

Maximize Software Cost Savings by License Reharvesting, Recycling & Applying Product Use Rights

Software asset management (SAM) is a complex process that enables organizations to gain control of their software estate from both a license compliance and financial standpoint. In many organizations, SAM represents one of the few remaining ways that substantial IT savings can be realized. McKinsey and Sand-Hill Group estimate that 30% or more of IT budgets are consumed by software license and maintenance costs.¹ By optimizing the SAM process, organizations can maximize software utilization, reduce the risk of non-compliance (audits, fees, penalties), and reduce overall IT costs by as much as 5 to 10% per year.

But, where do these cost savings come from? Reharvesting unused licenses and recycling licenses from retired hardware are techniques that yield significant savings. Another approach that is often overlooked is the application of product use rights (PUR) to reduce initial license purchase, true-up and renewal costs.

The commonly accepted view of SAM holds that organizations must define their application requirements (what applications, versions and editions should be purchased), centralize purchasing, collect inventory of what software is installed, compare installations to number of purchased licenses, and finally, collect application usage data to track what's really being used. Granted, these are necessary and important steps, and many organizations have only partially implemented the necessary IT asset management processes. Furthermore, many SAM tools fall far short of the mark, in delivering the automation required to streamline these processes. A new generation of SAM tool that incorporates the proper understanding and application of PURs has arrived that enables organizations to take this critical next step in the SAM optimization process.

Product use rights define where you can install the software (laptop, desktop, home computer, virtual machines, etc.), how it can be used, and whether you can freely upgrade or downgrade between versions; they define how licenses can be consumed. You cannot determine an optimized vendor license position, without taking PURs into account. PURs give the organization benefits that are frequently untapped. If properly applied, product use rights can significantly increase IT savings.

License agreements & license types

Product use rights are specified in the license agreement that accompany the software. Many organizations purchase software under volume agreements such as Microsoft Enterprise Agreements (EA) and Select Agreements. Volume agreements provide a way for organizations to get a discount on their software purchases. Software may also be purchased as full packaged product (FPP), meaning off the shelf in the shrink-wrapped box. And some software, for example the computer operating system, may be purchased as part of the bundle that comes with the hardware (an OEM license). Each type of license agreement (volume, FPP, OEM, etc.) provides different product use rights. Another factor that must be considered is the vendor's maintenance plan—for example, Microsoft offers Software Assurance (SA), which is a standard part of EA, but is optional for Select agreements. PURs change depending on whether SA is in effect.

There are many license types that can come into play—device, named user, processor-based, site licenses, and more. The license type can also dramatically alter the consumption of licenses. For example, a user license will count consumptions differently than a device license. In a development environment, a developer could have 5 machines all running Visual Studio. If Visual Studio use is based on a device license, the developer would consume ‘5’ (expensive) licenses. However if the developer has an MSDN (Microsoft Developer Network) license that applies to Visual Studio, then it becomes a user-based license and the consumption would be reduced to only ‘1’. Hence, organizations need to understand and optimize with respect to their license agreements and license types.

Common product use rights

Now that we have introduced the above license agreement alphabet soup, let’s take a look at some common product use rights. These include: upgrade, downgrade, second use, virtual machine use, and multiple versions rights. Upgrade rights allow the organization to use the latest version of the software as soon as it becomes available, at no additional cost. This right is provided by Software Assurance (SA) which is included in all Enterprise agreements.

A good way to purchase SA is only on selected products and for agreements (e.g. Select) that are due to expire. This is a complex way of managing agreements, but allows the organization to keep the cost of upgrades on specific products to a minimum.

Downgrade rights allow you to purchase the license to a newer version of the software, but run an older version on your computer. Many businesses have, for example, purchased Visio 2007, but have installed and run Visio 2003 on their desktop computers. Unless you apply downgrade rights in your SAM system, it is difficult to reconcile the Visio 2007 license purchases against the installed inventory. This can result in what appears to be an over-purchase of Visio 2007 licenses and a license breach for Visio 2003.

