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**Information Technology**

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## ISO/IEC JTC1/SC7 N4086

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<b>Source</b>	WG21
<b>Project</b>	<b>19770-3</b>
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## New Work Item Proposal

June 2008

### PROPOSAL FOR A NEW WORK ITEM

Date of presentation of proposal: 2008-07-14	Proposer: ISO/IEC JTC1 / SC7 / WG21 Convenor: David Bicket
Secretariat: Standards Council of Canada (SCC) National Body: Canada	<b>ISO/IEC JTC 1 N XXXX</b> ISO/IEC JTC 1/SC 07 N4086

**A proposal for a new work item** shall be submitted to the secretariat of the ISO/IEC joint technical committee concerned with a copy to the ISO Central Secretariat.

#### Presentation of the proposal.

<b>Title: ISO/IEC 19770-3 Information technology -- Software asset management -- Part 3: Software entitlement tag</b>
Scope (and field of application)  The scope of the proposed standard is information to facilitate the identification of software entitlement, including for reconciliation with software inventory. This is to be vendor-independent, across all platforms (eg Windows, Unix, Linux, Macintosh).
<b>Purpose and justification</b>  Standardization of how software licensing entitlements are documented electronically will facilitate the management and control of licensing, and also facilitate reconciliation of installed software with licensing entitlements  Furthermore, the software entitlement tag will complement the software identification tag which is covered by the proposed ISO/IEC 19770-2, allowing the software industry to implement both, in similar ways.  Numerous industry organizations are already supporting this effort, such as Adobe, Eracent, CA, Centennial Software, Sassafras, Managesoft, and Symantec.
<b>Programme of work</b>  If the proposed new work item is approved, which of the following document(s) is (are) expected to be developed? <input checked="" type="checkbox"/> a single International Standard (part 3 of 19770) <input type="checkbox"/> more than one International Standard (expected number: ..... ) <input type="checkbox"/> a multi-part International Standard consisting of ..... parts <input type="checkbox"/> an amendment or amendments to the following International Standard(s) ..... <input type="checkbox"/> a technical report , type .....  And which standard development track is recommended for the approved new work item? <input type="checkbox"/> a. Default Timeframe <input checked="" type="checkbox"/> b. Accelerated Timeframe <input type="checkbox"/> c. Extended Timeframe

**Relevant documents to be considered**

- ISO/IEC 19770-1:2006
- ISO/IEC 19770-2 (in development – approved for combined CD registration and FCD vote)

**Co-operation and liaison**

- With WG21 mirror groups at national levels, in particular in Sweden (SIS TK303/AG1) and in the UK (BSI IST/15/-/9).
- With the itSMF (SC7 Category A liaison), and with the International Association of IT Asset Managers (proposed WG21 Category C liaison)

**Preparatory work offered with target date(s):**

- See attached introduction and table of contents from document which is already well into development.

**Signature:** David Bicket, Convenor, WG21

Will the service of a maintenance agency or registration authority be required? .no.....

- If yes, have you identified a potential candidate? .....

- If yes, indicate name .....

Are there any known requirements for coding? .The tag is to be in XML, for which an XSD is required which can be held on the ISO website as already confirmed. (<http://standards.iso.org/iso/19770/>)

Existing international standards will be referred to where applicable.

-If yes, please specify on a separate page

Does the proposed standard concern known patented items? .no.....

- If yes, please provide full information in an annex

**Comments and recommendations of the JTC 1 or SC7 Secretariat** - attach a separate page as an annex, if necessary**Comments with respect to the proposal in general, and recommendations thereon:**

It is proposed to assign this new item to JTC 1/SC 7

**Voting on the proposal** - Each P-member of the ISO/IEC joint technical committee has an obligation to vote within the time limits laid down (normally three months after the date of circulation).**Date of circulation:**

2008-07-14

**Closing date for voting:**

2008-10-14

**Signature of Secretary:**

W. Suryn

<b>NEW WORK ITEM PROPOSAL - PROJECT ACCEPTANCE CRITERIA</b>		NP:Acceptance criteria
<b>Criterion</b>	<b>Validity</b>	<b>Explanation</b>
<b>A. Business Requirement</b>		

