



3 ways to reduce software costs

Software asset management





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Top 4 benefits of SAM

1. Proactive and automated software license compliance

- Full understanding of your current license status
- Reduced risk of noncompliance discovery by audits

2. Optimized license purchasing

- Clear view of software owned and used
- Reallocation of unused software licenses
- Negotiation of entitlements to reduce license purchases

3. Full upgrade discounts

- Complete software entitlement and deployment tracking

4. Reduced maintenance costs

- Cancellation of maintenance for unneeded licenses
- Negotiation of license agreements from a vantage position

Executive summary

“How will IT control enterprise cost? How will technology support growth?” CIOs across the world are constantly searching for answers to these questions, especially in the wake of recent economic upheavals. And, as they look for areas where they can cut costs and heighten efficiency to give their IT organizations a competitive edge, they cannot overlook the opportunity that lies in the software asset management (SAM) space.

This paper discusses the potential for radically improving cost efficiency with a well thought-out SAM strategy. It aims to improve understanding of the SAM discipline, including the challenges it poses as well as the tactical and strategic advantages it offers. And, it lays out a high-level plan for you to architect your own SAM approach, drawing on proven solutions that can help you optimize the returns on your software investments.

The changing job description of the CIO

Recent events in the global economy have changed the role of IT. It's not considered an expense anymore, but an investment for business growth. This gives IT leaders the opportunity to demonstrate leadership in shaping technology-driven business growth—by cutting costs, improving efficiency, and helping the business pursue growth with agility.

More than ever, CIOs are now measured on their ability to effectively manage the IT organization and its resources. This is because people managing the business have become more cost conscious. If the IT services sourced internally turn out to be too expensive, they do not hesitate to buy them from the public domain, where there are many options available today. So clearly, there is mounting pressure on the CIO to take a close look at how different IT resources are managed and spot areas where cost efficiency can be optimized.

In this scenario, SAM assumes great significance. Software costs consume a significant portion of IT budgets. After labor, software can be the second most expensive component of an IT budget, depending on your industry. In fact, through 2014, enterprise software spend is expected to increase by 25 percent¹ from the current figures, as a consequence of the proliferation of smart operational technology. Ironically though, software assets are loosely managed compared to hardware assets.

Most organizations do not know what software is installed across the company, where the software is installed, and if the software installation is compliant with licensing rights. Without this information, you face several risks. You could be overspending by purchasing licenses for software that's not installed or used. Or, you could be illegally using software by having insufficient license rights and face the prospect of paying heavy penalties.

Fundamentals of software asset management

Software Asset Management (SAM) involves the acquiring, sorting, analyzing, and interpreting of a big volume of data. The objective is to facilitate control and accountability for spending at the department level and ensure proper software entitlement, software license compliance and contracts, and inventory management—all based on actual need. This is accomplished through effective discovery of software instances, management of licenses and related contracts, and reconciliation of inventory vs. license entitlements. If executed efficiently, SAM can help you reduce costs by:

- Preventing avoidable costs during audits
- Right-sizing your license purchases
- Lowering software maintenance costs

Most IT departments have some form of SAM in place, but often with wide gaps, as shown in **figure 1**. And, many overlook the importance of having ongoing inventory discovery, reconciling it with purchased licenses, and proactively and continually exercising compliance management. As a result, organizations are unprepared for vendor audits and incapable of negotiating maintenance or enterprise license agreements (ELAs), and they often end up renewing them automatically.

¹ “Predicts 2013: IT and OT Alignment Has Risks and Opportunities,” J. K. Steenstrup, P. Iyengar et al, Gartner, November 2012.

Finding insights to better manage your software assets

Managing software licenses is much like managing human capital. Knowing how your resources are used can help you manage them better—so you can get more out of your investment and optimize costs.



A mature SAM solution can help you achieve this by providing answers to some fundamental questions:

How many are fully utilized?



Proactive and automated software license compliance enables:

- Full understanding of your current license status
- Reduced risk of non-compliance discovery by audits

How many are overworked?



How many are underutilized?



License purchasing with a clear view of software owned and used enables:

- Reallocation of unused software licenses
- Negotiation of entitlements to reduce license purchases

Can they be moved to other roles to cut new hiring?



Depending on actual skill requirements, can you...

Hire some under a lower pay band?



