



## Getting a head start in **Software Asset Management**

Managing software for improved cost control, better security and reduced risk

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### **Abstract**

Software Asset Management (SAM) can deliver significant benefits for any organization in terms of increased efficiency, better cost control, risk mitigation, improved security and patch management, etc. But while it is important to understand the value of SAM, the biggest challenge for most IT departments lies in understanding how to begin to implement a SAM program. Software asset management should not be a daunting IT initiative, either in its initial implementation or its ongoing maintenance. This white paper will provide a general overview of SAM benefits, and then address the specific issues involved in getting SAM up and running in your organization.

## 1. Understanding SAM

Software Asset Management (SAM) refers to the act of controlling and managing software assets to better support and further business goals, as well as managing both costs and risks. As such, SAM is a critical part of any organization's IT strategy. In a nutshell, if you can understand what you've got, where it is, how it's used, how it's licensed and when it needs to be updated or changed, you're well on your way to an improved enterprise IT infrastructure.

An overall SAM initiative can be broken into several constituent parts, which include:

1. Discovery – what do you have on the network, where is it, how is it used, etc.
2. License management – is it appropriately licensed, are there unused or duplicate copies, etc.
3. Deployment – how to manage the deployment of new software, updates, migrations, initiatives, etc.
4. Patching – is the software up to date and secure, which versions need patching, retiring etc.

The value of SAM is derived directly from the improved control and efficiency these elements bring to an organization's overall software infrastructure. In fact, the arbiter of control and efficiency, the International Standards Organization, has even gone so far as to publish a standard for SAM known as ISO 19770-1; adherence to this standard "proves that an organization is performing software asset management to a standard sufficient to satisfy corporate governance requirements." ISO 19770-1 is of course extremely comprehensive, which is good from a standards and best practice aspect, but this comprehensiveness can at times make implementation seem intimidating. And in truth, much like any large-scale IT initiative, a complete SAM strategy can actually take years to fully mature.

Fortunately, there are aspects of SAM that are quicker to implement (and tools that can help), thereby delivering a much more immediate business and financial impact. These tangible business benefits include lower costs, greater security, decreased risk and improved corporate governance. And as these benefits correspond to our later discussion about the implementation of a SAM initiative (perhaps as part of a wider ITIL project), it's worth drilling down a bit to ensure a solid understanding.

### 1.1 Cost control

In theory, software purchasing is a fairly straightforward process: You buy what you need. Yet, inherent in that process are several questionable assumptions: What exactly do you already have? Of that pool, what are people actually using on a regular basis? What is already up to date? What is not?

One of SAM's goals is to deliver those answers, enabling the IT group take control of the software licensing and lifecycle management process. By knowing what you have, you can accurately budget and plan software purchases. By knowing what people are using or not using, you can eliminate waste and redundancy, reallocating unused licenses or avoiding unnecessary upgrades.

Moreover, a comprehensive picture of current software usage across the organization enables IT and business managers to negotiate more advantageous pricing – whether in the form of volume licensing agreements or re-working existing maintenance contracts to ensure that retired and unused licenses do not continue to require support fees.

Looking at the economy as a whole, a leading analyst firm recently reported that organizations that fail to incorporate software usage and inventory data into their asset management will overbuy licenses for 60 percent of their portfolio and will be out of compliance on another 30 percent of their portfolio. Either way, those companies risk losing out financially.

### 1.2 Greater security

Tracking software on the network can also help dramatically improve network security. For example, after a critical vulnerability alert is released for a particular application, organizations with a full and up-to-date IT inventory will know which machines are affected and where those machines are on the network. Armed with this information, administrators can quickly decide to deploy a patch (if available) or even quarantine the affected PCs (especially on older, unsupported platforms).

Similarly, IT managers can use audit reports to monitor networks for applications known to pose security risks—such as file sharing software—and take proactive steps to eliminate those applications.

### 1.3 Decreased risk

Organizational risk is not limited simply to security; it also strongly corresponds to the legal risks associated with software non-compliance, lack of policy enforcement, inappropriate usage and more. Industry research shows that roughly one quarter to one half of all software worldwide is pirated or unlicensed, and much of this resides on corporate networks.

This leads to several issues from a legal standpoint, not the least of which is the potential for heavy fines. In fact, the industry's watchdog organizations, including the Business Software Alliance (BSA), Software and Information Industry Association (SIIA), Federation Against Software Theft (FAST) and others regularly levy fines that range from \$100,000 to \$250,000 or more against organizations.

This issue is compounded thanks to the principle of vicarious liability, where the organization bears responsibility for practically all actions of its employees. As such, whether it is installing unlicensed software, copying music and video files to the network or unwittingly propagating viruses – it is the employer that has the legal responsibility to guard against the misuse (intentional or accidental) of its IT systems or face the risks of damage to their reputation.

### 1.4 Improved Governance

SAM provides several key benefits for business management beyond those discussed above. Current and comprehensive software asset control improves IT-related business functions, from support operations (knowing what exactly is on the system and the respective configurations speeds time to resolution) to release management to faster and easier mergers, acquisitions, business consolidations or expansions. Knowing exactly what's on the network also allows organizations to focus more on running the business and less on trying to keep up with IT systems, facilitating planning for future IT initiatives, migrations, new hardware or software purchases and more.

Yet while the benefits of software asset management are readily understood and the various components are straightforward, the implementation can seem daunting. For many IT departments, the idea of identifying, tracking, auditing and maintaining every software asset on a sprawling, often multi-site network is a difficult one to wrap their mind around. Certainly it might be *possible* – management by walking around, if nothing else. But manually tracking every piece of software would be a nightmare, and manually managing it might well be impossible.

Instead, organizations need to find a way to combine technology with their own people and processes to implement SAM in a cost effective way that will return the maximum value in the minimum time.