The multiple versions right allows the organization to run more than one version of the software on the same computer. Application of this right means that you won’t be liable for additional licenses during a true-up, as would be the case if you simply counted and compared installations to purchases. The simple counting method would consume two licenses for two versions of the same software on any single computer, while the PUR approach would consume only one.

Virtual environment use rights allow an application or OS to be installed and used on a physical machine, as well as one or more virtual machines (VM’s). Virtualization has become very popular with the advent of free VM players from companies like VMware. And datacenter server virtualization has been one of the hottest trends in IT due to the hardware and energy cost savings involved. But with virtualization comes manifold software license management challenges—it’s very difficult to manually track VM’s and the software running on them. Not only do you have to know what applications are installed on each VM, you also need to know about the underlying hardware in the host server, depending on the license type in effect—for example, a processor based license requires detailed knowledge of the server hardware. Furthermore, different versions and editions of software have different virtual use rights, making the license management job even harder.

And lastly, second use rights allow the user to have one copy of the software on their desktop at work, and a second copy on their laptop or home computer. MS Select agreements provide this right, but EA do not. Once again, the “counting and comparing” method of license reconciliation would lead your organization to believe that it has many more copies of the software installed than licenses purchased when users have both a desktop and laptop computer with the same application installed.

It's easy to see that product use rights can significantly impact an enterprise's license position. Organizations must understand PURs and take full advantage of their benefits to avoid over-spending on licenses and associated maintenance.

License Reharvesting & Recycling

License reharvesting and recycling both involve reclaiming and reallocating unused software licenses. In the former case—reharvesting—licenses are simply not being used by certain people or groups within the organization, and/or there are computers in storage that contain installed software. If there are users in another part of the organization who need access to this software, then the applications must be uninstalled from the one set of machines and re-installed on the other. Application metering can be used to track usage and find candidates for reharvesting. IT asset management tools such as Microsoft System Center Configuration Manager, and ManageSoft Deployment Manager provide application metering capabilities. ManageSoft's Enterprise Compliance Manager® (ECM) product supports the collection of usage data from either tool for the purpose of reducing costs via reharvesting. Wiping software from computers in storage also frees up licenses for reallocation and reduces the organization's audit or true-up liability.

License recycling is the process of reclaiming licenses from retired hardware. Many organizations have a three or four year hardware refresh cycle, so one quarter to one third of the machines are retired each year. Frequently, software licenses that could be reused instead go out the door with the retired hardware. If only 10% of the software licenses on retired hardware could be reclaimed, then 2.5 to 3% of the software spend could be saved by recycling.

Reharvesting and recycling are important elements of an optimized software asset management program. Software purchase and renewal costs can be reduced by 5 to 10% or more in the first year of implementation of a program that includes these strategies.

Example software cost savings scenario

Let's take the case of a hypothetical mid-sized insurance company that has the following IT hardware and software profile: 10,000 PC's (desktops, laptops), 500 servers, and total software spend per year of \$7.75 million (\$23.25M over the three year term of their volume agreements). The annual software costs are allocated as shown in the table below, with \$350 per PC and \$1500 per server spent under MS EA, on average, \$160 per PC and \$200 per server under an MS Select Agreement, \$50 per PC for Adobe applications, and so on.

Insurance Company IT Profile Showing Annual & 3 Year Software Spend

	MS EA Software Spend per PC/Server	MS Select Software Pay as you go (Avg. per PC/Server)	Adobe Software Spend (Avg. per PC/Server)	Other Software Spend (Avg. per PC/Server)	Total Spend Before Optimization
PCs (10000)	\$350 / yr	\$160 / yr	\$50 / yr	\$90 / yr	\$6,500,000
Servers (500)	\$1,500	\$200	\$0	\$800	\$1,250,000
				1 Year Spend:	\$7,750,000
				3 Year Spend:	\$23,250,000

Now consider the cost savings that can be attained in year 1 by proper allocation of licenses based on PUR for PC licenses purchased under MS and Adobe volume agreements. Under MS Select agreements, as noted above, second use rights may be applied to all those users who have both a desktop and a laptop—let's say only about 10% of the users fall into this category. Since MS Select PC spend is about 25% of the total, the potential savings is 2.5% (10% x 25%). If Adobe and other vendors account for another 14% of the PC spend for licenses that include second use rights, then an additional 1.4% (10% x 14%) savings is possible. This means that 3.9% of the PC software cost can be saved by correctly applying second use rights.

