

# Bringing Order to Software Asset Management



ITAK Columnist

*Steve Klos*

*Founder and Managing Partner*

*Agnitio Advisors*

*John Tomeny*

*Director of Marketing & Customer Support*

*Sassafras Software Inc.*

There has been much discussion in the last two years about the development of the first international standards for software identification tags and software entitlements tags (ISO/IEC 19770-2 and ISO/IEC 19770-3). But much of the discussion has been in the form of questions or anticipation of what is to come. As work on 19770-2 has neared completion and the officially sponsored work on 19770-3 is about to begin, greater clarity on these two standards has come into view.

But since authoritative information on the standards has often been scarce, some industry participants have continued to ask: “Why does the SAM industry need these standards?”. The answer is: simple and accurate identification of software, and automated reconciliation with licensing entitlements.

Derick Snyder, one of the contributors of the early “dash-3” effort and former Program Manager for of Microsoft’s Software Protection Platform, wrote in a 2007 report that software asset management is based on ‘discovery by archeology’. The focus of 19770-2 and 19770-3 is aimed squarely at that problem.

## ISO/IEC 19770-2 - Software Identification Tag

Software tagging is the process by which a file is made to contain identifying information for “software

configuration items” (installed software). The standard is intended to be sufficiently supported and implemented by software manufacturers, “modifiers” (resellers and delivery chain participants) and owners alike to ensure the viability of conformance. Standardized digital software identification tags will ease software asset discovery and management, making SAM practice more efficient, consistent and straightforward.

## ISO/IEC 19770-3 - Software Entitlement Tag

Electronic entitlement (software licensing rights) discovery is non-existent today. There is no standard for definition and automatic discovery of software license entitlement. Entitlement data is most commonly found in printed documents - purchase orders, invoices, purchase receipts.

ISO/IEC 19770-3 will create specifications for how entitlements should be defined so SAM can be optimized through automated reconciliation against 19770-2 tag data. Standardization of digital definitions for software licensing entitlements will provide uniform, measurable data for the license compliance processes of SAM practice, making it possible to optimize reconciliation of installed software with licensing entitlements.

It is important to note that software licensing entitlements themselves will

not be standardized. Software manufacturers will not be forced into using limited and specific licensing models in order to adopt the 19770-3 standard. Instead, it is the digital “language” that defines software licensing that is being standardized.

## The history that has brought us here:

In the roughly 20 years since the first organized efforts for SAM began to emerge from haphazard IT management practices, there have been vast improvements in the functionality of SAM tools. We have gone from the early days of simple metering to sophisticated electronic management of multiple licensing models. We have created and refined audit, discovery and reconciliation processes that only a few people even envisioned just a decade ago.

Yet the two most important technology improvements necessary for effective SAM and license management do not yet exist: accurate electronic discovery of 1. installed software products, and 2. software license entitlements.

The old teaching mantra coined by George Fuechsel, IBM technician/Instructor, is fitting here: “Garbage In, Garbage out”. As long as software and entitlements discovery remain archeological digs, SAM practices will be arduous. Software manufacturers have been slow to catch up with SAM practices in the industry, and especially slow at delivering accurate, discoverable identification data.

Traditional discovery and software identification utilities typically rely on specific file details such as filename, files sizes, MD5 calculations, etc. This information may be augmented by details from the add-remove or MSI data repositories. However, this level of information is not enough to do a complete job of software asset identification. There is a lot of information that discovery tools simply cannot collect including:

- Applications can look like they’ve

been installed as stand-alone, when in fact they are installed as part of a product suite

- Installed applications may be upgraded versions, in which case it is important to know what the original application was that was upgraded
- Applications may have changed product or manufacturer names due to acquisitions or divestitures. In this case it's important to know the relationships between different manufacturer names.

By capturing the information in ISO/IEC 19770-2 Software Identification Tags, the discovery agent will be able to provide all this information and more. The 19770-2 Software Identification Tag allows the discovery agent, and by extension the SAM tool and/or SAM practitioner with the detailed information required to enable automated or nearly automated reconciliation of discovered software with specified license entitlement information. Entitlements (software licensing rights) will become electronically discoverable with the adoption of the proposed ISO/IEC 19770-3 Software Entitlement Tag.

The “dash-2” standard is already being put into production at two major commercial off-the-shelf (COTS) software manufacturers. In fact, Adobe Systems has already announced the availability of Adobe Acrobat 9 – the first product to utilize ISO/IEC 19770-2 software identification tags. These software manufacturers are providing software tags in their product offerings in order to help SAM tool providers and SAM practitioners with the accurate identification of software assets installed in their environments. More information on these manufactures will be forthcoming in press-releases and through IAITAM news updates.

With the addition of these software tags, SAM practitioners will finally get the clean data they need to accurately assign discovered software products with the correct license entitlements to ensure they are in compliance with legal

agreements.

**The road ahead:**

In May this year, the ISO/IEC 19770-2 working group, convened by Steven Klos, submitted its Final Committee Draft (FCD) of the proposed standard for software identification tags. This is a major step forward toward bringing order to accurate identification of software assets.

The 19770-2 FCD will now proceed through the international voting process that all ISO standards undergo. While the standard is moving through this voting process, as I mentioned earlier, some software manufacturers are already adopting it to help make their software products more manageable.

Also in May this year, a New Work Item Proposal (NWIP) was submitted to ISO by “WG21” (Working Group 21) to begin work on ISO/IEC 19770-3. John Tomeny was named as Convener of the 19770-3 working group. John plans to convene the group and begin work on “dash-3” as soon as the NWIP is approved.

Steve Klos and John Tomeny will offer a detailed presentation of the ISO SAM Standards work at this year’s IAITAM Annual Conference in Marco Island, Florida.

**Deciphering the maze of acronyms:**

ISO, the International Organization for Standardization, is the world’s largest developer and publisher of international standards. It is a network of the national standards institutes of 157 countries, one member per country, with a Central Secretariat in Geneva, Switzerland, that coordinates the system. See: <http://www.iso.org/>

IEC, the International Electrotechnical Commission, is the international standards and conformity assessment body for all fields of electrotechnology. See: <http://www.iec.ch/>

JTC1, the Joint Technical Committee 1, was formed by ISO and IEC to encourage cooperation between the two organizations in technology standards to which they both hold interest.

WG21, Working Group 21, is the group under the JTC1 that is responsible for development of international SAM standards.

If you would like to participate in the upcoming work of ISO/IEC 19770-3, or simply receive public notices of its progress, you may contact John at [john@sassafras.com](mailto:john@sassafras.com). Important: in order for your email to safely make the trip through spam filters, please include the acronym “ITAK” in the subject of your message.

