Driving Down Software Costs with Software Asset Optimization

Contents
- Preface
- Extending Audit’s Horizons
- Software Asset Optimization Defined
- High Level Business Drivers
- Optimization’s Potential Benefits
- Three Phase Optimization Process
- Fast Track to Optimization Benefits
**Preface**

For many organizations, efforts to improve software management start with an audit which is driven by a concern to ensure license compliance and safety from prosecution.

However, this is a largely negative reason for investing time and money into an audit.

**In contrast, a balanced program of pro-active software asset management procedures can provide most organizations with financial savings and improved user productivity.**

A compliance audit is essentially a closed exercise of counting installations and comparing the total with the licenses owned, whereas a pro-active management approach deals with questions such as:

- How many copies do we actually need of each application?
- Is our installed software being used effectively?
- Do we have spare licenses that we could re-deploy?
- Which applications have been over-licensed and offer scope for savings on annual maintenance renewals?

With this emphasis driving your organization’s activities on software asset management, the objective of license compliance will be supported as an important – but essentially spin-off – benefit.
Extending Audit’s Horizons
When your organization is proposing to conduct a software audit for compliance, you have an opportunity to consider a much wider and longer lasting set of objectives and benefits.

Organizations using software should:
• Understand what software the enterprise needs, by evolving Application Policies (see below) to define who should have what;
• Monitor software usage to locate unused copies that can be redeployed, and to target training;
• Maintain an accurate inventory of installed applications to ensure legality and that software is up to date.
• Maintain a centralized register of license purchases and maintenance to ensure license compliance.

All these management activities service an objective that Vector identify as software asset optimization.

Software Asset Optimization Defined
Vector highlights four key factors in the ownership, management and exploitation of application software assets:
• **Requirements** – defining and quantifying the organization’s true requirements for an application. Organizations will purchase MS Office™ Professional for the entire network simply because they have no tools to quantify how many users only require Office Standard.
• **License ownership.** If an organization has had decentralized software purchasing, then locating and documenting actual licenses can be the most challenging aspect of taking full control of software assets.
• **Inventory** – how many copies are actually installed. This is critical – top quality inventory is a cornerstone of software asset optimization.
• **Usage** – how many of the deployed copies are actually used. A PC sitting unused on a desk is highly visible. A copy of an application sitting unused on a hard disk is invisible and unnoticed.

Vector regards an organization as having fully optimized its software assets when all four factors are in sync.

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**Application Policies**
Part of our philosophy is that all application software requirements should be defined and quantified using a standard method. Vector recommends that the need for each application is defined in an ‘Application Policy’, which states which PCs need the application. A policy would refer to groups of PCs defined in an organization’s Active Directory or in its chosen IT Asset Management tools – or both, if the two are integrated as they should be. Within a policy, an application could be defined as ‘mandatory’ for some groups of PCs, ‘optional’ for some other groups, and prohibited from others.
Optimization: the High Level Business Drivers

Once data has been collected and analyzed, optimization decisions can be made and prioritized in accordance with the organization’s objectives. The key business drivers to consider are:

Compliance

It is not uncommon for an organization to revert to its initial objective of ensuring compliance, but with the usage information indicating where unused copies are installed, there is now the opportunity to reduce the cost of compliance by ensuring maximum use of the copies already owned. i.e., where an application is under-licensed compared to the deployment, the first focus should be to ensure that the deployed copies are being used, before any additional copies are bought.

Reduction of ongoing costs of ownership

Each PC can carry a significant cost in the annual maintenance of the applications. When the application copy is not being used, or an alternative provision can be made for occasional use, then the copy should be de-installed, and its maintenance cancelled unless the copy is needed elsewhere. Either way, the objective is to not pay for maintenance on unused software.

Maximum return on the investment of application ownership

A first priority under this heading would normally be the redeployment of unused copies of applications, but it may also be appropriate to assess whether usage would increase if user training were increased. Going down this path requires an organization to understand that application software can and should be a source of user productivity, and not just a pure overhead.

It may also be appropriate to purchase additional application copies to match requirements, to increase organization productivity without compromising compliance.
The Opportunities of Optimization

Whenever any two of the four factors are out of sync, there is opportunity for improved optimization. An organization can decide which areas of improvement to pursue, based on top-down management principles, or may decide to wait until comprehensive information has been collected on all four factors before setting priorities.