Multiple versions rights apply to MS EA and Select, as well as Adobe and some other vendor licenses. Another 3.7% savings can be achieved by applying the multiple versions right to PC software spend if we assume that only 4% of computers have multiple versions of software installed (4% x 94% = 3.7%). Total PUR savings is therefore 7.6% of the PC software budget. Similarly, multiple versions use rights could save an additional 3.4% of the server spend (4% of servers and let's say 85% of software running on them allows this right).

If just 5% of users have unused software that can be re-harvested and an additional 10% of licenses from retired hardware can be recycled, that's another 7.5% of the PC spend. (For example, if 25% of PCs are refreshed each year and 10% of software on those computers can be recycled then there is a 2.5% savings opportunity from recycling. 2.5% + 5% (for re-harvesting) = 7.5%).

Adding it all up (see table below), we find that about 15% of the PC software spend and about 7.6% of the server spend can be saved in the first year with an optimized SAM process using fairly conservative numbers. The result is \$981,000 in potential savings on the PC software estate and about \$95,000 on the server spend for a total first year cost savings of \$1,070,000. Of this total, \$531,000, or about half of the savings is attributable to proper application of PUR. So, it's clear that PUR is a critical aspect of the SAM optimization process.

Total First Year Savings from Optimized SAM Program

	PC's (10,000)	Servers (500)	Totals
1 Yr Software Spend	\$ 6.5M	\$1.25M	\$ 7.75M
PUR License Savings (% of Software Spend)	7.6%	3.4%	\$ 531,000
License Reharvesting	5%	3%	\$ 362,000
License Recycling	2.5%	1.2%	\$ 177,000
	15.1%	7.6%	
ECM 1 st Yr Savings	\$ 981,000	\$ 95,000	\$ 1.07M

SAM automation is a necessity

The SAM process involves the collection and tracking of a multitude of pieces of data—from hardware and software inventory, to purchase orders, license agreements, and maintenance contracts. In addition, there are huge libraries of information that must be created and maintained to make sense of the collected data. For example, an “application recognition library” (ARL) is required to translate raw inventory data (file evidence, installer evidence, registry data, etc.) into a list of recognized software applications per computer. A Stock Keeping Unit (SKU) library helps normalize purchase order data so that licenses bought can accurately be matched to licenses in use (i.e. installed software). The SKUs on purchase orders identify not only the application title, version and edition, but also the type of license agreement under which it was purchased. A “product use rights library” (PURL) is needed to understand all the license types, terms and conditions, and correctly apply product use rights to calculate an accurate license position.

Even with this cursory look at the complexity involved it becomes obvious that a SAM tool is required to effectively manage the SAM process. Microsoft provides quarterly updates to their product use rights document for volume licensing; the latest edition is 117 pages long. It's simply not feasible to attack this problem without an automated solution.

Very few SAM tools on the market today provide the extensive set of built-in libraries and license optimization functionality necessary to automate such a complex set of tasks and reap the maximum IT cost savings. Look for tools that provide a comprehensive and continuously updated ARL, a stock keeping unit (SKU) library that ties purchase data to software installations, and a product use rights library (PURL) that automates the process of applying use rights to determine an accurate license position. One such SAM product is Enterprise Compliance Manager® (ECM) from ManageSoft.

1 McKinsey and Sand-Hill Group 2008 Enterprise Software Customer Survey

www.ManageSoft.com