WHITE PAPER

Considering Software Licensing and Entitlement Management: SafeNet's Life-Cycle Approach

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INTRODUCTION AND MANAGEMENT SUMMARY

IDC survey and case study research has shown that the benefits to software publishers of software licensing and entitlement management solutions can include faster time to market with new product and licensing options, increased ability to capture and optimize revenue, reduced operational inefficiencies, and improved customer satisfaction. As a continuation of prior research, this white paper, commissioned by SafeNet, discusses IDC's findings on the best practices for the deployment of software licensing and entitlement management technologies. Therefore, this white paper:

☑ Discusses the need for software licensing and entitlement management in the context of software industry dynamics

☑ Identifies various approaches to using technology for software licensing and entitlement management

☑ Presents key factors that make an investment in licensing and entitlement management a priority now

☑ Highlights the importance of looking holistically at the software product life cycle when making a software licensing and entitlement management decision

☑ Includes a profile of SafeNet, with an overview of company history, an update on the acquisition of Aladdin, and new product directions

METHODOLOGY

IDC utilized a number of sources to provide the background and data points in this white paper. These sources include the following:

☑ IDC's April 2009 *Software Pricing Survey* of 326 North America–based enterprises

☑ IDC research on software pricing and licensing, as well as the adoption characteristics of emerging models and technologies that impact licensing, such as software as a service (SaaS), virtualization, and cloud computing

☑ Interviews with two SafeNet customers

☑ Interviews with SafeNet executives

SITUATION OVERVIEW

Today's software licensing landscape can be challenging for both software vendors and customers. Vendors are struggling with the reality that it is growing increasingly difficult to make money as a traditional software company (i.e., through perpetual licensing). Customers believe that current software licensing models are not an accurate or fair gauge of the value they derive from using the software.

In addition, while most enterprise software today is installed and managed at the customer's site rather than delivered as a hosted, managed service, SaaS delivery models are threatening the status quo in the software industry. According to IDC, approximately 65% of net-new application offerings worldwide in 2008 were subscription-based SaaS offerings. In addition, spending on SaaS in 2009 is up 42% from 2008, while spending on total software is up only 3.4% and spending on all applications is up 5.6%.

Furthermore, in IDC's 2009 *Software Pricing Survey*, the majority of enterprises indicated a very high interest in software pricing models that tie price to usage, such as a utility pricing model. Software licensing models that shift accountability to the software vendor for customer success, provide the customer with flexibility and choice, and align more closely with customer usage scenarios are gaining customer interest and market traction. Key trends IDC has observed include growth in subscription licensing, concurrent user models, value-based metrics, and usage-based, utility pricing. This represents a powerful and pervasive change in mindset that is impacting vendor and customer notions of how software functionality is licensed.

Also, as customers begin to exploit new capabilities available to them through the magic of virtualization and partitioning, the potential for running afoul of software use rights runs high.

Finally, rapid and widespread consolidation is taking place in the software industry today, bringing together companies and products that have different licensing schemes, practices, and policies. Rationalizing these differences and providing a consistent framework is a challenge. Even companies that have a good methodology for integrating an acquisition often neglect to consider the impact on licensing operations.

Licensing Change = Increased Complexity

Not all licensing change means increased complexity. Many publishers are working on simplifying their licensing approach. However, predominant industry forces are calling for increased flexibility, which is impossible to achieve without increasing complexity. Well, almost impossible. That is where licensing and entitlement management technologies come into play.

Many of the licensing approaches suggested as better proxies for value add complexity to the management of licenses. One important concern for user organizations is that any additional complexity related to the administration, installation, and updating of products often shows up as a problem for organizations because it increases the costs of operations. A licensing architecture that creates more work for an organization will be viewed rather dimly by organizations looking for ways to lower their IT costs.

IDC believes that as a result of the dynamics discussed above, spending on technologies that assist with the licensing, metering, and tracking of software is poised for rapid growth. Almost every trend in software licensing today points to the need for additional technology in order to enable the following:

☑ Licensing models that require the tracking of software usage

☑ Licensing models that require the tracking of software deployment statistics, such as geographic location or hardware configuration

☑ Licensing models that require the tracking of concurrent or floating licenses

☑ Tracking of licenses when it is difficult to determine which hardware resources are being used and for how long

☑ Microlicensing, such as the capacity-per-hour models being offered via Amazon's cloud

Other drivers for licensing technologies include the continued proliferation of metrics, SKUs, and productized approaches to delivering software to new markets that all cause managing software to become increasingly complex.

LIFE-CYCLE APPROACH

Various point solutions address discrete licensing needs. These solutions may be developed internally or purchased from a third party. Within a given publisher, it is typical to find multiple point solutions that might address product activation or license enforcement. Rarely are they integrated with one another. In addition, because these products address discrete needs, they are often lacking in the ability to provide the kind of visibility and granular information needed to support the licensing requirements dictated by today's market.

