

5 Key Capabilities Needed For SLM Success

The Role of A Unified Tool

A SCALABLE SOFTWARE WHITEPAPER

Executive Summary

The continued growth of Shadow IT, the need to transform IT platforms, unpredictable software license expenses from cloud and virtualization and the very changing nature of what is a software asset, all continue to demand a far more proactive management of software assets and their costs. Despite this very chaotic situation, Gartner's assessment is that software management tools are only 1 to 5 percent penetrated.¹ With software representing twenty percent of an enterprises IT spend, this is surprising. This low adoption is attributed to poor consumption(usage) data, lack of integration with existing tools and weak support for Cloud and virtual technologies. When you add in the Shadow IT effect where up to 30 to 40% of cloud based applications are used on an unsanctioned basis,² the percentage of spend on IT overall becomes much higher.

To address this a new class of Software License Management (SLM) tooling has emerged. One that is both specialized enough to keep pace with the rapid changes on devices and licensing models, but is also broad enough to satisfy all aspects of today's needs.

These systems have been developed in a unified manner to prove actionable intelligence to enable proactive control of software expenditures. This means they incorporate discovery and inventory, their own automated normalization services along with reconciliation and integrated analytics. This white-paper explores the five key capabilities that should prove the most beneficial in identifying unused software and potential cost savings, through harvesting of software from desktops and servers or managing your SaaS deployments, be they sanctioned or not .

The Overall Importance of SLM

Whether it is IoT, Digital Business Transformation initiatives, compliance, security or just standard cost optimization, software is at the core. Sixty years ago the computer revolution began and within the past two decades the rise of the modern Internet, has put all the technology required to transform industries through software in place and is now driving commerce on global scale. Take Amazon. It is the second publicly listed U.S. company to achieve a \$1 trillion market cap. But it is a software company. Its core capability is all about the software engine for selling virtually everything on-line. So, software is the lifeblood of any company and needs to be considered from several viewpoints.

First, as companies grow and mature, the overall cost of those assets will increase as will the complexity of those assets. Software license and maintenance costs have routinely been quoted as 21% of a companies' information technology budget. With spending on enterprise software expected to increase 4.7% a year through 2019 and SaaS growth projected at 17%, SLM can help

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control these software expenditures. By capitalizing on volume discounts, avoiding non-compliance, making use of detailed usage metering capabilities and allocating software more efficiently, a unified tool approach will yield high returns.

The second consideration is risk reduction. Strong SLM initiatives help reduce risk through tracking vulnerabilities, providing white listing along with a detailed and accurate inventory of assets, both hardware and software. By strengthening the overall security landscape SLM can play a significant role in combating malware attacks. Besides the damage to a company’s reputation where inappropriate leaks of information may occur, the overall malware-related activity costs to the global economy are estimated at a startling \$600 billion annually, or 0.8 percent of the global GDP.⁴

All together these form a compelling case for SLM to not just be something functional IT executives should consider but an imperative elevated to the most senior levels. All in all it is not just about cost reduction but cost optimization, transparency, managing the changing vendor landscape and improving overall compliance and security.

Key Capability: SLM Demands Consistency

Excel continues to be the most common method of communicating data, particularly within IT. MLS documents, LAR statements, exports from multiple discovery tools, all the conceivable bits of information necessary to build a solid baseline are reduced to spreadsheets with no common format, no common creation date and representing a past point in time. Although many modern tools provide APIs to assist integration, the standard operating procedure is for one tool to export a spreadsheet, which is asynchronously consumed by another tool. In most cases the exported data needs to be finessed before it can be imported or, worse still, a cleanup must be done in the target system following each import. End-user surveys by EMA identified forty-five percent of respondents spend fifteen hours or more per week on resolving data accuracy issues.⁵ That comes at a considerable cost. Just using a 48 week work average model says 38% of a man year is being consumed with reconciliation . . .at a minimum!