Complete software entitlement and deployment tracking enables:

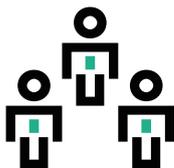
- Purchase of software versions that are less expensive
- Negotiation of full-upgrade discounts

Promote some rather than hire new ones?



By right-sizing your workforce, how much can you save on...

Training costs?



Cancellation of unneeded licenses enables:

- Reduction in maintenance costs
- Avoiding of unnecessary upgrades

Supply chain costs?



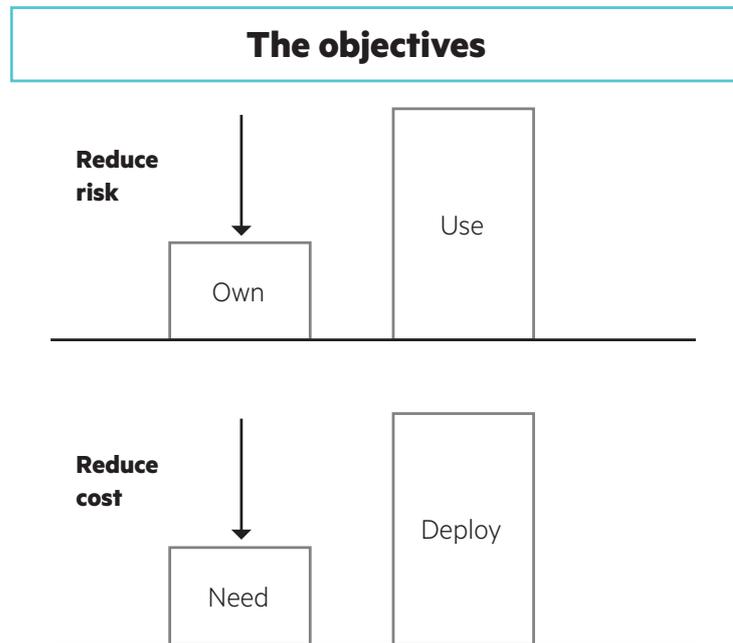
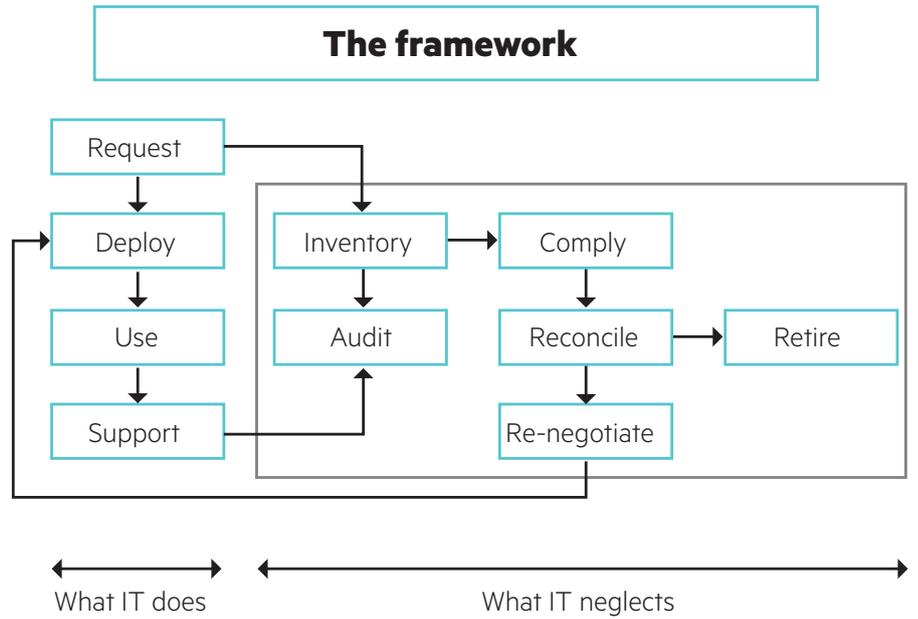


Figure 1. Software asset management blueprint

SAM's key objectives are reducing costs and risk by purchasing and deploying only the software licenses actually needed and using only software that is licensed. That said, SAM is often not a straightforward discipline, mainly because license rules, types, and schemas differ from vendor to vendor, and differ even among products from the same vendor. Adding to the confusion, many software vendors keep changing the rules and terms of licenses. That's why the reasons for disputes between software vendors and their customers lie in vaguely articulated areas such as license metrics and usage entitlements.