That is one reason that an approach designed to manage the software product life cycle can provide software publishers with the best overall view of how software policy should be designed, implemented, and enforced. IDC tracks a market called software product life-cycle management (SPLM), which encompasses a range of technologies to support a software product's life cycle.

SPLM technologies represent a derivative, rather than functional, market that includes technologies that are utilized in combination to help productize, monetize, deliver, and install packaged software. IDC research of SPLM can be divided into three areas: inside the enterprise, between the enterprise and the publisher, and inside the publisher. Together, these areas represent a range of products and activities that IDC calls SPLM.

As a derivative market, SPLM includes the technologies that support the creation, entitlement, and control of software licenses from the vendor to the enterprise as well as technologies utilized within the enterprise for activities such as identity and access management.

Specifically, SPLM represents a range of capabilities that foster the movement of software through a series of six phases:

- ☑ **Phase I: creation and management.** This phase includes code generation tools, version repositories, and approval workflow.

- ☑ **Phase II: configuration as a product.** This phase consists of tools to create salable software that includes applicable education, manuals, terms and conditions of the license, support agreements, and so forth associated with a single SKU.

- ☑ **Phase III: entitlement management.** Similar to other entitlement scenarios, this capability supports the identification and authorization of transactions involving the software SKU and can be linked to purchase order, receivables, electronic payment, or other accounting modules for either pre- or post-transaction reconciliation. This is also the phase where a "license key," if necessary, is created.

- ☑ **Phase IV: delivery.** This phase is the "fulfillment" of the software and a "right to use" license. It is characterized by the movement of the software from the repository to the customer enterprise, either electronically or physically, and includes the transfer of the license key or electronic authorization as enabled by the vendor. This transfer may include intermediate steps of a single-tier or multitier reseller.

- ☑ **Phase V: installation.** Incorporating more traditional elements of IT asset management, this phase is characterized by the proper installation and reporting of software added to any type of computing device.

- ☑ **Phase VI: control.** Incorporating the elements of discovery/inventory and software metering, this phase represents the control and compliance phase of the enterprise-level environment, including identifying and managing software license assets. The tools used to monitor usage not only are focused on the instance of a software application or tool but also may monitor specific module or feature usage. They are also the controlling entity to enforce the enterprise's agreement with the agreed-upon terms and conditions of the right to use.

Phases I and II are capabilities that software vendors can implement as a method of development.

In addition, Phases III and IV involve the electronic entitlement, provisioning, and delivery of software and its permissions to use (licenses). These phases impact the ability of a company to distribute its products and the ability of a software vendor's channel to adopt electronic software delivery (ESD) as a viable form of fulfillment. IDC has seen a lot of growth in this area recently as companies strive to save money and trees by fulfilling software electronically as well as provide customers with systems to better manage their entitlements for reasons such as improving customer satisfaction.

Despite this growth, the majority of spending on SPLM technologies has been and continues to be focused on software that facilitates the installation and control of software assets (Phases V and VI). Initiatives that motivate software publishers to

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purchase SPLM technologies are often centered around recovering revenue lost to noncompliance. This can be more tangible for vendors than revenue opportunities associated with process improvements that aren't explicitly targeted at improving compliance and is often a key component of a return-on-investment (ROI) model that a vendor might build to justify the investment in SPLM.

SPLM Adoption and ROI

Software publishers that have a high priority to adopt SPLM technologies typically:

☑ Have recently completed a number of acquisitions or have recently gone through organic growth

☑ Are recently new providers of software but have a legacy as a hardware or other nonsoftware technology provider

☑ Do not have central management of licensing strategy (i.e., leave the licensing approach up to product management or sales)

☑ Have built legacy systems to support licensing and distribution that are now stretched

IDC has worked with many publishers in various stages of SPLM adoption. Most have in place a mix of homegrown and third-party technologies. The environment of consolidation in the software industry, as well as product management fiefdoms, results in a high level of complexity in both the management of these systems and the day-to-day operations. At some point, this complexity becomes enough of a priority that publishers come to a crossroads where they can:

☑ Continue to spend money and development time on a homegrown system that may not be meeting the need

☑ Do nothing

☑ Look at adopting a third-party SPLM technology

☑ In this analyst's experience, the first option tends to be a short-term fix, the second option is usually not attractive, and the third option typically has the highest rate of success in this dynamic software licensing climate.

That said, many software vendors gravitate initially to a "do it yourself" approach when it comes to SPLM. While this approach is not inherently bad, it tends to lead to problems down the road, potentially costing more than purchasing a third-party solution from the start. Even if software publishers are fortunate enough to have a development team dedicated to a license management system, they often still have a hard time maintaining the system to keep up with the changes required by the industry. They could potentially be at a competitive disadvantage by not being more responsive to licensing changes, as their core competency typically isn't managing an internal license management system.

