

Best Practices for Implementing Software Asset Management



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The Case for Software Asset Management (SAM)

In recent years, software asset management (SAM) has rapidly gained importance among many organizations as a strategic imperative that enables them to achieve maximum value from their IT investments. SAM, at a very basic level, involves integrating people, processes and technology in such a way as to allow software licenses and usage to be systematically tracked, evaluated and managed. The goal: to reduce hard-dollar IT expenditures, human resource overhead, and risks inherent in owning and managing software assets, without compromising the technology and service levels needed for the organization to operate at an optimal level.

Companies that recognize the value of SAM and implement effective SAM programs have been able to:

- 1) Reduce total cost of ownership (TCO) related to IT assets** by eliminating time-consuming manual audits, determining where the organization is overspending on software licenses, and reducing help desk costs.
- 2) Manage technology change** by using software procurement models that map to current and future needs and by collecting data that assists with technology migration and upgrade planning.
- 3) Minimize security risks** by preventing the use of unauthorized software and enforcing desktop standards.
- 4) Limit compliance risk** by identifying PCs with unlicensed applications, preventing employees from using unlicensed software, and producing accurate reports to vendors in the event of an audit.

The purpose of this document is to provide a tactical guide for implementing a SAM program within your own organization, from tracking software assets to developing processes and procedures for managing those assets on an ongoing basis.

Laying the Groundwork for SAM

Many organizations believe the key to a successful SAM program is technology—that is, the tool they select to collect data about the software assets that reside within their corporate network. Nothing could be further from the truth; the key to a successful SAM program is the legwork performed before selecting a tool. This includes evaluating your existing IT environment, gaining executive sponsorship, setting program goals, committing the appropriate human resources, and designing strong processes that support your organization's business objectives. Before getting started with your SAM program, it is important to achieve the following milestones to ensure not only that the right tool is selected, but that the processes that the tool supports are formally established, understood, and documented.

(Note: The list of questions below is not meant to be comprehensive, as your organization's needs will be unique. However, they serve as a general guideline to use as you begin to develop your program.)

- 1) Assess needs and obtain executive approval:** You will likely need to gain corporate sponsorship for the implementation of a SAM program. If this is the case, you will need to articulate the value of a SAM program within your organization by answering the following types of questions:
 - What are you trying to accomplish by implementing a SAM program? What are the specific goals?
 - What kinds of benefits is your organization likely to recognize as a result?
 - Will the value of implementing a SAM program outweigh the costs? (To help answer this question, see our paper entitled "**Quantifying ROI: Building the Business Case for IT and Software Asset Management**", available at www.expressmetrix.com/pdf/ROI_6.pdf.)
- 2) Determine organizational requirements:** The key to this issue is determining how a SAM program will fit into your own organization. You'll want to consider:
 - Are there cross-functional, technical, legal or other requirements unique to the organization that influence how the SAM program is structured?
 - Who are the stakeholders, and what level of involvement do you require from them? (Software asset management is a cross-functional issue that spans IT, purchasing, legal, business units, and other departments; ideally, there should be stakeholders from each of these departments.)
- 3) Establish baseline:** In order to quantify the success of your SAM program, you will want to evaluate and document where your organization is today with respect to its SAM efforts. This includes answering questions such as:
 - How much money and human capital do you currently commit to SAM?
 - How often do you conduct internal software audits?
 - What is your yearly spending on software licenses?
 - How do you currently track your software inventory and usage, and what is the quality of or confidence level in that data?

- 4) Develop metrics and timeframes:** One of the most important questions you will need to ask yourself before implementing a SAM program is what the measurable criteria for success are. These will map directly to the goals discussed in section one above. It is also critical that you establish target dates by which you hope to reach those goals. Make sure your targets are realistic, not idealistic. In fact, at the outset of the program, you should consider lowering expectations, as it will take some time to optimize the program, and you risk losing executive sponsorship if you aren't able to deliver the results you promise. The metrics you use to judge success will be unique to your organization, but some ideas include:
- Reduce software expenditures by 15% by <target date>.
 - Cut human resource overhead involved with yearly internal audits by 30% by <target date>.
 - Reduce time to service support calls by 20% by <target date>.
 - Achieve 90% adherence to software usage policy among employees by <target date>.
 - Prepare all desktops for a Windows Vista roll-out by <target date>.
 - Achieve 100% license compliance by <target date>.
- 5) Develop processes:** A SAM program is only as good as the processes that support it; the processes you establish will be the single most important determinants of the success of your SAM efforts. Your processes will be tailored to the unique needs, situation, and objectives of your organization, but some questions you will want to think about are:
- Does the size or complexity of your organization suggest you should do a pilot program or limited roll-out before expanding the program to the rest of the organization?
 - What specific information do you need to gather in order to achieve the stated goals of the program?
 - What are the key tasks that need to be performed to gather information?
 - How will findings and recommendations be communicated to decision-makers?
- 6) Allocate resources:** The key question here is what resources are required to make your SAM program a success. Specifically:
- What is the overall budget for your SAM program?
 - Given the size and complexity of your organization, how many people do you need to dedicate to this effort?
 - Which individuals will be tasked with the various responsibilities?
 - If you don't have enough internal resources to allocate, should you consider outsourcing some of the key responsibilities?
- 7) Select and deploy tool:** There are a broad range of issues you will need to consider when determining which SAM tool best suits your needs and to ensure the deployment runs as smoothly as possible. Your tool selection will be based in large part upon the size and complexity of your organization and its IT infrastructure, as well as the technology needs of your users. In order to keep this paper focused, this discussion will be limited to a basic overview of the questions you will need to ask yourself, including:
- Does the tool provide all the information you need to make decisions and meet your stated objectives? At the very least, you will want to make sure the tool you choose provides hardware inventory reports, integrated software inventory and usage reports, and gap analysis between software installed and actual number of licenses purchased.
 - Is the information gathered by the tool presented in a useful way?
 - Does the tool leverage industry standard technology and/or technology that already exists within your infrastructure?
 - How well does the tool's deployment functionality fit within your existing IT software distribution procedures?
 - Does the tool give you the ability to view what has changed in your environment over specified time periods?