Another key challenge is managing license compliance in virtualized environments. While your business may expect to save costs as soon as you move to a virtualized or cloud environment, the existing on-premise software maintenance contracts cannot be canceled overnight. You need to clearly understand the costs and legal consequences of transferring existing licenses into the cloud. A good understanding of all the challenges and opportunities of SAM can go a long way in helping you shape and execute your own SAM strategy.

Licensing challenges that come with assets on the move

As IT systems and environments evolve, your rights for software use may no longer be valid. Like most IT departments, you may have invested in virtualization to optimize utilization and costs by dynamically adjusting capacity, which may involve moving software from one resource to another quickly. But, this kind of agility makes the existing software licensing models ineffective from a cost perspective, as many software licenses are still tied to servers or processors. The right to run the software anywhere on demand can be extremely expensive.

Matching supply with demand with elasticity is the key advantage of the cloud. But, this flexibility can also be a nightmare for asset managers, as they have to ensure adequate and timely software license procurement. In cloud environments, the biggest challenge is to provide an accurate account of licenses that satisfies both long- and short-term demand. Whether it's a private or public cloud, the use of software needs to be licensed. The cloud service provider may provide the licenses. But, it's the responsibility of the organization that uses the software to ensure that they are correctly licensed.

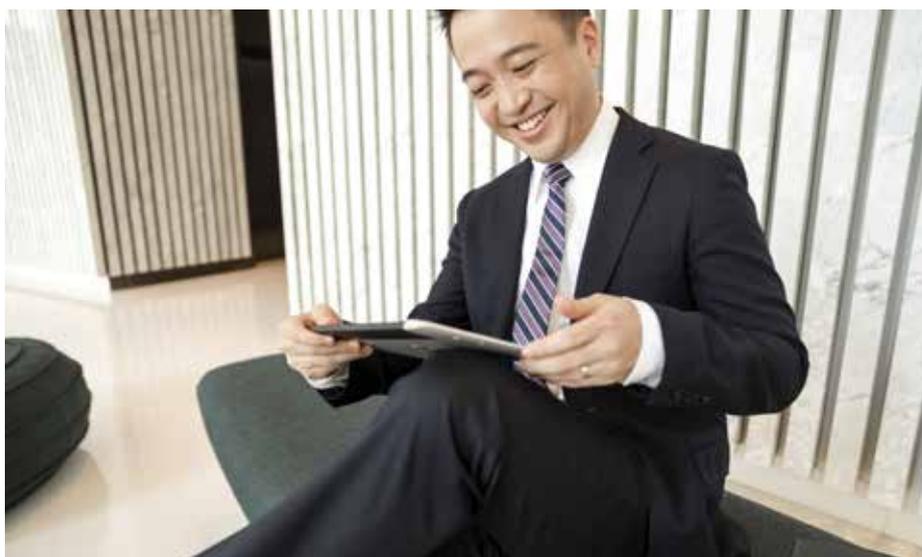
The software licensing challenges that come with adopting virtualization technologies and cloud computing are also applicable to "bring your own device" (BYOD) programs. Using mobile devices and mobile access comes with its own set of licensing challenges and risks.



3 ways you can reduce costs with software asset management

- 1. Prevent avoidable costs during audits:** Even though 65 percent² of organizations are audited on a yearly basis, many don't have appropriate processes and tools in place to manage software audits, leaving them vulnerable to unexpectedly high fines. If an audit detects the use of unlicensed software, you'd have to pay heavy fines, additional license fees, as well as software maintenance costs. That said, penalties are not the only way audits can cost you. Often, misunderstanding the scope of the audit can lead to wrong estimates of the time and effort needed for the audit. Lack of preparation can also make the audit a time-consuming exercise that can disrupt routine business operations. The best way to be sufficiently prepared for the vendor audit is to proactively manage license compliance.
- 2. Right-size your license purchases:** Most large companies waste millions of dollars purchasing more licenses than they need, resulting in over-compliance. This is because they have no idea how many of the licenses they own are unused. These companies often purchase software licenses in a decentralized way and discover that gathering information about all the software that was bought—when it was bought, for what price, and under what terms—can be a complex undertaking. Being unaware of all the unused or unnecessary licenses you possess means asset managers cannot powerfully negotiate with vendors at the time of renewing licenses and maintenance contracts.