One software publisher IDC spoke with provided a clear picture of this challenge: "Every time product management wanted to include a new feature or product, it required a massive development effort to accomplish from a licensing protection point of view. Also, because our systems were mostly homegrown, there was temptation at every sales opportunity to ask for a custom code for a new licensing behavior, which adds to complex licensing landscapes."

In addition, the ongoing maintenance and support costs of an internal system are often underestimated. One large software provider that IDC spoke with estimated that around 40% of inbound support calls were based on issues related to its custom software protection system.

Costs such as these typically factor into a vendor's ROI of SPLM. IDC has interviewed several software publishers over the years on their SPLM experiences, and the consensus is that coming up with hard data on SPLM ROI can be difficult. This doesn't mean that it isn't possible to put hard numbers behind the benefits of SPLM. Plenty of firms develop an ROI estimate up front, but far fewer go back and test this ROI once the system is up and running. Commonly, companies estimate the following as part of an ROI of SPLM:

☑ Quantitative

- ❏ Cost of noncompliance

- ❏ Productivity lost due to manual processes/workarounds

- ❏ Internal development/maintenance cost

- ❏ Cost of support calls due to licensing

- ❏ Cost of physical shipping/delivery (when ESD is involved)

- ❏ Time spent on ongoing maintenance and development

☑ Maybe quantitative, but most likely qualitative

- ❏ Customer and partner dissatisfaction (quotes/customer names/specific examples)

- ❏ Inefficiencies caused by lack of licensing discipline

- ❏ Lost revenue opportunity associated with not being able to license a product in a certain way in a timely manner

This last item should intuitively be quantitative, but IDC has found that publishers have a hard time determining exactly what portion of the revenue opportunity should be attributed to the underlying licensing technology.

While the numbers can sometimes be difficult to nail down, the qualitative benefits of having a holistic SPLM solution are usually clear and numerous. Following is a discussion of the SPLM capabilities of SafeNet Inc., a company that provides license and entitlement management solutions for publishers that are seeking both point and life-cycle licensing technology solutions.

PROFILE OF SAFENET

SafeNet Inc., a privately held company based in Baltimore, Maryland, offers a set of security and software license enforcement products. According to SafeNet, these products have protected over 35 million software applications worldwide since 1984. The company has more 25,000 customers in 100 countries.

SafeNet has long been associated with software license security and enforcement. These activities are important because more money is spent on software license enforcement than any other activity within SPLM, and for good reason. Software companies are looking to reduce the amount of revenue lost to piracy and noncompliance, and software license enforcement has proven to be an effective way of doing so.

At the same time, many of the trends discussed earlier in this paper have resulted in a rewriting of software license policy. New licensing approaches have become more flexible, but as a result, they can also be complex to implement and manage. SPLM technologies such as SafeNet's Sentinel RMS have played a role in enabling the next generation of software licensing by providing the infrastructure necessary to meter and secure licensing approaches such as pay-per-use, time-limited, concurrent, and feature-based licensing.

In July 2009, SafeNet launched a software entitlement management module, Sentinel EMS, to complement its software licensing module, Sentinel RMS. According to SafeNet, the RMS customer base has shown a need for entitlement management. Sentinel EMS helps round out SafeNet's software licensing and management solution, which previously lacked a robust entitlement and back-office component as part of the standard package. The offering includes:

☑ Single interface to back-office systems and license generators

☑ Centralized management of multiple licensing systems

☑ Data collection, reporting, and analysis

☑ Automated fulfillment

SafeNet views itself as a provider of technology solutions that address needs throughout the software product life cycle (see Figure 1) with license and entitlement management, as well as antipiracy and IP protection.

