



SOFTWARE ASSET MANAGEMENT

much more than INVENTORY

License Dashboard White Paper



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1. Executive Summary

As an industry, Software Asset Management hasn't really helped itself in the last ten years. For a start there's a self-perpetuating confusion over terminology: Software Asset Management (SAM), Inventory, Software License Management, Compliance, Discovery, Application Management... they're all the same thing really, right?

Well, no. In fact, definitely No.

But many so-called experts are guilty of hiding behind jargon or substituting clarity for confusion either to make themselves look more clever, or perhaps to sell you technology you don't need.

This guide will break through the smoke and mirrors to demystify some of the terminology around Software Asset Management. In particular, it will highlight one of the main confusions – that Software Asset Management and Inventory are not the same thing.

By the end of this document, you will have a clearer understanding of Software Asset Management and will be in a better position to decide what component technologies and/or services will drive true value to your organization.

2. Defining Software Asset Management

The Information Technology Infrastructure Library (ITIL) defines Software Asset Management (SAM) as:

“...all of the infrastructure and processes necessary for the effective management, control and protection of the software assets...throughout all stages of their lifecycle.”

What does that mean in real life? Well, quite a lot. In fact, for many organizations, probably too much.

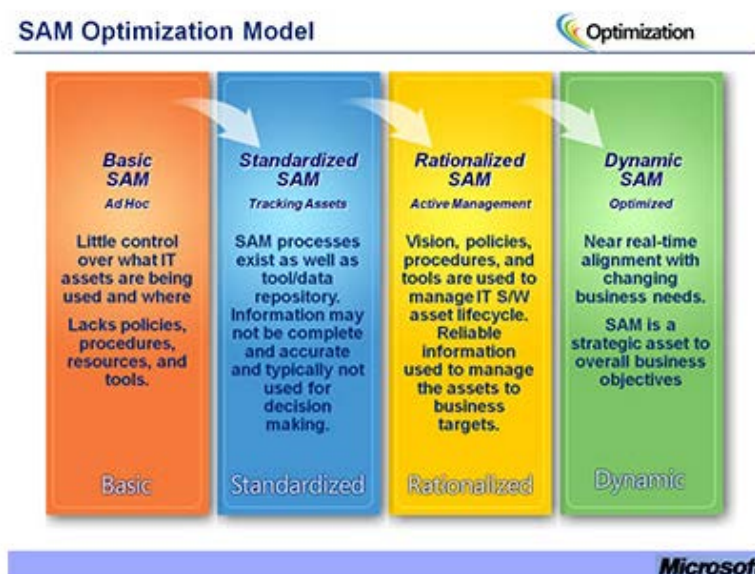
In plain English it means that SAM in its entirety encompasses *everything* to do with how software is purchased, deployed, managed, updated, used and secured across the enterprise. That means people, processes and technology all working together to optimize each and every element of software usage.

The one thing that it isn't is small. In fact, you only need to read the ISO 19770-1 international SAM standard to see just how demanding 'true' SAM is: the full document runs to 80 pages and comprises no less than 27 individual processes.

In short, it's one heck of an elephant to try to eat in one sitting – but more of that in chapter four.

In real life, few (if any – at the time of writing, no organization has been certified as compliant with the standard) organizations actually have a SAM strategy that encompasses all the requirements outlined in the ISO 19770-1 standard.

It may be easier to look at a simplified version of SAM. In this case, the Microsoft SAM Optimization Model outlines four stages of SAM 'maturity' that enterprises must pass through on the route to Optimization:



Microsoft suggests that the vast majority of organizations have only achieved a 'basic' level of SAM to date, with around 2% of organizations worldwide having what it describes (see above) as 'Dynamic SAM'.

Under Microsoft's model, 'Basic SAM' is perhaps a bit generous, as it suggests organizations have 'little control over what IT assets are being used and where'. That sounds a little more like 'chaos' to us!

The following chapter breaks down the core requirements of Software Asset Management, to help you identify the parts likely to deliver the strongest immediate value to your organization.

3. Software Asset Management Core Components

While the ISO 19770-1 international standard for SAM might identify 27 key processes and requirements, for the sake of simplicity this document identifies four ‘essential’ SAM technology components:

1. Inventory (including software metering / usage monitoring)
2. License Management
3. Application Deployment (including patch management)
4. SAM process management

Let’s explore each of these in a little more detail:

3.1. Inventory

Inventory, sometimes referred to as ‘Discovery’, is the foundation of many IT management practices, not just SAM (and, as such, many organizations already have inventory in place, see chapter four). In very simplistic terms, it is the automated collection of configuration data about the hardware deployed on the network and the software (both operating systems and applications) installed on that hardware.

