2.1) and masters of all software controlled by *SAM* (3.1.14)

3.2.3**local SAM owner**

individual at a level of the organization below that of the *SAM owner* (3.2.7) who is identified as being responsible for SAM for a defined part of the organization