A.1 Market Requirement	Essential <input checked="" type="checkbox"/> Desirable ____ Supportive ____	Numerous industry organizations are already supporting this effort, such as Adobe, Eracent, CA, Centennial Software, Sassafras Managesoft, and Symantec.
A.2 Regulatory Context	Essential ____ Desirable ____ Supportive ____ Not Relevant x__	
<b>B. Related Work</b>		
B.1 Completion/Maintenance of current standards	Yes <input checked="" type="checkbox"/> No ____	ISO/IEC 19770-2 which has been approved for joint CD registration and FCD ballot refers to this proposed standard ISO/IEC 19770-3.
B.2 Commitment to other organisation	Yes ____ No <input checked="" type="checkbox"/>	
B.3 Other Source of standards	Yes <input checked="" type="checkbox"/> No ____	W3C for XML related standards
<b>C. Technical Status</b>		
C.1 Mature Technology	Yes ____ No <input checked="" type="checkbox"/>	The technology solutions for entitlements management are limited. This standard will allow this market to grow.
C.2 Prospective Technology	Yes ____ No <input checked="" type="checkbox"/>	The scope of this standard has been limited to avoid many quickly evolving areas, such as for execution control.
C.3 Models/Tools	Yes ____ No <input checked="" type="checkbox"/>	Model
<b>D. Conformity Assessment and Interoperability</b>		Conformity (to standards) and Interoperability
D.1 Conformity Assessment	Yes <input checked="" type="checkbox"/> No ____	Although conformity assessments are not an immediate objective, they are a possibility in the future.

D.2 Interoperability	Yes <input checked="" type="checkbox"/> X___ No___	One of the objectives of the standard is to apply across all platforms.
E. Cultural and Linguistic Adaptability	Yes___ No___X___	
F. Other Justification		

## **Notes to Proforma**

**A. Business Relevance.** That which identifies market place relevance in terms of what problem is being solved and or need being addressed.

A.1 Market Requirement. When submitting a NP, the proposer shall identify the nature of the Market Requirement, assessing the extent to which it is essential, desirable or merely supportive of some other project.

A.2 Technical Regulation. If a Regulatory requirement is deemed to exist - e.g. for an area of public concern e.g. Information Security, Data protection, potentially leading to regulatory/public interest action based on the use of this voluntary international standard - the proposer shall identify this here.

**B. Related Work.** Aspects of the relationship of this NP to other areas of standardisation work shall be identified in this section.

B.1 Competition/Maintenance. If this NP is concerned with completing or maintaining existing standards, those concerned shall be identified here.

B.2 External Commitment. Groups, bodies, or fora external to JTC 1 to which a commitment has been made by JTC for Co-operation and or collaboration on this NP shall be identified here.

B.3 External Std/Specification. If other activities creating standards or specifications in this topic area are known to exist or be planned, and which might be available to JTC 1 as PAS, they shall be identified here.

**C. Technical Status.** The proposer shall indicate here an assessment of the extent to which the proposed standard is supported by current technology.

C.1 Mature Technology. Indicate here the extent to which the technology is reasonably stable and ripe for standardisation.

C.2 Prospective Technology. If the NP is anticipatory in nature based on expected or forecasted need, this shall be indicated here.

C.3 Models/Tools. If the NP relates to the creation of supportive reference models or tools, this shall be indicated here.

## **D. Conformity Assessment and Interoperability**

D.1 Indicate here if Conformity Assessment is relevant to your project. If so, indicate how it is addressed in your project plan.

D.2 Indicate here if Interoperability is relevant to your project. If so, indicate how it is addressed in your project plan

**E. Cultural and Linguistic Adaptability** Indicate here if cultural and linguistic adaptability is applicable to your project. If so, indicate how it is addressed in your project plan.

**F. Other Justification** Any other aspects of background information justifying this NP shall be indicated here

**Attachment:**

**Introduction, Table of Contents and Bibliography from  
Proposed ISO/IEC 19770-3 Software entitlement tag**



# Information technology — Software asset management — Part 3: Software entitlement tag

## Introduction

This part of ISO/IEC 19770 provides a software asset management (SAM) data standard for software licensing entitlements. Entitlements tags provide authoritative licensing information for software configuration items specified in ISO/IEC 19770-2 (paragraph 3.2). This document is intended to be sufficiently supported and implemented by software manufacturers, modifiers and users alike to ensure the viability of conformance.