Inventory solutions come in many shapes and sizes, from entry-level point products which cost less than \$1,000 for a network-wide license, through to components of much larger IT Asset Management (ITAM) suites. In the middle, there are solutions like Microsoft’s SCCM and MAP which are provided free to eligible volume licensing customers.

Although their intricate workings might differ, most inventory solutions are capable of providing the basic information about software installed on Windows PCs and servers (caveat: that doesn’t mean you will necessarily be able to make sense of their reports! See below).

If your network is also home to so-called ‘advanced platforms’ (virtual servers, Mac, Unix, Oracle, IBM etc.), then the chances are that a cheap or off-the-shelf inventory solution isn’t going to do a good job of identifying these assets. This is why a growing number of organizations actually use several inventory solutions, optimized for the different platforms across their network.

It’s all just Greek to me

A quick reality check. While most inventory solutions are capable of identifying the bits and bytes of what software is installed on Windows PCs and Servers, there is often a huge difference between what is ‘technically’ and what is ‘commercially’ installed. A quick example: an inventory solution might tell you that Microsoft Excel 11 is installed on a PC. And on a technical level, the inventory solution is correct. But the organization didn’t buy (and therefore doesn’t need to license) ‘Excel 11’. It would have bought ‘Excel 2003’ or perhaps Excel as a component of ‘Office 2003 Pro’. This is where many inventory solutions fall short.

Thankfully, there is a way to cope with this shortcoming (that doesn’t necessarily involve throwing out your incumbent inventory solution): A good license management solution will be able to take the raw data from inventory solutions and transform this into ‘normalized’ data which makes more sense when looking at commercial application installations.

3.1.1. Software Metering

A number of inventory solutions are able not only to detect the presence of software installations on PCs, but also to track how often they are used. The extract mechanisms and metrics vary, but essentially the aim is to add value to audit data by giving managers a view whether deployed assets are actually delivering any value back to the organization. In SAM terms, metering can be a valuable metric when trying to reduce software

expenditure, as this information can be used to determine where software can be removed from PCs where it is not used, and redeployed to new or more active users.

3.2. License Management

If building an inventory of the installed software is the first step towards Software Asset Management, then the second has to be the process of understanding how the installed software affects your current software licensing position (often referred to as an Effective Licensing Position – or ELP). The fact is that inventory alone can't deliver a strong ROI to the organization, as there is little or no 'value' in the raw data. It is only when you apply a level of 'intelligence' to this inventory data that organizations can start to benefit from reduced risks and cost savings.

This is where a good license management solution comes into its own. Again using simple terms, a license management solution is designed to process two data sources (in this case, the raw software audit provided by the inventory solution, and the license entitlements held by the organization) and provide a reconciliation between the two. If that's the theory, then the reality is much, much more complex as the license management tool not only needs to be able to make sense of the sometimes confusing data provided by the inventory solution (see "It's all just Greek to me" in section 3.1). It also has to be able to support all the different licensing models offered by the different software vendors being managed.

That's difficult enough when dealing with just a couple of major vendors such as Microsoft and Adobe. Factor in server virtualization, Oracle and IBM and the vast majority of so-called License Management tools simply can't cope. That's because many of these solutions are, in fact, little or no more than repositories. Yes, you can *store* license information in them, but try to *apply* those licenses accurately against actual usage and it all starts to fall apart.

The level of automation provided by different license management solutions also varies hugely. Some solutions offer the ability to automatically import license sources such as a Microsoft License Statement (MLS) in their raw format, others require you to do a substantial amount of data transformation outside of the product before import. Some solutions automate the modeling of the effects of server virtualization technologies such as DRS (Dynamic Resource Scheduling) from VMware, others can't cope. Some solutions provide an instant ELP in the format required by major vendors, others need you to export the data to Excel and then cut and paste.

Which license management solution is right for your organization will depend largely on which software vendors you need to manage, how many resources you have available to throw at the project and what sort of investment you are willing to make (and how long before you expect to see an ROI).

3.3. Application Deployment

Application Deployment can come in many shapes and sizes (for example, it may or may not include in-product packaging of applications), but essentially the aim is to streamline both the process of deploying new software packages to many users across the network as well as then keeping those applications and operating systems up-to-date in terms of both upgrades and security patches.