Implementing SAM

Once you've worked through the topics discussed above, it will be time to implement your SAM program. The next section will walk you through the steps for gathering data and discuss the ways you can use that data to make informed decisions about how to better manage your IT and software assets.

Step 1: Conduct inventory

The first step in implementing your SAM program is to perform an inventory of all the PC software and hardware in your organization. This information can be used to:

- Determine whether your organization is in compliance with licensing agreements.
- Locate machines that have unauthorized applications installed.

- Identify PCs that don't have the required service packs or security patches installed.
- Provide help desk staff with real time data on individual users' PC configurations, so they can service support calls more quickly.
- Support migration and upgrade planning by quickly identifying which machines do not meet minimum requirements.

Many companies take inventory of their software installations manually—that is, by physically visiting all the desktops in the organization and documenting the hardware configurations and software installations on each machine. Needless to say, this is a time-consuming, error-prone, and non-scalable approach. By this point in the process, you will likely have selected an automated tool that can quickly and accurately perform this inventory for you.

A) Establish parameters

Before conducting your software audit, you will want to determine what kind of information you are looking for. Most good tools will allow you to take an inventory of software, hardware configurations, and networked devices such as printers. You may also want to look at disk space utilization or the existence of applications within your network that pose a risk to security or productivity (such as P2P applications, chat programs, or games). You may want to view inventory data by individual machine, Active Directory organization, or in the aggregate by software publisher. Finally, you will want to determine what level of information will be made available to various individuals or departments within your organization (assuming your tool offers this functionality). For example, you may want to make hardware configuration data for individual PCs available to all your help desk staff, but limit visibility into employees' software usage data (software usage metering is discussed later in this paper).

B) Run inventory

You will need to determine how often to run your inventories. Your organization may only need to conduct audits on an ad-hoc basis. Other organizations with stricter governance policies may choose to perform them as often as weekly. The tool you select should provide the ability to conduct audits both on an ad-hoc and scheduled basis.

Once you've conducted the inventory, it is recommended that you spot check PCs to make sure the data you have received is accurate.

Step 2: Review software usage

Performing an inventory is only the first level of information necessary to implement your software asset management program. With software usage metering, you can determine:

- Whether your organization has purchased more software than is actually being used, so you can reduce maintenance costs, re-allocate unused or under utilized licenses, and plan better for future software consumption.
- The extent to which unauthorized applications are being used that may damage employee productivity (such as games), introduce viruses, spy ware or other security threats to your network (such as instant messaging or downloaded executables), or degrade network performance (such as streaming video or MP3 files).

A) Establish parameters

Once you have conducted your software inventory, you will likely want to use the information to prioritize and establish parameters for software usage metering. For example, if you discover that all the employees at your company have Microsoft Project installed on their desktops, you may decide to collect usage data on Project to determine what percentage of your employees are actually using the application and, if so, how frequently. Likewise, if your inventory data reveals the existence of gaming programs within your network, you may make it a top priority to ascertain how much these applications are being used to determine whether they impact employees' productivity.

B) Implement software usage metering

You will typically need at least 30-60 days to monitor usage to be able to draw meaningful conclusions about software usage patterns, but the timeframe you select will vary greatly depending on the programs you are monitoring and how they are used within your organization.

Step 3: Match software inventory and usage with licenses owned

Once software/hardware inventory and usage metering have been conducted, it is necessary to compare this data with your purchasing records, to see whether your company has purchased too few licenses (and is therefore out of compliance) or too many licenses (and is therefore overspending).

A) Locate purchasing records

The first step in performing license reconciliation is to find purchasing records for all the software installed on your network. If your organization has not been tracking this information in a central location, you may need to contact software vendors, resellers, or distributors to get the most recent records.