Standardization of software licensing entitlements provides uniform, measurable data for the license compliance processes of SAM practice, making it possible to optimize reconciliation of installed software with licensing entitlements. Standardization will benefit all parties involved in software asset management:

- a) Software entitlement tag creators. These include software manufacturers, publishers and line of business application developers. This group must continually update various software licensing models to adjust to market demands. Benefits of standardization in software entitlement tagging practices for software entitlement tag creators include, but are not limited to, the following:
  - a. Improved customer adaptability to shifts in software licensing models, terms and conditions.
  - b. Immediate end-installation recognition of details pertaining to software licensing.
  - c. Ability to specify details to software entitlements tag consumers that allow installed software configuration items to be measured and reported for license compliance purposes.
  - d. Increased awareness of software license compliance issues on the part of software entitlement tag consumers.
  - e. Improved customer relationships through fewer, quicker and more effective license compliance audits.
- b) Software entitlement tag managers. These include SAM tool providers, deployment tool providers, re-sellers, value-added re-sellers, re-publishers, packagers and release managers. Benefits of standardization in software entitlement tagging practices for software entitlement tag managers include, but are not limited to, the following:
  - a. Receipt of consistent and uniform data from software entitlement tag creators.
  - b. Enhanced power to ensure delivery of consistent license allocation and metrics data and to determine need for remediation of software licensing.
  - c. Improved reporting from additional categorization made possible by the use of software entitlement tags.
  - d. Improved tool reconciliation capabilities resulting from standardization in location and format of software entitlement tag data.
  - e. Improved tool capabilities to differentiate licensed from unlicensed software.

- f. Ability to deliver value-added functionality for compliance management, such as launch controls, through the consumption of entitlement data. (Although launch controls are out of scope for this part of ISO/IEC 19770, there will be sufficient data available in the entitlement record for tool vendors to provide value-added functionality).
- c) Software entitlement tag consumers. These include SAM owners, SAM practitioners, IT support professionals and end users of a given software configuration item. Benefits from standardization in software entitlement tagging practices for software entitlement tag consumers include, but are not limited to, the following:
  - a. Receipt of consistent and uniform data from software entitlement tag creators and entitlement tag managers.
  - b. Enhanced power to ensure delivery of consistent license allocation and metrics data and to determine need for remediation of software licensing.
  - c. Improved reporting from additional categorization made possible by the use of software entitlement tags.
  - d. Improved SAM and software license compliance capabilities stemming from standardized, manufacturer-supplied, easily reconcilable software tags and entitlement tags.
  - e. Improved ability to avoid software licensing under- or over-procurement with subsequent cost reductions.
  - f. Standardized software entitlement tag usage across multiple platforms, rendering heterogeneous computing environments more consistent and manageable.
  - g. Improved and more efficient communications between desktop management, purchasing and asset management roles through standardization of fields and data.