Tracking which software features are consistently used and how often they are used can help determine the optimal amount and types of licenses your organization actually needs. Another key reason for over-compliance is that the licenses from retired machines are usually forgotten and wasted. Companies that don't have mature change management processes generally don't track retired assets. You need to know exactly what software you use and what licenses you possess in order to adequately plan for future license purchases. But, when you don't really know your current usage, predicting future needs correctly is impossible.
- 3. Lower software maintenance costs:** Sometimes, license keys are installed simply because they are available. This creates additional liability, as there will be a maintenance fee for each user license key. Properly licensed software that is not used is a liability, rather than an asset, for the organization. Apart from wasting money to purchase the unnecessary licenses, there are costs involved in maintaining and managing the software with processes such as patching and upgrading.



² "Software Vendor Auditing Trends: What to Watch for and How to Respond," J. Disbrow, A. Bona et al, Gartner, May 2012.

Must-have processes of a software asset management solution

Software licenses are an organization's investment. They need to be protected by preserving entitlement records and gaining a thorough understanding of their content, including the fine print. But, the reality is many organizations don't protect their software investment, as they get overwhelmed with the complexity of managing software licenses and ensuring compliance. There's a way out though. What you need is an effective SAM solution that involves automated tools to facilitate the four key processes required for efficiently managing, controlling, and protecting software assets across their lifecycle. The processes include:

- **Inventory management:** You need to know what software has been deployed and by whom, and how often that software is used. Your discovery tool should help you do this with a summarized output, factoring details such as the status of installations and the number of core processors on the machines where the software has been installed. Some vendors mandate that you apply a multiplier to calculate the number of licenses required on multicore processors.

It is also necessary to detect the software licenses allocated to retired systems, as those licenses can be reallocated. In addition, an observation of the software usage data can help you discover that a number of users may not be using the installed applications regularly or that they don't use many of the application features. The needs of these users can be satisfied with software versions that are less expensive.

- **License management:** License management is about getting full control over the procured software licenses. This involves managing:

- License lifecycles, covering procurement, allocation to users, reallocation, and retirement
- Related contracts, including maintenance contracts that define rights to upgrade the applications, volume purchase contracts, terms and conditions of licenses (such as transfer policy, upgrade rights, and metrics for counting deployments)

At this stage, the task is to make sure all software license contracts and their attachments, including support, maintenance, and upgrades, are verified and stored in a centralized repository. Verifying license compliance using the information gathered with an inventory solution requires full understanding of licensing terms and conditions. For example, a software application that's installed on a server will be discovered only once; but it may be accessed and used by many users, each requiring a license. If you cannot prove your actual software deployments, the auditing company could make assumptions based on factors such as the number of employees, test servers, or OEM deployments. And, this may put you at a disadvantage, forcing you to purchase more licenses than you need.

- **Policy management:** Vendor audits should never be the main reason to be license compliant. Licensing is the center and crux of most corporate policies, stating that only software that is properly licensed is installed and used by entitled users. Policy management relates to corporate governance policies that dictate what software needs to be allocated to which user group or function and who is allowed to install the software.

Governance policies also need to protect the company's interests. The policies should ensure that the organization is neither over-compliant nor under-compliant, as both situations cost money and the latter can damage the organization's reputation. Besides controlling the license inventory, you need to set up and track users' entitlements by framing suitable policies. Usually, a user's right to use applications can be based on his or her role in the company and users need to follow the defined license request process. Otherwise, the organization might have to overpay for software that shouldn't have been used.

- **Compliance management:** The compliance management process reconciles the licenses owned against the software consumption to determine the compliance status and plan further action, if needed. The barriers at this stage include the ambiguous language used in license contracts, complexity of your IT environment, and complexity of the licensing rules, which differ with each vendor and each software product. With these challenges, computing the number of licenses ever purchased for each software product and validating if the license counts are compliant with your actual software usage can be a daunting task. However, a proven compliance management solution can help you reconcile the number of licenses you own with the installed base automatically and determine suitable action: purchase additional licenses, uninstall some of the software, or reallocate unused licenses.

It is very important to acknowledge that compliance management is not only about detecting and reporting non-compliance, but also about automatically triggering remedial action. In fact, with an automated compliance management tool, you can perform an internal audit.