<table>
<thead>
<tr>
<th>Factors out of sync.</th>
<th>Opportunity for improved optimization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licenses &lt; installations</td>
<td>Non-compliant situation.</td>
</tr>
<tr>
<td>Licenses &gt; Installations</td>
<td>Spare licenses can be redeployed or cancelled.</td>
</tr>
<tr>
<td>Installations &lt; Copies needed</td>
<td>Installations are not as planned and desktop users may not be adequately provided for.</td>
</tr>
<tr>
<td>Installations &gt; Copies needed</td>
<td>Installations are not as planned.</td>
</tr>
<tr>
<td>Licenses &lt;-&gt; Copies needed</td>
<td>Improve the coordination between the requirement planning and purchasing functions.</td>
</tr>
<tr>
<td>Installations &gt; Copies used</td>
<td>Wasted installations that could be redeployed or training may be required to increase use.</td>
</tr>
</tbody>
</table>

The Optimization Process

The process of applying the four functions to the goal of Software Asset Optimization has three main classes of activity:

- Set-up and discovery
- Analysis of discrepancies and identification of priorities for action
- Optimization actions – redeploying applications, consolidating maintenance purchases, etc

1. Discover

2. Analyse

3. Optimise

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**Optimization Activities and Priorities**

This matrix summarizes the full set of potential activities in the three stage optimization process. Each organization will decide where it wishes to deploy its resources first, depending on its goals.

IT asset management tools will be needed to fully exploit the potential of optimization, including software inventory and software usage measurement. Tools are readily available, including on a temporary basis for an investigative survey.

<table>
<thead>
<tr>
<th>Optimization Factor</th>
<th>Set up and Discovery</th>
<th>Variance Analysis</th>
<th>Optimization Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copies Installed (Inventory)</td>
<td>Resolve any applications not recognized by the inventory/discovery tool.</td>
<td>Regular review of correlation of inventory with licenses owned.</td>
<td>Removal and redeployment of applications for compliance.</td>
</tr>
<tr>
<td>Copies Required (Application Policies)</td>
<td>Define application policies in consultation with IT and user departments.</td>
<td>Regular review of correlation of inventory and usage with application policies.</td>
<td>Regular review and update of application policies to define desktop IT needs.</td>
</tr>
<tr>
<td>Copies Used (Software Metering)</td>
<td>Low initial setup task, Low ongoing maintenance.</td>
<td>Regular review to identify unused copies of software.</td>
<td>Regular review to identify wasted installations that can be redeployed or where training is required to enable use.</td>
</tr>
<tr>
<td>Licences Owned (License Recording)</td>
<td>High initial data input Steady ongoing update.</td>
<td>Regular review of correlation of inventory with licenses owned.</td>
<td>Ensure licenses are correctly recorded.</td>
</tr>
</tbody>
</table>
Software Asset Optimization: Fast Track to Benefits

For today’s slim-line IT management teams, it is worth summarizing the fastest routes to benefits from expanding the original concept of a software audit to embrace other factors of software asset optimization.

**Step 1: Basic Inventory**
Executing a full hardware and software inventory collection delivers immediate benefits, such as:

- Knowledge of the true population of PCs and software.
- The basis of information for planning software deployments and system upgrades.
- Access to rich and accurate data for support and helpdesk staff.

**Step 2: Software License Totals**
Without needing to go into detailed data entry of individual historic license purchases, the figure of total licenses owned can be used. Comparison with inventory immediately delivers summary compliance information – a very important short term objective for many organizations.

**Step 3: Understand Requirements**
Begin re-assessing license requirements by defining application policies. Choose the applications where you suspect there has been over-purchase in the past, simply though a lack of clarity of true requirements. This should reveal:

- Inappropriate installations, representing opportunities for removal and/or redeployment of software.
- Missing installations, potentially representing reduced user productivity.

In addition, you could choose to lay down a firmer foundation for all subsequent software purchases by ensuring they are based on a definition of requirements embedded in an application policy.

**Step 4: Reveal the usage information**
Often the last piece of information to be collected, this provides the ‘sanity check’ on your organization’s purchase and deployment of application software. With costs under constant scrutiny, it is hard to claim to be in control of cost of PC ownership without documentation verifying that application copies are used.

For a freeware utility it may not be economically justifiable to be concerned, but for applications costing hundreds of dollars deployed on hundreds or thousands of PCs, the figures cannot be ignored.

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**About the Author**

Colin Bartram is VP Technology with Vector Networks Technology Group. He has been involved in the evolution of IT asset management since its inception in the 1980s, holding positions primarily in marketing and product management. Colin is based in the UK and can be reached at cbartram@vector-networks.com. Information on Vector Networks’ IT service and asset management solutions can be found at www.vector-networks.com