

Information Security Updates

Software Asset Management

Issue 6

Related Article

BSA Sri Lanka Encourages Corporates to Implement SAM

The fast increasing reliance of businesses on software has introduced a new dimension of critical importance - Software Asset Management or SAM. It is through prudent management of software as an 'asset' that companies can maximise on their software and ensure reliability, efficiency, accuracy and compliancy of their operations. While software inventory and tracking are integral parts of SAM, so are the policies, procedures, technologies, procurement, delivery, deployment, and support of a company's software assets.

(http://www.biz.lk/biz/Businessnews/results.asp?key_c=3935)

Standard Update

ISO/IEC 19770-1:2006 Software asset management

ISO/IEC 19770-1:2006 has been developed to enable an organisation to prove that it is performing software asset management (SAM) to a standard sufficient to satisfy corporate governance requirements and ensure effective support for IT service management overall. ISO/IEC 19770-1:2006 is intended to align closely to, and to support, ISO/IEC 20000.

(http://www.iso.org/iso/catalogue_detail?csnumber=33908)

I. Background

Industry Story

University of Kentucky Research Group Controls Costs with Centralised IT Management Software

The University of Kentucky's Research Information Services group, which serves a 300-plus staff of research administrators facilitating \$300 million in university grants, has realised dramatic savings by consolidating from five network support software tools to a single system.

Administrative tasks handled by the new software suite include inventory management, software updates and patches, and new application deployments, which used to take weeks to complete when a technician must be on site to manually perform the maintenance.

See the article:

(<http://campustechnology.com/articles/2009/12/10/u-kentucky-research-group-controls-costs-with-centralized-it-management-software.aspx>)

Software Asset Management (SAM)

SAM is an organisational practice designed to manage and optimise the purchase, deployment, maintenance, utilisation and disposal of software applications. By implementing SAM, universities should be able to achieve the following benefits:

- Reduced IT cost by acquiring right number of licenses and reducing redundancy
- Quality decision making and responsiveness to new IT requirements through better identification of software needs
- Increased employee productivity by standardising software versions and eliminating conflicts caused by discrepancies

However, universities also face with constraints and challenges when implementing SAM within their IT infrastructure, such as:

- Lack of IT resources to implement and maintain effective SAM
- Tracking software inventory and usage seems impossible for decentralised IT functions or increased proliferation of mobile workers
- Requirement on software licenses cannot be properly estimated in the absence of proper tracking of software inventory
- Complex licensing due to infinite software models with new schemes continuing to emerge and involve

Reference:

Software Asset Management, Mitigating Risk and Realizing Opportunities – KPMG Publication

http://www.ipd.gov.hk/eng/promotion_edu/seminars/20080123/pp_ada_kong.pdf

http://www.dell.com/content/topics/global.aspx/services/saas/software_inventory_challenges?c=us&l=en



Statistical Report

Research Finds IT Organisations Will Fail More Software License Audits Than They Think

Results of 2010 Software License Management Benchmark Survey show that many organisations underestimate their risk for software license non-compliance much more than they realise. As more software companies conduct software audits to rein in the unsanctioned use of software and make up for deficits in new license revenue in a down economy, organisations are unnecessarily exposing themselves to the possibility of stiff fines if software audits occur and they are not in compliance with license agreements.

(<http://www.numarasoftware.com/news/software-license-management-iaitam.aspx>)

Related Article

Seven Steps to License Management Maturity

Gartner says license costs can be reduced by 30% by license management. In order for this to happen two worlds have to be combined, i.e. the software world of bits and bytes, and the procurement world to satisfy this demand through contracts and license purchases.

Aspera has created the A-Model which refers to seven steps, which are Software Data and Procurement Data, Products and Product Use Rights, Demand and Entitlements, Compliance Position, Financial Position, Aggregate Position, and Software License Management.