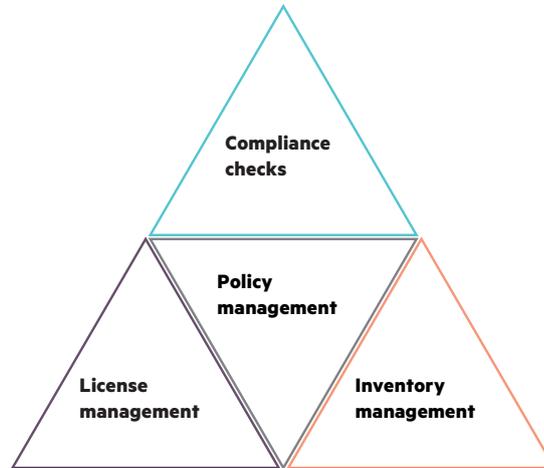


Figure 2: The four pillars of a SAM solution

With the SAM discipline becoming increasingly complex with new technologies and software licensing models, you need sound processes and tools for automated control of inventory, updates, license computing, and compliance status monitoring. HPE can help with a proven end-to-end SAM solution, designed to address your needs and enable true evaluation of your software compliance status. For over 20 years, HPE has been helping large, complex, global organizations realize greater value from their software investments.

Partnering with you on your software asset management odyssey

SAM is a journey. And, having a partner like HPE can help avoid trial-and-error situations along the way. To help you begin the process with ease, HPE offers two key products: the HPE Software Asset Insight (SAI) service and the SAM solution. The SAI service is a tactical solution that helps garner reliable data and reports on your license compliance status at any given time. It’s a great starting point, but not a replacement for having a holistic SAM strategy—for which you need a comprehensive SAM solution that enables you to mature your capabilities up to a point where SAM becomes an integral part of how you manage your software assets.

Table 1. A two-step, gradual approach to success

Software asset insight service	Software asset management solution
<ul style="list-style-type: none"> • Pre-installed and pre-configured software • Automated discovery • Ready-to-use reports • Point-in-time service 	<ul style="list-style-type: none"> • Automated and continuous software asset discovery and management • Contract and entitlement management • Ongoing software compliance enablement • License optimization

HPE Universal Discovery (UD): Verified by Oracle
 HPE UD for the Oracle Licensing Management Implementation software is verified by Oracle. As the tool discovers Oracle databases, database options, management packs, and hardware information using Oracle License Management Services (LMS) methodologies, it meets Oracle’s exacting standards. The results delivered using HPE UD for Oracle licensing are accepted by Oracle, as if collected by their own LMS engagement team.

You may not have a SAM initiative in place yet, but may be facing a vendor audit or have to renegotiate or renew enterprise license agreements or maintenance contracts with your vendor. The SAI service can be helpful in such situations. The service can help you perform an internal audit, without having to deploy software or provision infrastructure to do it.

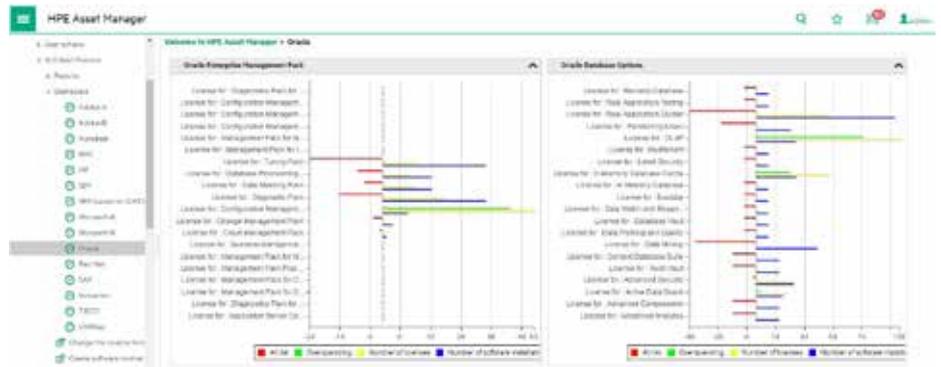


Figure 3. Oracle compliance dashboard: shows the compliance status of each Oracle application

