BUYER’S GUIDE: PC INVENTORY AND SOFTWARE USAGE METERING TOOLS

A guide for identifying an IT/software asset management product that best meets the needs of your organization
Introduction

Selecting an IT and software asset management (IT/SAM) tool can be a very complicated process. There are an abundance of tools on the market that address a variety of needs in very different ways, and making sense of all the features and capabilities can be an arduous task. In an effort to simplify the process, we have created this guide to help businesses and IT professionals identify a best-of-breed product that best meets the needs and objectives of their own organizations, as well as describe some of the pitfalls associated with certain categories of products. This guide focuses specifically on two types of functionality: PC inventory and software usage metering, and the minimum requirements you should seek from any tool that provides these capabilities.

First and foremost, before evaluating any tool, you must identify your own organization’s objectives with respect to IT and software asset management, and remain focused on these goals throughout the selection process. Too often, the principal drivers become secondary to the feature set, with only a moderate understanding as to whether the specific features will in fact empower the organization to achieve its established objectives. Additionally, organizations sometimes overlook the processes required to maintain the tool over the long run, as well as the organizational processes that the tool is required to support. It is vital to take these into consideration when evaluating a tool, as the process and the tool need to be tightly integrated in order to ensure an effective IT/SAM program.

Definitions

Before discussing the specifics of what to look for in inventory and software usage metering tools, we will define these terms and briefly discuss the IT and business problems they solve.

1. PC Inventory
A PC inventory tool collects information about the hardware configurations and software installations of networked (and often times non-networked) computers in an automated fashion. A hardware inventory typically includes data such as computer name, CPU type and speed, memory, disk space, network card address and manufacturer, serial number, and so on. A software inventory identifies application information such as program name, version, manufacturer, and path.

An organization typically purchases a PC inventory tool to achieve the following objectives:
- Conduct software audits to determine compliance status
- Reduce overhead associated with manual audits
- Detect the presence of unauthorized applications
- Plan for software upgrades and/or migrations by revealing what machines do or do not have the necessary hardware/software requirements
- Increase help desk efficiencies by providing support staff with instant access to data regarding software installations and hardware configurations for individual PCs

2. Software Usage Metering
Software usage metering involves collecting data pertaining to usage patterns of software programs running on employees’ PCs. The most common application of usage metering is determining what software is being used, and what software is unused or underutilized. Another component of software usage metering may include “application control,” which involves blocking the use of unauthorized or unlicensed programs.

Specifically, usage metering helps organizations:
- Reduce spending on software that is unused or underutilized
- Reallocate unused or underutilized software to more appropriate individuals or departments
- Forecast future organizational software requirements based on usage patterns
- Monitor and/or restrict the use of unauthorized applications for security, productivity, or compliance reasons
- Enforce a standard desktop
There are two common myths when it comes to purchasing an inventory or usage metering tool. The first is that all products perform the same fundamental tasks, and that a basic audit tool will be just as effective as a best-of-breed product at managing IT assets. The most basic audit tool is designed to conduct one-off software inventories on an ad-hoc basis. Although such tools are typically less expensive than best-of-breed inventory products, the low price invariably comes at a cost. Admittedly, it is difficult to generalize a tool’s capabilities based on its price, but by and large, the cheaper the tool, the less likely you will be able to easily obtain the information you need to make good decisions about managing your IT assets and achieve the ongoing objectives of your IT/SAM program. Unfortunately, many tools designed for one-off audits appear to be relatively straightforward and easy to use, but they actually cost more in the long run given the additional amount of time required to make sense of the information collected, detect inaccuracies, and find workarounds for incomplete data. The bottom line is that basic audit tools are generally not sophisticated or flexible enough to allow you to strategically manage your IT assets in long run.

One of the largest issues relates to how basic audit tools perform application recognition. These tools often doublecount applications, cannot differentiate between programs with the same executable (such as MSDE and SQL), and/or fail to associate support files with their parent applications because they merely provide a raw inventory of files that reside on PCs. Such inventories tend to be inaccurate because the tools do not depend on a database of recognized applications; rather they rely on what can be found using a single methodology, such as Add/Remove programs or file headers. This leaves you to sift through literally thousands upon thousands of file names to determine their origin.

Additionally, there are often problems with basic audit tools’ reporting capabilities. Typically, these tools produce mountains of data, but do not present in a manner that corresponds to specific questions you are trying to answer, such as, “What are my vulnerabilities with respect to license compliance?” or “Where are we overspending on software?”

If the data cannot be presented and filtered in meaningful ways out of the box, you will spend inordinate amounts of valuable time trying to interpret and organize the information in a manner that enables you to make good decisions.

Finally, many basic audit tools do not provide valuable software usage metering functionality. While it is critical to obtain inventory data to determine an organization’s status with respect to compliance, this often leads organizations to overpurchase software licenses in an effort to remain compliant. Collecting usage data helps companies avoid spending too much on software by revealing which installed copies are not being used (or used enough) to justify ownership of those licenses. In addition, there are other benefits to usage metering, such as enforcing a standard desktop and detecting or prohibiting the use of unauthorized applications.