Worse yet, this care and feeding routinely gets deprioritized in favor of more pressing requirements. When systems begin to lag each other, data inconsistencies develop and are easily spotted. The result: data-trust issues quickly dominate the SLM conversation and before too long the project is sidelined. The root cause of most failed projects can be traced back to poor data quality as a result of weak integration within the tool.

A unified solution overcomes these problems by ensuring data quality is present throughout the system. Discovery, inventory and normalization are all working together in this unified model to represent the trusted source against which all other data sources should be compared against. When integration is minimized errors are reduced. With this exacting standard of automation and data quality, data consistency becomes a self-managing and reliable process.

Key Capability: Removing Data Uncertainty - Normalization

Unnormalized data is by and large useless. One example is software signatures. They are diverse

and subject to change by publishers on a version by version basis. Further, these signatures are routinely altered through application packaging and deployment, leading to even greater diversity. So Microsoft Office 2013-Sales/Microsoft Office 2013/Microsoft are all the same product but can confuse the situation by showing up as 3 separate products in inventory without some form of normalization.

By applying a consistent, automated process, the seemingly random and diverse ways in which hardware manufacturers and software publishers define the items they produce can be turned into a consistent naming standard. This gives accurate data that is organized in a routine manner. This is critical when one must reconcile software contracts, licensing rules as well as installation and usage information.

Normalization needs to happen to many different objects as well. Discovery data is obviously important to normalize but more so is licensing and purchasing data. Crucially these other objects must be normalized using the same rules if they are to be applied consistently. This argues for an inventory capability with embedded normalization functionality closely linked to the license management function.

Licensing is the most well understood example, but associating purchase records with discovered computers and user location data with device location data are other less obvious examples of where consistent normalization, across classes of IT asset data, is critical. All of this data needs to exist in a unified fashion if a complete and accurate picture of your software license management status is to be reported on.

Along with the architectural unification one must consider applying advances in innovation to support this important function. Many current normalization technologies use simple lookup models, where the presence of a signature equates to a normalized name. This remains the case in many systems today which are backed up by cadres of data analysts pouring over spreadsheets of software product names and resulting in unnecessary expense for the end-user.

With the explosion of devices, software and cloud services this model has reached the end of its useful life. Modern software license management tools use machine-learning techniques based on crowd-sourced, automatic lookups. Multiple signatures per object are used to train the normalization model. These sophisticated algorithms can identify the most reliable signatures across millions of daily lookups to ensure breathtaking levels of accuracy while increasing the supported objects autonomously.

Key Capability: Cloud Aware Discovery

As mentioned at the opening, Shadow IT usage is up 70% and 30 to 40% of cloud based applications are used on an unsanctioned basis within companies. As more of the software used by an organization shifts to the cloud, any tooling that remains focused on internal assets only is doomed. The rise of Shadow IT has also created an IT liability that is hidden to traditional tools; and most commentators' assert that the size of the liability is set to overtake traditionally deployed assets within a realistic planning horizon.

What should be most concerning for companies who embrace the use of SaaS is the variety in licensing metrics. They are as diverse as: company division definitions in accounting systems; lead counts in marketing systems; customer logins in support portals; sub-function enablement;

“ Without normalization it is impossible to accurately determine any kind of baseline to support ITAM functions. ”

“ Modern integrated ITAM tooling cannot only identify the cloud assets in use, but represent them in ways that illustrate their value. ”

back-end database sizes and much more. Pretty much all of these metrics can be exceeded with out any evidence appearing outside of the SaaS system, and in many cases without a customer explicitly enabling anything. When coupled with the fact that many (but not all) SaaS environments do nothing to pro-actively alert you to the fact you have exceeded any limits, or stop you doing it, you have a recipe for breaching licensing agreements that far exceeds that of traditional on premise software. The net of this scenario is that in the world of SaaS it is less about being prepared for an audit, and more about monitoring consumption of the SaaS tools in use.