There are many benefits of automated deployment – reduced support overheads thanks to all users in the organization running common versions of software, minimized administration time to manually ensure that software policies are being adhered to, and increased user productivity due to reduced downtime etc. Application deployment is, by its very nature, complex and thus solutions in this area tend to be major investments and require significant behavioral changes across the organization.

Successful application deployment is itself dependent on having both inventory and license management in place beforehand. Otherwise, it is near impossible to ensure the right software is deployed/updated on

appropriate machines or indeed check that the organization's deployments are in line with current license entitlements.

3.4. SAM Process Management

As stated earlier in this document, SAM in its widest form is essentially the bringing together of people, processes and technology to meet the common objective of better management of software throughout its entire lifecycle.

One of the key challenges facing any organization trying to achieve this is the sheer scale and diversity of stakeholders that need to be involved. Take the lifecycle of just one application as an example:

1. End User requests a copy of Adobe Acrobat Pro be deployed to their machine
2. Line manager examines and approves request
3. Software manager identifies that no spare licenses are 'in stock' so new purchase required
4. Procurement identifies best-cost supplier and places order
5. Software manager updates license availability on confirmation of order
6. Application deployment team receives go-ahead to deploy application to target device

In that simple example, no less than five different stakeholders from four or more departments are involved in the request, approval, purchase and deployment of the software. Unsurprisingly, for many organizations this kind of process chain can be difficult to manage. This in turn results in slow resolution times, user productivity issues and possible over-spend in software licensing.

That's where SAM process management solutions can come into their own, linking together all the different stakeholders involved in the software lifecycle onto a single platform. This makes it easier to track requests, costs, resolution times as well as ensuring that all software deployed on the network is both accounted for financially (SAM process management solutions can also prove invaluable to cross-charging and inter-department accounting) and fully in-line with the organization's license entitlement (thus avoiding any potential compliance and governance issues).

4. Eating the SAM Elephant

Most people are familiar with the saying ‘How do you eat an elephant?’; ‘One bite at a time’. Addressing SAM is very much like eating an elephant (although don’t ask us what an elephant tastes like, we’re being metaphorical here!).

If SAM is daunting when seen in its entirety, then breaking it down into its component parts makes things more bearable – and is likely to ultimately deliver greater value to the organization.

Whichever way you look at it, SAM has to start with inventory. You simply can’t do any of the other processes effectively if you don’t know the current baseline of software installs (and usage/metering if you can) on the network. So in that way, Discovery comes first. But remember that inventory alone is rarely the direct driver of cost savings or risk reductions.

A critical stage in the adoption of SAM is when the process stops having a net cost on the organization and starts driving cash positive outcomes. This conversion from cost to ROI starts with license management.

Why? Research conducted by License Dashboard (over the course of around 1,000 SAM engagements) suggests that most organizations that are new to SAM are spending in the region of 20% too much on their licenses and support contracts each year. For most organizations, that 20% wasted spend far exceeds the cost of investing in a license management solution (don’t forget, many organizations already have an inventory solution, so this is often not necessarily a new or direct SAM cost) and so it is quite feasible to see a full ROI in less than six months from the deployment of the license management solution.

There are other compelling reasons why license management should be a priority for SAM:

1. Your organization now faces a 65% chance of being audited by at least one software vendor in the next 12 months (source: Gartner)
2. More software vendors than ever now have active review and compliance programs for licensing
3. Streamlining application deployments is actually dangerous if you don’t monitor the effect on the organization’s ELP
4. Most organizations with Enterprise Agreements or other volume licensing schemes fail to realize the maximum value of their license entitlements, effectively losing money on agreements

When inventory and license management are in place and running effectively, that’s the time to broaden the SAM scope to include other value add components such as application deployment, and SAM workflow automation. The building blocks are now in place for these components to contribute towards the ROI rather than simply increase the Total Cost of Ownership (TCO) of the SAM program.

5. Avoid unnecessary costs - Making the most of what you have

It is important to remember that SAM – and the components of SAM – is not a unique and siloed activity but inter-connected with many other aspects of IT operations. Many organizations, for example, already run an inventory solution to feed data to their help desk, or to manage the lifecycle of hardware purchases. Similarly, application deployment modules are often included in larger IT Asset Management (ITAM) suite solutions. For organizations with a Microsoft Enterprise Agreement, they more often than not have access to the Microsoft SCCM inventory and configuration management solution (other Microsoft customers can often get MAP free of charge).

As such there is a strong business case for identifying the tools already available to your organization (whether actually deployed, or just unused entitlements) before committing to any new costs associated with SAM technologies. As outlined below, it is also important to view inventory solutions not only in terms of acquisition cost, but also ongoing costs around deployment, configuration and maintenance.