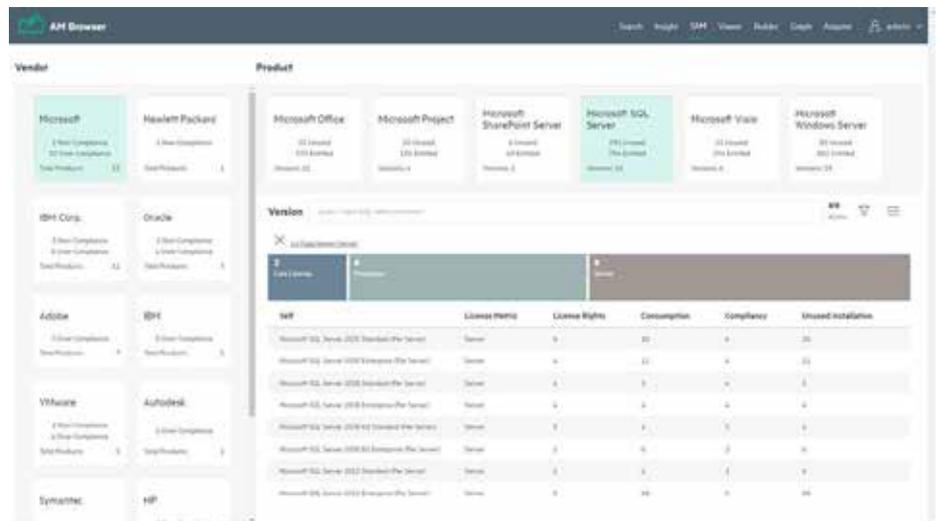


Figure 4. Software Asset Management dashboard can be customized to include widgets with the most relevant cost and compliance information



Figure 5. HPE SAM solution: manage software license procurement from within the platform for end-to-end tracking



The next step, after leveraging the SAI service, is to adopt the SAM solution, which has implementation processes and automated tools that let you efficiently manage, control, and protect your software assets at each phase of their lifecycle. HPE has designed its SAM solution to work in heterogeneous environments. The solution includes discovery of software instances, either through a native HPE UD product or through another vendor's product. HPE UD is used to continuously discover all installed software, while the HPE SAM software performs the business slicing and dicing of the discovered data—so you get the insights you need into your entitlements, usage rights, actual usage, costs, and compliance status.

Part of the SAM solution offered by HPE is contract management, which helps track and manage license, maintenance, and purchase contracts. You can select from predefined license structures (by user, server, CPU, installation, or other parameters), or you can create your own license model. Besides the license terms and conditions, the SAM solution can execute internal policies with different user entitlements and discover unauthorized software.

The SAM solution from HPE automates the license compliance process and offers an easier route to license optimization by:

- Providing out-of-the-box content for more than 700 hundred software titles and versions and delivering the stock keep unit (SKU) library with thousands of licenses
- Offering a regularly updated best practice package that contains the standard terms and conditions of key software vendors such as IBM, Oracle, Microsoft®, Adobe®, Symantec, SAP, VMware, Autodesk, Red Hat, and BMC
- Reconciling the license inventory with the license rights and internal policies on entitlements
- Reporting on upgrade and downgrade rights covered by maintenance contracts
- Analyzing application usage, identifying license reduction opportunities, providing the cost of compliance, and calculating projected costs after factoring in planned removal of certain software
- Initiating automated corrective action to request new licenses or uninstall software through integration with software deployment tools

Ultimately, the goal of the SAM solution is to help you optimize software licenses, prepare your organization for audits, and reduce the impact on your critical IT processes.

Recommended reading

[HPE Asset Manager software overview](#)

[HPE Software Asset Management data sheet](#)

[HPE Asset Manager support knowledge base](#)

[HPE ITSM Software Blog](#)

SAM enables savings

A major US-based pharmaceutical company wanted to become audit ready and reduce unnecessary software purchases. To do this efficiently, the company needed to view and manage its effective license position proactively. The company's internal policy stated: For any software not in use for 90 days, the related licenses need to be reallocated to other users who need it and are entitled to use the product.

The company decided to implement the HPE SAM solution, including HPE UD. The solution enabled the company to reallocate existing licenses, helping avoid significant new purchases to that effect. They increased cost control and centralized audit coordination for all hardware and software assets, optimizing license costs. Every stakeholder in the company's IT organization and various business units have customized views of their respective compliance status and its financial implications, which enables them to re-harvest licenses for reuse.

Getting started with software asset management

You can begin with a limited scope, covering software from only some of your strategic vendors, such as Oracle, IBM, and Microsoft. You'd be able to track software utilization accurately, intelligently normalize constantly changing software titles, and speed up your inventory process. Building on the initial gains, you can proceed toward a full-fledged SAM solution that lets you proactively control costs, maintain compliance, and reduce vulnerabilities.

Learn more at
hpe.com/software/itam



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