(<http://www.itassetmanagement.net/2010/10/08/steps-license-management-maturity/>)

II. Management

Nowadays, software is a critical enabler that encompasses almost all core processes in various organisations, including universities. With the intention to maximise the IT functions and optimise the IT investment, management needs a clear picture of how their software needs are managed, procured, developed, tested, released, maintained and retired in accordance with the overall IT and organisational strategies. A typical SAM include the following key component that require the involvement of both universities' management and IT functions:

IT Asset Lifecycle

As the fundamental component for a SAM solution, IT Asset Lifecycle provides the baseline process flows for universities to maintain its software asset inventory. The IT Asset Lifecycle contains the following stages:

Procurement – being the first stage of the IT Asset Lifecycle, procurement must be authorised by relevant management and synchronised with universities' asset management systems on a timely basis.

Deployment – when software is deployed in the production environment, the corresponding information such as IT asset owner, target users, vendor, warranty, licenses should be updated in universities asset management systems.

Retirement Management – any retired software, whether they are subject to re-deployment or decommissioned for salvage value, should be clearly recorded in the asset management systems and keep track of them until re-deployment or salvage has been completed.

Change Management – whenever there is a change (i.e. upgrade or bug fixing) to the deployed software, the respective records in the asset management system should be updated timely.

Assessment on Current SAM

The “SAM Optimisation Model” is a framework to assess the efficiency and effectiveness of software asset management procedures currently established by universities. The universities can evaluate the maturity level of its SAM and categorised into following four models.

- **Basic SAM** – management has little / ad-hoc control over software asset; in addition, no policies and procedure are established to specify the requirement and standards for SAM
- **Standardised SAM** – SAM processes and tools are in place to keep track on software used by universities; however, the information recorded for SAM purpose may be obsolete and usually not used for management decision making
- **Rationalised SAM** – Active management of software is performed within universities. In addition, defined policies, procedures and tools with reliable software asset information are in place for management decision making.
- **Dynamic SAM** – Optimised management of software is achieved by universities to “real-time” cope with changes to strategic needs.

Based on the assessment results, universities can identify the gap between their current SAM levels and the most optimised status (i.e. Dynamic SAM), and determine the required improvement areas.



II. Management (cont'd)

While the above model provides a useful roadmap, management may still need to translate these ideas on improvement areas into practical attributes and actions items. The following practices illustrate the key steps toward optimising the SAM within the universities:

1. Policy and Procedures

Policies and procedures are the major components of a SAM solution. When universities understand their current SAM levels after using the “SAM Optimisation Model”, missing requirements or mechanism should be addressed by formulating specific policies or procedures. For example, to transform from “Standardised SAM” to “Rationalised / Dynamic SAM”, universities should establish procedures requiring regular update of information on software assets. Furthermore, universities should also appoint designated IT administrators to enforce the execution of policies / procedures. Periodic review and audits are also required to detect any process-level defects or changes in universities’ IT environment.

2. Change the Culture

Proper use and management of software needs to be ingrained in the universities’ culture. Simply enforcing the policies and procedures and targeting on shifting to the higher levels of SAM is merely sufficient. Negligence of intellectual property and the importance of SAM among universities’ senior management, members or students can easily render the policies and procedures ineffective. In order to change the universities’ culture towards SAM, tailor-made awareness trainings should be delivered to all university members and facilitate their recognition of the need to actively manage of their software assets and understand software is no different from other products or servers that requires to be paid for.

3. Gain Control of the Environment

Another important step in the drive to optimised SAM is controlling the access to software deployment. The easiest way to roll out a new server is often to copy an existing software image that is known to be effective. But infrastructure teams all too often forget they need to acquire additional licenses for the extra deployments. Servers can run high-ticket software, and can be used to deploy, inadvertently, hundreds or even thousands of unlicensed copies. So gaining control of what gets placed on servers becomes a critical step in the road to SAM.

4. Implement the Right Tools

Process and culture is critical, but universities also need to implement suitable technologies to realise the SAM solutions. In today’s market, many SAM products provide SAM capabilities ranging from software metering, patch management, software deployment and software discovery. Popular SAM products are IBM Maximo Asset Management, HP Asset Manager, Novell ZENworks Asset Management, to name a few.