## 2. Getting started with SAM

The secret to starting a SAM initiative is much like anything in life: learn to walk before you run. Or in business terms: start with the basics, identify the element(s) with the greatest potential for ROI and determine the easiest way to proceed. Then once things are underway you can readily build from there.

Applying these fundamental principles to SAM brings the focus onto two elements we discussed at the start of this paper: discovery and license management. Discovery provides the foundation for everything that comes after – you can't figure out what you need or how to fix it if necessary if you don't know what you have. Similarly, license management promises a significant, immediate ROI in terms of cost control and risk mitigation. Taken together, discovery and license compliance form the bedrock of successful SAM best practices, providing an immediate return and a less complex implementation than deployment or patch management.

Starting Software Asset Management with a focus on discovery and license management distills into four basic steps:

1. Inventory
2. Capture
3. Identification & Validation
4. Reconciliation

### 2.1 Inventory

The first step of any SAM project is to perform a software inventory. An accurate inventory will help IT managers establish (and maintain) baselines such as:

- What software is in use across the organization?
- Is the company using the most recent versions of the programs it needs?
- Does the company have any unused programs that can be removed or reallocated?
- Does the company have a licensing shortfall on any applications?
- Does every employee have the needed software?
- Is the installed software on each machine used regularly?

Inventorying all of the assets on the network is the basic function of discovery, and fortunately there are automated tools for this process (Centennial's SAM.Suite® for example) that generate a quick, efficient and accurate IT inventory. In fact, these tools typically work across multiple geographies, subnets and platforms, ensuring a comprehensive inventory even when the finance department is working on PCs in New York while development is on Linux in Hyderabad.

### 2.2 Capture

Once software assets are inventoried, the next step is to capture license entitlements for all of the installed applications, whether in use or not. Again this is where an automated solution can be invaluable – minimizing both the chance for human error and the overall labor requirements needed to build and maintain the data repository. These tools typically include software wizards that speed the scanning process and ensure accurate and complete data capture, as well as comprehensive software databases that ensure up-to-date vendor and application information.

A key consideration when capturing license entitlements is whether it is feasible for one person to manage this or whether, more likely, this will be a collaborative effort across multiple individuals and departments. If the task of entering license information is going to be shared, the organization needs to consider how to protect both the integrity of the data records (i.e. ensuring that all records are in a consistent format etc.) and also the confidentiality of the licensing position. Again, certain tools are designed to support multiple users with different privileges, while others will fall short in this area.

### 2.3 Identification & Validation

The next step in the process is to identify and understand how the captured license information (i.e., what you have) relates to both what you *think* you have, and to the vendor's actual catalog (i.e., what *they* think you have). Often there will be discrepancies between original invoices, installed software and future audits – something particularly true in large organizations with a traditionally ad hoc software management approach.

Solutions such as Centennial's SAM.Suite can aid in this process by automatically matching entered information and discovered software with vendor product information, including the proper title, SKU number (part number), associated entitlement rights and other important information. This reduces turnaround and errors, and facilitates future licensing discussions.

More importantly, from an auditing and compliance perspective, it is essential that you are able to link any entered entitlement information to the actual proof of entitlement (such as scanned images of invoices email confirmations, etc.).

### 2.4 Reconciliation

The final element is to do a reconciliation of the license entitlement to actual installed software. There are a wide range of potential licensing restrictions, making an automated approach a necessity for this reconciliation. For example, a license may have upgrade or downgrade restrictions that don't match actual usage within the organization.

Centennial's SAM.Suite applies intelligent rules and a dynamic "best fit" matching algorithm when reconciling installed assets against software licenses, avoiding the manual task of creating a one-to-one relationship between a specific license and an actual software instance. This gives the organization more flexibility when upgrading or swapping out software.

Moreover, SAM.Suite features a built-in rules engine for calculating upgrade and downgrade rights – and ensuring that upgrade licenses are backed up with appropriate historic version entitlements.

### 3. The Fast Path to SAM

While organizations have traditionally found it difficult to accurately determine the total cost of poor software management, more and more IT leaders are recognizing that better controls, processes and technologies can deliver significant advantages in terms of cost savings and productivity gains across the enterprise.

By concentrating first on asset discovery and license management, any organization will dramatically improve insight into its IT infrastructure and drive productivity enhancements. More importantly, the business can enjoy immediate cost savings from improved software allocation, volume license discounts, better price points, accurate asset depreciation and more – all while eliminating the risks associated with software non-compliance, lack of policy enforcement and inappropriate usage. Finally, these initial steps will put the enterprise in a strong position to implement further best practice processes as described in standards and documents such as the ISO 19770-1 and the ITIL Guide to SAM.

To put your organization on the fast path to improved Software Asset Management, please visit [www.centennial-software.com/sam](http://www.centennial-software.com/sam) for more information on how to build an effective strategy.

Be sure to also look out for Centennial's upcoming series of SAM webinars in association with Forrester Research.

You can even download a free 30-day evaluation of the Centennial Discovery network audit software from: [www.centennial-software.com/downloads](http://www.centennial-software.com/downloads) or view our short demonstration of Centennial License Manager at [www.centennial-software.com/license\\_manager\\_demo/](http://www.centennial-software.com/license_manager_demo/).

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#### About Centennial Software

Centennial Software is a leading developer of IT audit, software asset management and security solutions with more than five million licenses sold to blue-chip organizations around the world. Available through a global network of resellers and market-leading OEM vendors, Centennial Software's solutions are designed to help organizations better manage their IT infrastructure, maintain compliance and reduce operational risks. The company operates offices in the USA, UK, Germany and Australia. For more information, please visit [www.centennial-software.com](http://www.centennial-software.com).