B) Centralize purchasing information

In order to match inventory and usage data with actual licenses owned, you will need to consolidate all the relevant information into a central location. Ideally, this information should be imported into the tool you use for reconciliation against installed copies. The software tool you choose should, at a minimum, allow you to record the following information: software title and version, manufacturer, number of licenses, date of purchase, and PO or invoice number. You may also want to store the purchase price for your licenses so you can easily see the total investment your organization has made compared with actual installations or application usage.

C) Perform reconciliation

Next, you should compare the number of licenses purchased with the number of licenses owned and the frequency with which the applications are used. A good inventory and metering tool will generate reports that automatically reconcile this data, so you can see where disparities exist.

D) Evaluate data and determine appropriate course of action

Using the reconciled data, you can determine whether your organization has overspent on software or is out of compliance with licensing agreements. If you find your organization purchased and installed 200 licenses of Microsoft Project, for example, but only 160 people are using it, you may want to consider letting your maintenance contract lapse for the 40 underutilized licenses. Or perhaps you would get more value by re-allocating those licenses to individuals that are more likely to use them. Likewise, if you discover there are 175 copies of CRM software installed on your network, but your company has only purchased 150 licenses, you know that 25 of those copies are not legal. This means you will need to purchase an additional 25 licenses to become compliant.

Step 4: Review, document, and communicate policies and procedures

Once you have obtained a snapshot of your software inventory and usage, you will need to evaluate whether your current processes and policies are designed in such a way as to optimize your ability to easily and accurately gather this data on an ongoing basis. Specifically, you will want to look at the following areas:

A) Software procurement

First and foremost, you will need to establish software procurement guidelines that enable you to simplify your asset management efforts going forward. You will want to:

- Create a list of approved software vendors.
- Determine specifically which people and/or departments are responsible for acquiring new software, negotiating pricing, and tracking purchases.
- Decide whether or not employees are allowed to procure software on their own. If so, be sure to develop and communicate guidelines for obtaining software and documenting the purchase.

B) Software use

It is very important to develop a set of policies governing the download, installation, and use of software among employees, and to make employees aware of these rules. Consider posting a Software Usage Policy on your internal company web site and sending periodic reminders to employees that they are responsible for knowing the rules. This will demonstrate your commitment to good corporate citizenship not only to your employees, but also to vendors, if you make them aware of your efforts. Issues to consider include:

- Who should be allowed to install software? As mentioned in section A) above, if employees are allowed to install software on their own desktops, you must develop a process for reporting and documenting these activities.

- What kinds of software are allowed on the desktop? Should the use of gaming applications, chat programs or other non-business related software be allowed in your organization? If not, you must consider whether employees should be self-governing, or whether you want to implement a tool that has the ability to monitor and/or block the launch of unauthorized applications.
- What are the penalties, if any, for not complying with your organization's Software Usage Policy?

C) License tracking

Once a software license is purchased, what processes are in place to ensure that ownership is documented and records are maintained? Although these processes will likely vary depending on who is purchasing and installing the software, you should at the very least:

- Create a central location and assign ownership for maintaining all relevant purchasing data to simplify ongoing tracking and management. You will likely want to incorporate some of the data into your SAM tool for reconciliation, while other, more detailed documentation and proof of ownership may be stored elsewhere.
- Determine exactly what purchasing information is important to have on hand. Check with your software vendor or reseller to determine what constitutes "proof of ownership" in the event of an audit.
- Establish a process for tracking ongoing purchases, and determine who is responsible for maintaining the documentation.

Step 5: Establish ongoing SAM processes

Software asset management should not be perceived as a one-time project. Rather, it should be viewed as an ongoing strategic program that needs to be continually evaluated and modified to meet the dynamic needs of an organization. The data you gather and your areas of focus may change over time and will be determined to great extent by what you discover through conducting inventories and software usage metering. Your processes must therefore be flexible enough to accommodate changes within your organization. With this in mind, the following points should be taken into consideration:

- You will need to decide how often to conduct ongoing inventory and license reconciliation activities to make sure you are not overspending or underspending on software. Ideally, whichever tool you choose will be capable of generating reports at regular intervals or on pre-defined dates.
- You should also monitor the usage of your software assets on an ongoing basis so you can stay on top of changing technology needs and trends among your employees and optimize your IT spending.
- It is important to determine how to evaluate the data you receive, as well as how to communicate your findings and/or recommendations to decision-makers. As part of this, you'll want to consider how key findings relate to decisions about ideal purchasing levels, possible upgrades, pros and cons of standardization, and overall lifecycle planning.
- Finally, do not yield to the temptation of letting your SAM efforts go on auto-pilot. It will be beneficial to re-evaluate and even re-engineer these processes periodically based on the success with which your overall SAM program goals are being met.

Conclusion

Best practices for SAM begin with laying a solid foundation of processes and personnel, then selecting a tool that provides the functionality required to meet the goals of your organization. Getting the most out of your SAM program requires a disciplined approach to implementation that includes gathering inventory and usage information, reconciling the data with licenses owned, and developing policies, procedures, and processes that support and optimize your ongoing SAM efforts. This guide should provide a framework for asking the right questions and taking the appropriate steps to make your SAM strategy a success.



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