Related Article

Chicago State Overhauls Management of IT Systems

Chicago State University, a public university in Illinois with a campus community of 7,200, will be implementing a new infrastructure monitoring platform for its IT operations. The institution will be running AccelOps for network analysis and management of systems, virtualisation resources, and application performance.

The university's IT department supports a central data center, distributed systems, and a distance learning program. Staff found it had outgrown a variety of IT management applications and open source utilities and sought a tool that could advance its infrastructure monitoring capabilities.

(http://campustechnology.com/articles/2010/06/10/chicago-state-overhauls-management-of-it-systems.aspx?sc_lang=en)

Statistical Report

Study finds softness in software asset management routines

The research revealed that the procurement office is responsible for buying software in 70% of organisations, the board accounts for 15%, service line managers 14% and the IT department itself just 13%. Only 48% of general management staff in larger enterprises were found to consider that compliance was a risk to their organisation, compared to 60% of their IT colleagues. But 38% admitted that they had only a basic understanding of their software licences.

(http://www.cbronline.com/news/study_finds_softness_in_software_asset_management_routines_250909)

Reference:

Software Asset Management, Mitigating Risk and Realizing Opportunities – KPMG Publication
http://www.ipd.gov.hk/eng/promotion_edu/seminars/20080123/pp_ada_kong.pdf
<http://www.microsoft.com/sam>



Related Article

Watch out: the licensing auditors are about

There are recently changes in the behaviour of software vendors who are increasingly targeting organisations that are potentially under-licensed or do not have sufficient maintenance cover. It's easy to see the importance of this type of revenue, especially maintenance income, which accounted for 58% of Oracle's software revenues last year and 74% of the profits.

There are already signs of an increase in activity. Gartner has stated that they expect vendors to double the number of audits they perform. Microsoft has sent questionnaires to a number of organisations that they suspect are under-licensed. Industry operators have reported that audit activity is at an all-time high.

(<http://www.paconsulting.com/our-thinking/software-asset-management/>)

Related Article

Software management saves Northumbrian Water £250,000

Northumbrian Water, which provides water to 4.4 million people, has saved £250,000 in software licensing costs by introducing a formal software asset management programme.

"If you can standardise on one technology you save a lot on cost. You can buy in bulk and it's cheaper. You don't need to have 18 different PDF readers across the organisation." said Damian Robinson, IT asset manager.

(<http://www.computerweekly.com/Articles/2010/11/05/243765/Software-management-saves-Northumbrian-Water-163250000.htm>)

III. General Users

Users' Obligations in SAM

To support the implementation of effective SAM, general users are obligated to conform to the following requirements when they come across software assets owned by the universities.

1. Software Installation

Universities' staff members, students and contractors must only install the software obtained through the IT departments on the desktops, laptops or other information systems owned by the universities. If users wish to install non-universities-owned software, they must seek advice from the IT management for assessment on potential compatibility issues and compliance with licensing requirements. Furthermore, users are prohibited from installing any software containing malicious components or virus.

2. Policy Awareness

Regarding the software management policy of universities, staff and students should pay attention to every detail on the security requirements on the usage of software. Any security patches and hotfixes should be installed when they are initiated by IT management.

3. Termination of Use

At the termination of employment or study with the universities, all university-owned software should be removed from the users' personnel computer or laptops.

University-owned software installed on non-University owned computers should be removed if it is no longer required, if the license has expired, or if the person who owns the machine terminates employment with the University.

Conclusion

SAM is an integrated approach to understand software needs and the ways in which software can contribute to the maximum efficiency and effectiveness of organisations including universities.

To implement an effective SAM requires a fundamental shift in culture, as well as incorporating the values of software to boarder business objectives and future planning. Nevertheless, by understanding purchase, deployment, maintenance and removal of software asset lifecycle, SAM can lead to lower costs, reduced risks and an overall greater return on this technology investment.

Reference:

Software Asset Management, Mitigating Risk and Realizing Opportunities – KPMG Publication
http://www.ipd.gov.hk/eng/promotion_edu/seminars/20080123/pp_ada_kong.pdf
<http://www.microsoft.com/sam>



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