# **1 Scope**

## **1.1 Purpose**

## **1.2 Field of application**

## **1.3 Limitations**

# **2 Conformance**

## **2.1 Conformance Scope**

## **2.2 Organizational Conformance**

### **2.2.1 Organizational Scope**

### **2.2.2 Software provider conformance**

### **2.2.3 Tag tool provider conformance**

### **2.2.4 Software consumer conformance**

## **2.3 Product Conformance**

### **2.3.1 Product Scope**

### **2.3.2 Platform provider conformance**

### **2.3.3 Tag tool provider conformance**

## **2.4 Agreement compliance**

# **3 Terms and definitions**

## **3.1**

Term to be defined

# **4 Alignment and rationalization with prior standards**

## **4.1 Statement of alignment for this part of ISO/IEC 19770**

## **4.2 Alignment with ISO/IEC 19770-1:2006 specification**

## **4.3 Alignment with ISO/IEC 19770-2:2008 specification**

## **4.4 Alignment with ISO/IEC 20000-1:2005 specifications**

## **4.5 Alignment with ISO/IEC 20000-2:2005 specifications**

# **5 Implementation of entitlement data**

## **5.1 SAM Process**

**5.1.1 Software discovery**

**5.1.2 Entitlement data**

**5.1.3 Reconciliation of software discovery and entitlement data**

## **6 Requirements of electronic entitlement tags**

### **6.1 General guidelines**

**6.1.1 Consistency among data types and values**

**6.1.2 Measurable data**

**6.1.3 Relationship and use with software tagging practices (ISO/IEC 19770-2:2008)**

**6.1.4 Entitlement types**

**6.1.5 Software entitlement tag installation and location**

**6.1.6 Unique identifiers**

**6.1.7 Unique software entitlement tag file name**

**6.1.8 Authenticity of entitlement tags**

### **6.2 Capturing entitlement data**

**6.2.1 Capturing hardware information**

**6.2.2 Capturing general system information**

**6.2.3 Capturing software information**

### **6.3 Software entitlement tag life cycle: operational breakdown**

**6.3.1 Software entitlement tag creators**

**6.3.2 Software entitlement tag managers (SAM tools)**

**6.3.3 Software entitlement tag end users**

**6.3.4 Entitlement tags for COTS software**

**6.3.5 Entitlement tags for volume purchased software**

## **7 Entitlement metrics**

### **7.1 General**

### **7.2 Entitlement tag elements**

**7.2.1 Mandatory entitlement tag elements**

**7.2.2 Optional entitlement tag elements**

**7.2.3 Extended entitlement tag elements**

## **8 Platform recommendations**

**8.1 Types of platforms**

**8.2 Basic platform data**

**8.3 Capturing entitlement data**

**8.4 Virtual environments**

**8.5 Virtual computers**

**Annex A**  
(Informative)  
**Guidance for roles and use cases**

**A.1 Software manufacturers and providers**

**A.1.1 Roles Involved in the software entitlement tag creation/management**

**A.1.2 Product manager role**

**A.1.3 Development manager/engineer**

**A.1.4 Manufacturers and providers with electronic licensing infrastructure**

**A.1.5 Manufactures and providers without electronic licensing infrastructure**

## **Annex B**

### **(Informative)**

## **SAM Tool providers**

### **B.1 Discovery tool/License management tool vendors**

#### **B.1.1 General**

#### **B.1.2 Primary use cases**

#### **B.1.3 Secondary use cases**

#### **B.1.4 Entitlement tracking**

##### **B.1.4.1 Management of entitlement tracking via electronic entitlement tracking tool**

###### **B.1.4.1.1 Installation based tracking**

###### **B.1.4.1.2 On-demand usage tracking**

###### **B.1.4.1.3 Usage based tracking**

#### **B.1.5 Distribution tool vendors**

**Annex C**  
(Informative)  
**Distributors, re-packagers and re-sellers use cases and  
guidance**

**C.1 Distribution, re-packaging and re-selling use cases**

**C.2 Distributor software entitlement tag data creation and modification**



## **Annex D**

### **(Informative)**

# **Entitlement tag data end users use cases and guidance**

## **D.1 Overview**

## **D.2 Software entitlement data**

## **D.3 Definition of roles**

## **D.4 Scenario: external audit response**

## **D.5 Scenario: product requisition and fulfillment**

## **D.6 Scenario: entitlement discovery and reconciliation**

### **D.6.1 Objectives**

### **D.6.2 Functional roles<sup>1</sup> involved**

### **D.6.3 Requirements<sup>2</sup>**

### **D.6.4 Challenges**

## **D.7 Scenario: electronic software distribution**

### **D.7.1 Objectives**

### **D.7.2 Functional roles involved**

### **D.7.3 Requirements**

### **D.7.4 Challenges**

## **D.8 Scenario: migration planning**

### **D.8.1 Objectives**

### **D.8.2 Functional roles involved**

### **D.8.3 Requirements**

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<sup>1</sup> Brief descriptions of these roles are provided in section D.3 of this document. These lists are not exhaustive and may not include all roles that would be involved.

<sup>2</sup> Not all data requirements listed for the Use Case are necessarily expected to be obtained from the entitlement tag.

#### **D.8.4 Challenges**

### **D.9 Scenario: patch management**

#### **D.9.1 Objectives**

#### **D.9.2 Functional roles involved**

#### **D.9.3 Requirements**

#### **D.9.4 Challenges**

**Annex E**  
(Normative)  
**XML schema definition (XSD)**

## **Annex F**

(Informative)

### **Extended examples**

#### **F.1 General**

#### **F.2 Scope**

#### **F.3 Pseudo code**

##### **F.3.1 Metrics**

##### **F.3.2 Examples**

###### **F.3.2.1 Example 1 – Per use**

###### **F.3.2.2 Example 2 – Shared use on a network**

###### **F.3.2.3 Example 3 – Client Access Licenses (CAL's)**

###### **F.3.2.4 Example 4 – CPU based**

###### **F.3.2.5 Example 5 – Software tag values**

## Bibliography

- [1] *ISO/IEC 19770-1:2006, Information technology — Software asset management — Part 1: Processes*
- [2] *ISO/IEC 19770-2:2008, Information technology – Software asset management – Part 2: Software Tag*
- [3] *ISO/IEC 20000-1:2005, Information technology service management, Part 1: Specification for information technology service management*
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- [7] *IETF RFC 4646, Tags for Identifying Languages*
- [8] *IETF RFC 4647, Matching of Language Types*
- [9] *W3C Recommendation, XML-Signature Syntax and Processing*
- [10] *W3C NOTE, Date and Time Formats*
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