FIGURE 1

The Sentinel Approach
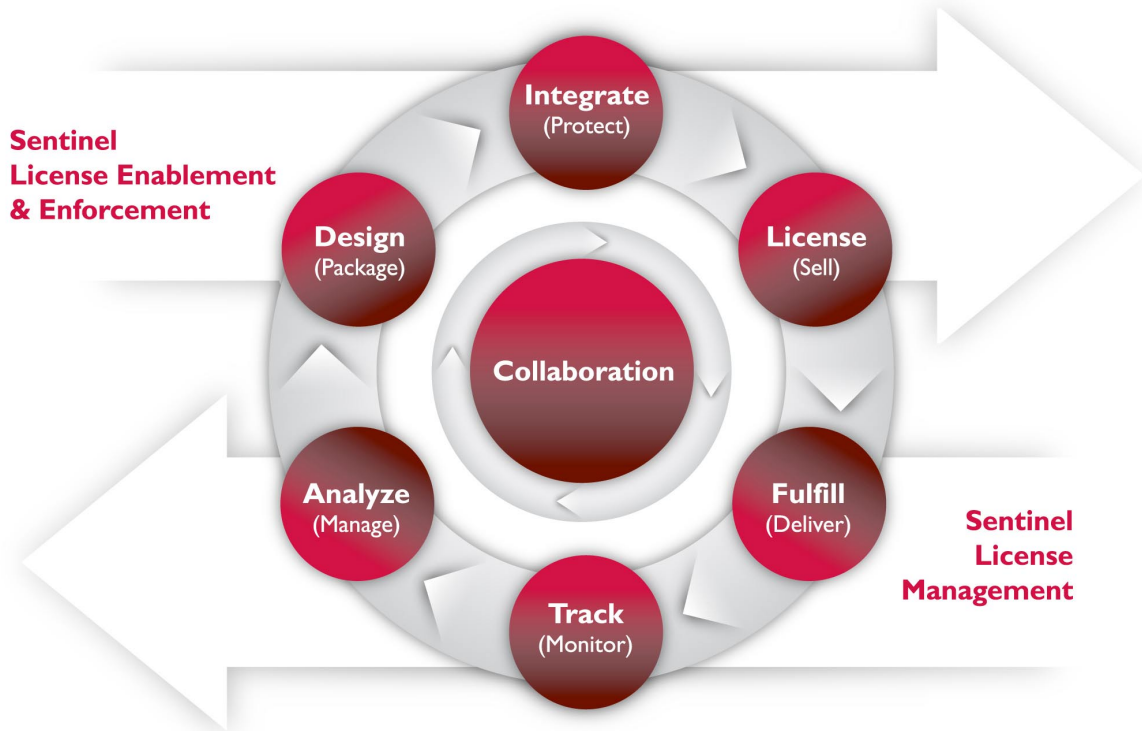
Source: SafeNet, 2009

Key capabilities of this approach include visibility into how various pricing models and product packages perform, as well as tools to help analyze product offerings, partnerships, and go-to-market strategies to determine which will work and which might be improved with different licensing and entitlement schemes.

While software market consolidation is a driver for many current SPLM initiatives at software publishers, there has also been consolidation activity within the SPLM market. Through this, SafeNet has emerged as one of the top players in terms of technology breadth and depth as well as customer satisfaction.

The SafeNet customers that IDC spoke with chose SafeNet for a variety of reasons. One company, a member of the United Kingdom's FTSE 250, runs its products on 43 different platforms and needed the highest platform coverage possible. SafeNet was able to meet this requirement and integrate into the company's highly customized back-office system. The spokesperson for this company remarked that "SafeNet's open API, the way that SafeNet publishes their interfaces into the license generators, made it easy."

Another reason this company chose SafeNet was its pricing model, which allowed the company to license SafeNet's technology for a one-time perpetual charge. While other software publishers may prefer more of a subscription approach, some prefer the perpetual model.

Another SafeNet customer, an industry leader in datacenter networking solutions and services, chose SafeNet based on its Sentinel technology, which this firm's IT department considered to be the best based on product, scope, and range.

Challenges

While IDC expects high demand for SPLM based on the dynamics discussed in this paper, this demand is not always coming from the top down, meaning upper management within a software company. In addition, while having poor licensing and distribution systems can cause headaches or worse for internal folks, not to mention customer and partners, it isn't always easy to make a direct correlation between such systems and lost revenue. Therefore, while there may be strong advocates for bringing in SPLM technologies within the ranks, unless upper management is behind the effort, it is unlikely that the budget and resources needed to really make a difference will be available.

CONCLUSION

Many software vendors are reviewing their software licensing and entitlement management technologies and practices in light of current market dynamics. The economy, industry consolidation, and a desire in both the publisher and customer communities to optimize software revenue and spend are key drivers behind these initiatives.

Furthermore, technology trends in the software industry are calling for new licensing policy that often pushes the limits of software publishers' existing licensing systems, including subscription, SaaS, virtualization, concurrent user licensing, and usage-based licensing and cloud computing.

The expansion of SafeNet's software license management capabilities provides software publishers with a packaged, integrated licensing and entitlement management solution that is an excellent alternative to in-house development and highly competitive with other third-party offerings. This offering will be regarded favorably by software publishers that are looking to buy entitlement management capabilities rather than building themselves. There has been consolidation in the marketplace for SPLM technologies, which has reduced the concerns that some software publishers have had with market fragmentation and the complexity of integrating multiple point products.

IDC expects that SPLM technologies will play a key role in enabling the software licensing model of the future. Software publishers that gain the most out of their SPLM investments are those that integrate the software product life cycle with technology that ties to back-office systems and includes reporting capabilities for vendors and customers. Most importantly, SPLM technologies should support

software publishers' ongoing licensing needs and enable software publishers to be responsive to needs in the marketplace. Licensing policy should be driven by market requirements, not operational technology limitations.

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