Monitoring these metrics require SaaS environment specific technology as well. A modern integrated tool can not only identify the cloud assets in use, but represent them in ways that illustrate their value. For example, todays advanced tools can discover and illustrate the comparative use and cost between on premise ERP systems such as Oracle eBusiness and their SaaS cousins. This kind of practical, side by side analysis of assets with the same business purposes, but separated only in terms of deployment, is only possible by using a fully unified SLM tool set.

Key Capability: License Aware

Another key capability of unified SLM tools is being license aware. Many times software providers in the same space can use the same terms to describe difference conditions. Traditional hardware and software discovery technologies do a great job on enumerating all items on a network, but this can quickly lead to information overload. When discovery is intelligent enough to know a running copy of SQL Server is different to an installed copy in terms of licensing, and that some products create a greater liability on an 8-processor server than a single processor server, real value is derived. Very quickly, a sweep of a network can identify those configurations that represent the greatest cost to the business. Only with tooling that understands both discovery and license rules can such value be secured.

Having these embedded rules ensures that organizations to do not over-assign licenses. Detection of liability, and thus the requirement to assign licenses, is a critical element of these newer software discovery and detection technologies. With specific support for the licensing models of major publishers, an effective SLM solution will detect those machines where the software configuration creates a liability, and will assess underlying hardware and virtualization configurations to enumerate the exact metric counts applicable to the assignment.

Key Capability: Business Analytics

Actionable reports that drive sound, evidence-based decisions are what is ultimately desired. Having a unified shared hub for IT decision making with trusted and actionable information, is where the real value in SLM solutions is found. Because discovery, inventory, normalization and reconciliation are all occurring in an integrated architecture this is possible in these new generation of tools. A generic or third party reporting solution used to provide analytics is an abdication of responsibility on the part of the tool developer.

Analytics for SLM are domain specific, and invariably rely on the power of interconnected data within the system. The only way for the value of the interconnected data to be realized is for the

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analytics to be aware of it. Specific examples include:

- time sequenced discovery data interconnecting with location information.
- software usage information integrated with discrete installation expenses.

It must be possible for decision makers to build data objects dynamically to support the questions being asked directly within the tool, and have those answers delivered in a consumable and chartable fashion. Not only should these be easily and automatically distributed to the various stakeholders, dashboards summarizing data for executive review should be expected.

Summary

Historically, many licensing projects have failed to deliver value, in large part because the tooling does not stand-alone. Many times there are no automated touch points into the stakeholders of as well. Equally important is the knowledge gap that is created because so much of the process is outside the scope of traditional IT infrastructure management where ITAM generally sits. The license management process is dependent on all manner of additional products to get the job done: discovery tools, procurement information, contracts repositories and barcode systems to name a few. This integration requirement causes not only the loss of data resolution but means traditional functional silos must share information and often it simply never gets done. The asset inventory becomes out of date, the information is hard to mine, and when it does get shared it is anything but actionable.

The constituents do not trust it and the project eventually becomes a burden to its initial sponsors. Equally important is the need for executive ownership to emphasize the importance in meeting corporate objectives around transparency, compliance and cost management. This executive leadership will help ensure that there is recognition of the processes that must be put in place and how important care and feeding of these solutions are.

It is possible to significantly increase the probability of success for a software license management program with a modern, fully unified SaaS solution to augment the people and processes required for success. Data is always current, normalized and enriched in ways that create true value. There is no loss of data resolution and Excel is only used as a data consumption tool, rather than a data integration tool.

Learn more about Scalable's Asset Vision at www.scalable.com, or email us to request a demonstration at sales@scalable.com.

¹ Emerging Technology Analysis: Software Asset Management Tools: 3 April 2018 Gartner Research Note G00349057.

² "Cisco Reports Rapid Rise in Unauthorized Usage of Cloud" Wall Street Journal; January 13, 2016.

³ "Cyber-Attacks Occurring More Frequently and With Greater Sophistication, NTT Security Report Finds," Security InfoWatch (August 9, 2017).

⁴ "Global Cybercrime Costs Top \$600 Billion," DarkReading (February 21, 2018).

⁵ "EMA Research Report: Next-Generation IT Service Management--: Changing the Future of IT," June, 2017.