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The best way to answer most of your questions is by installing the product in your own environment. Most best-of-breed tool vendors provide a time-limited evaluation which you can roll out to a subset of your organization's PCs. Be sure to evaluate the product among a representative cross-section of your organization, so you can ensure the data your tool collects is relevant to the applications being used. You should also evaluate whether the installation and deployment of the tool goes smoothly and is relatively hassle-free; the amount of time you spend on the installation and deployment is typically representative of the amount of time you will spend engaged in ongoing maintenance of the product. In conjunction with evaluating the tool, you should also thoroughly access the technical support of the organization, as these are the individuals that you will be interacting with on a long-term basis.

In the end, if a tool is collecting data accurately, it all boils down to the following factors: reporting and ease of use. Does the tool give you the information you need with minimal maintenance? Be sure to think back to your objectives. Are you confident the tool you purchase will give you the information you need to make good decisions—without need for further manipulation? Don’t pay for more features or scalability than your organization needs to accomplish its goals, as it may only make the tool more difficult to deploy, administer and maintain. And even if you do need a wide breadth of functionality to meet other requirements of your organization, you may still consider deploying more than one best-of-breed point product, as the inventory and software usage/metering capabilities of an enterprise suite may not be robust enough to meet your organization’s IT/SAM goals.

**Evaluating tools**

Don’t forget to ask for references from the vendor for organizations or departments the size of your own, and ideally, for organizations with similar objectives to your own (i.e. achieving license compliance, reducing annual software expenditures, identifying and restricting the use of unauthorized programs). If you are working with a high-quality vendor with a genuine customer base, they should have no difficulty providing you with references that are relevant to you. In addition to exploring the overall positives and negatives, be sure to check the following with your reference(s):

- Amount of ongoing maintenance
- Amount of manipulation required for meaningful reports
- Accuracy of application recognition
- Stability/reliability of product
- Quality and responsiveness of sales representatives

**IT/SAM tool checklist**

The next two pages provide a checklist of recommended features and capabilities to take into consideration when evaluating PC inventory and software usage metering products. There may be some items that do not pertain to your organization, but in general, you will want to make sure your tool has these minimum capabilities.
### Feature/Capability Checklist

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<thead>
<tr>
<th>Product Type</th>
<th>Functionality</th>
<th>Features</th>
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| **Inventory**| Discovery/Recognition| - Based on more than one methodology (Windows Add/Remove programs, file executables, GUID) to ensure comprehensiveness  
- Database of recognized files/applications updated frequently  
- Automatically associates support files with parent applications  
- Discovers files that are not recognized by application database  
- Differentiates between version numbers, standalone applications vs. applications that are part of a suite, and suite types (i.e. Microsoft Office Standard vs. Professional) |
| **Usage**    | Metering            | - Integrated with inventory data  
- Detects both start and stop times  
- Supports a Terminal Server/Citrix environment (if applicable)  
- Includes application control (ability to block or restrict launch of applications by individual or group)  
- Application control supports concurrently licensed programs and ensures usage-based license compliance (if applicable)  
- Does not rely on Windows usage parameters (such as “Frequently”, “Occasionally”, “Never”) |
| **Inventory & Usage** | Client | - Client is invisible to end-users  
- Can collect data when user is not logged in to the OS  
- Can collect data on non-networked computers  
- Supports concurrently licensed applications (if applicable)  
- Does not rely on user to execute inventory or metering |
| **Inventory & Usage** | Customization | - Provides ability to enter custom or unrecognized applications  
- Provides ability to input/import and store purchasing data (for example: licenses owned, PO number, purchase date, maintenance expiration)  
- Provides ability to input/import and store custom hardware data (for example: location, asset tag, phone number, lease number)  
- Can be configured to collect information on non-executable file types (for example: music and video files) |
| **Inventory & Usage** | Reporting | - Provides pre-configured reports for key data you need, such as:  
  - Unused applications  
  - Compliance status  
  - What has changed over specified timeframes  
  - Workstations that meet minimum security and or hardware/software requirements  
- Reconciles inventory and usage data with purchasing data  
- Provides ability to summarize application data regardless of version  
- Can be filtered based on Active Directory or NT domains  
- Can be filtered based on decision-making needs (for example: vendor, legal vs. not legal)  
- Offers both scheduled and ad hoc reporting  
- Uses standard report-writing technology  
- Does not over-count duplicate installations on a single machine |
## Feature/Capability Checklist

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<tr>
<th>Product Type &amp; Usage</th>
<th>Functionality</th>
<th>Features</th>
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<tbody>
<tr>
<td></td>
<td>Installation/ Deployment</td>
<td>- Components can be installed on a single server</td>
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<td>- Uses industry standard technology (for example: SQL, WMI, .NET)</td>
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<td></td>
<td>- Client can be deployed using applicable technology (for example</td>
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<td>Active Directory, NT domains, or IP address)</td>
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<td>- Takes hours to install and deploy, not days</td>
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<td>- Does not require professional services</td>
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<td>- Does not rely on user to install client</td>
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<td></td>
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<td>- Does not rely on login scripts for client deployment</td>
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