

ISO/IEC 19770-1:2017 – Information technology – IT asset management – Part 1: IT asset management systems – Requirements

ISO/IEC 19770-1:2017 specifies the requirements for an IT asset management system (ITAMS), extending ISO 55001 with controls for software, licensing, and IT asset data.



What it is

ISO/IEC 19770-1:2017 specifies the requirements for the establishment, implementation, maintenance, and improvement of a management system for IT asset management (ITAM), referred to as an IT asset management system (ITAMS). It is a discipline-specific extension of ISO 55001:2014, the asset management system standard, adding the controls that IT assets and especially software require: control over software modification, duplication, and distribution, audit trails of authorizations and changes, licensing compliance, mixed ownership in cloud and bring-your-own-device settings, and reconciliation with financial systems.

At a glance

PUBLISHER International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC), ISO/IEC JTC 1/SC 7	TYPE Standard	VERSION Third edition (2017-12), with Amendment 1:2024
EFFECTIVE December 2017	DOMAIN IT Governance	FAMILY ISO Management Systems
REGION International	ADOPTION MODEL Certification	IMPLEMENTATION COMPLEXITY High

Source: <https://www.iso.org/standard/68531.html>

Why it matters

- **Control license and subscription cost** Requirements for entitlement records, reconciliation, and controls over duplication and distribution reduce under-licensing penalties and over-licensing waste.
- **Improve security through asset knowledge** Accurate, current IT asset data supports vulnerability management, patching, and the asset controls in ISO/IEC 27001 and ISO/IEC 27002.
- **Integrate with other management systems** The harmonized structure lets the ITAMS share context, leadership, planning, support, and improvement clauses with ISO/IEC 27001, ISO/IEC 20000-1, and ISO 9001.
- **Implement in stages** Three tiers, trustworthy data, life cycle integration, and optimization, give a defined path from basic inventory to optimized asset value.

How SmartSuite supports ISO/IEC 19770-1:2017

ITAMS Requirements Library Hold every clause requirement and Annex A process area as a structured record with owner, implementation status, and tier.	Ownership, Cadence, and Accountability Assign asset owners and process owners, schedule reconciliations, internal audits, and management reviews, and track them to completion.	Evidence Collection and Audit Trail Record inventories, entitlement documents, reconciliations, authorizations, and changes to IT assets with timestamps and reviewers.
Internal Audit and Conformance Testing Plan audits against the requirements and tiers, document findings and nonconformities, and follow corrective actions to closure.	Risk and Vendor Alignment Connect IT asset risks, software publishers, and contracts to the assets, licenses, and process areas they affect.	Certification and Management Reporting Generate views of license position, tier progress, open nonconformities, and audit readiness for management review and certification bodies.

Common framework mappings

ISO/IEC 19770-5:2015

ISO/IEC 20000-1

ISO 27001:2022

ISO 27002:2022

ISO 9001:2026

ITIL 4

COBIT 2019

ISO/IEC 27036

Official resources

ISO/IEC 19770-1:2017 catalogue page The ISO catalogue entry for Part 1, with status, edition, committee, amendment, and purchase and preview options. iso.org/standard/68531.html	ISO/IEC 19770-1:2017 preview on the Online Browsing Platform ISO's read-only preview of the standard's foreword, introduction, scope, and terms. iso.org/obp/ui/en/#iso:std:iso-iec:19770:-1:ed-3:v1:en
ISO/IEC JTC 1/SC 7 flagship standard: ISO/IEC 19770-1:2017 The responsible ISO committee's description of the standard, its process areas, tiers, and joint use with ISO/IEC 27001 and ISO/IEC 20000-1. committee.iso.org/sites/jtc1sc7/home/projects/flagship-standards/isoiec-19770-12017.html	ISO/IEC 19770-1:2017 document preview (iTeh Standards) A sample of the published text showing the foreword, introduction, and Clause 1 scope, field of application, and limitations. standards.iteh.ai/catalog/standards/iso/a6bad394-a706-4431-baf7-81fc420b6124/iso-iec-19770-1-2017

Frequently asked questions

- What is ISO/IEC 19770-1:2017?**

ISO/IEC 19770-1:2017 is the international standard that specifies requirements for an IT asset management system (ITAMS): a management system for establishing, implementing, maintaining, and improving IT asset management. It is the third edition of Part 1 of the ISO/IEC 19770 series and the part organizations implement and can be certified against.
- How does ISO/IEC 19770-1 relate to ISO 55001?**

It is a discipline-specific extension of ISO 55001:2014, the asset management system standard, with changes. It adds the requirements that IT assets and particularly software need, such as controls over software duplication and distribution, audit trails, licensing compliance, mixed ownership in cloud and BYOD environments, and reconciliation with financial systems. Conformance to ISO/IEC 19770-1 does not imply conformance to ISO 55001.

What are the three tiers in ISO/IEC 19770-1?

Annex B optionally groups process objectives into three tiers: trustworthy data, which establishes accurate inventory and entitlement information and is the most important tier for most organizations; life cycle integration, which embeds ITAM in acquisition, deployment, change, and disposal processes; and optimization, which uses the data to optimize cost, risk, and value.

What changed between the 2012 and 2017 editions of ISO/IEC 19770-1?

The 2012 second edition defined SAM processes and a tiered assessment of conformance. The 2017 third edition cancels and replaces it and was technically revised into a management system standard using the harmonized structure of Clauses 4 to 10, so that it can be integrated with ISO/IEC 27001, ISO/IEC 20000-1, and ISO 9001 and certified in the same way.

Which assets does ISO/IEC 19770-1 cover?

All IT assets: hardware, executable software such as applications and operating systems, and non-executable software such as fonts and configuration information, in every environment from on-premises to virtualized and software-as-a-service. It does not cover information as an asset independent of hardware and software, and it does not set financial or technical requirements for specific asset types.

Can an organization be certified to ISO/IEC 19770-1?

Yes. As a management system standard, ISO/IEC 19770-1:2017 can be audited by an accredited certification body, and the standard states that it can be used by internal and external parties to assess an organization's ability to meet its own IT asset management requirements. Certification is voluntary.

How does ISO/IEC 19770-1 fit with ISO/IEC 27001 and ITIL 4?

ISO/IEC JTC 1 designed it to be implemented jointly with ISO/IEC 27001 and ISO/IEC 20000-1, sharing the harmonized clause structure, and its asset inventory and licensing controls support the asset management controls of ISO/IEC 27002. ITIL 4's IT asset management practice describes the same activities as guidance rather than requirements.

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Full framework page and mappings: smartsuite.com/frameworks/iso-iec-19770-1-2017-it-asset-management-systems-requirements