What the vast majority of organizations *won't* have in place is a credible license management solution. Certain ITAM suites do claim to offer license management modules, but by and large these are more like the repositories outlined in section 3.2 rather than intelligent reconciliation solutions.

The true cost of swapping inventory technologies

Organizations that are considering swapping out an existing inventory technology for replacement tools should bear in mind that the true cost of doing so will far exceed the initial purchase cost of the new solution. That's because inventory solutions are notoriously difficult to configure and deploy. Even the best solutions still need to cope with the vagaries of the host network, being able to send data through firewalls, across multiple sites etc. For organizations with no incumbent toolset, it's a necessary pain. However, an organization looking to move from one inventory tool to another really needs to ask itself whether the new solution will justify the cost, downtime, disruption and learning curve?

When a good license management solution is capable of overcoming perceived shortcomings in inventory 'quality', there is a strong argument to stick with the incumbent inventory tool to avoid the pain highlighted above.

By comparison, swapping license management tools is swift and painless – as there are no client agents to deploy, no firewalls to talk through and a good solution requires only modest hardware resources. Entitlement data from one license management tool (if the quality is good enough) can usually be imported to the new solution (with some data transformation or cleansing).

6. Conclusion

SAM is a big complex animal, with many components and requirements. But as this document shows, what SAM is not is inventory alone. Good inventory is essential, not only to SAM but to other aspects of IT operations. But at best inventory can only be a cost, it can't drive direct cost savings.

At the same time, organizations with incumbent tools – particularly inventory and ITAM suites – need to be wary of the real cost of swapping these technologies out. The license cost of a new replacement technology can often pale into insignificance next to the ultimate costs caused by labor, disruption, downtime, new hardware and training. A better strategy might be to identify the real areas in which the organization's toolset is currently lacking – what is it that the current incumbent tools are not delivering? Can these shortcomings be addressed with new technology that is complimentary to the existing investments, or is 'rip and replace' the only way forward?

To drive true value, organizations need to build on their inventory costs and turn these into ROI by extending their gaze to license management and other SAM components such as workflow automation.

License Management, in particular, is worthy of attention as it is central to both risk avoidance and driving cost savings across the organization. With Gartner and other analysts agreeing that organizations now face a 65% likelihood of receiving a software audit in the next 12 months, there are multiple business arguments for investing in license management:

1. Audits are disruptive – responding to one *will* waste time, cause disruption and could cost money – having a pre-prepared ELP will make the process much faster and less costly
2. More vendors than ever are now conducting software audits – it's not just Microsoft!
3. Identifying any shortfalls prior to an audit gives the organization *time* to plan how to rectify them

If auditing is the 'tails' side of the license management coin, then driving cost savings must be 'heads'. Here are some ways in which license management can deliver tangible cash benefits:

1. Eliminate purchasing of unnecessary software licenses
2. Increase re-harvesting of under-used software assets
3. Reducing over-spend on support contracts (for outdated or unused applications)
4. Ensuring organizations get full value of entitlements and volume licensing agreements

So the final takeaways are simple and succinct. SAM is big, too big to tackle in a single hit. SAM is also much more than just inventory – at best inventory is merely keeping an eye on what is happening on the network, often with little or no context.

For most organizations the first real steps into SAM are with license management – there is where SAM stops being purely a cost to the organization and starts delivering cash-positive value. Only after the organization's licensing situation (or ELP if you prefer) is fully understood is it justifiable to make additional investments in more advanced SAM technologies such as application deployment and SAM workflow automation.

To learn more about effective license management and how to drive value to your business contact License Dashboard today for a free appraisal of your current SAM maturity and potential risk analysis.

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7. About License Dashboard

License Dashboard combines unrivalled SAM and software licensing expertise with professionally-developed software solutions designed to help both large and fast-growing organizations manage their software expenditure, minimize costs, optimize utilization and streamline the entire software lifecycle

From point-in-time Effective Licensing Position (ELP) programs, through to ongoing license compliance and Software Asset Management initiatives, License Dashboard's advanced portfolio of solutions and professional services will help you establish, understand, optimize and manage your software licenses. All of which can lead to savings of up to 30% in your overall IT expenditure.

License Dashboard solutions and approved services are available through many of the world's most respected SAM and licensing providers, offering both on-premise and hosted or managed service options. To learn more about partnership opportunities, or to locate an expert partner in your area, contact License Dashboard today.

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7.1. Resources

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