AUTOMATED MANAGEMENT OF SOFTWARE LICENSES

A powerful software mechanism called automated license management is gaining converts among users, platform vendors and independent software vendors. A license manager ensures that software use and access comply with contractual commitments, and it collects data that helps users determine enterprise usage requirements.

Key Issue

How should ███ manage the licensing of personal productivity tools on the LAN?

Strategic Assumption

Without the proper monitoring tools, it will be impossible for LAN administrators to ensure contractual compliance with each vendors software licensing terms.

INTRODUCTION

The rise of LANs and distributed client/server systems in corporate America has solved many problems, but unfortunately, has created others. One of the biggest problems is license management. Client/server systems contain clients, servers and networks, made up of vendors with different licensing policies. In addition, the Software Publishers Association(SPA) with its surprise audits, has sensitized corporate software buyers to the issue of license compliance. Many of those buyers now negotiate with vendors for "authorized" user or concurrent user licensing instead of per-server plans.

With this licensing plan, sites contract for as many users as are likely to need access to the software at a given time. Site managers prefer this method because it eliminates the arbitrary per-server or per-machine pricing and ties software costs to actual use. However, it does provide them with challenges when it comes to conformance to licensing agreements. Without the appropriate tools, it is practically impossible for managers to ensure that their client/server site is in compliance with various software licensing agreements.

Automated license management - also known as technical license management - allows for central management of software assets, software compliance, global access and use of software, and value-based pricing. The license manager, functioning as a server-based hub, automates the software management routines that until today, have been handled on paper. The license manager ensures that software use and access comply with contractual commitments, and collects data to help determine enterprise usage requirements. Automated software management has several advantages:

Evaluation. With built-in license management software, vendors can promote software by allowing users to reach into an electronic software catalog, open a specific application, and evaluate it via a time-based control mechanism.

Software libraries. From a vantage point on a central server, the license manager monitors and controls access to all software (See Note 1).

Negotiating leverage. The real value of automated license management comes from the data collected on actual usage. With those figures, enterprises can negotiate better deals than they could with projected usage figures. They can calculate whether they are paying too much or too little, or whether usage is broad enough to warrant enterprise-level licensing.

Balancing leverage and end-user empowerment. Software suppliers can use automated license management to satisfy customer's requirements for accurate records and charges in enterprise deals. In this way, end users may still purchase software in a local transaction, but then the automated license manager would charge the acquisition against the company's enterprise-level contract, at a discount price instead of the street price.
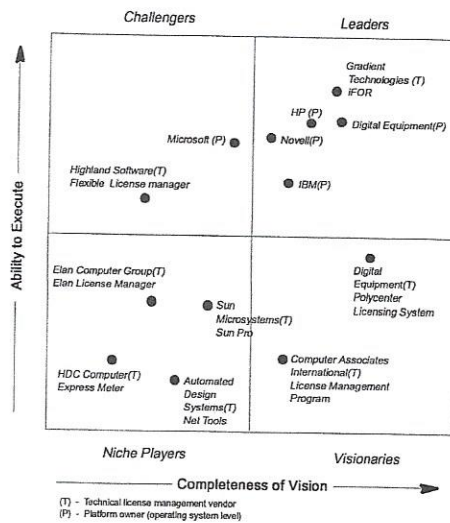
VENDOR STRATEGIES

Leading vendors have listened to the users' message and are taking action. Digital Equipment and Hewlett-Packard have started shipping license management hubs with their systems. Novell and IBM promise to incorporate license hubs into the next versions of Netware, OS/2, and AIX/6000 later this year (see Figure 1).

With the exception of Digital which has gone with the PolyCenter Licensing System, most vendors have decided to use Gradient Technologies license manager, iFOR/LS. Gradient's software engine is rapidly becoming the de facto standard, receiving the blessing of platform vendors and the Open Software Foundation.

Note 1
LSAPI - A Tool For Compliance

The License Service Application Program Interface (LSAPI) developed by the Software Publishers Assoc. (SPA), the MicroComputer Managers Assoc., and Microsoft allows developers to build an LSAPI call into their application. This call invokes a library or routine which lets the application determine whether it should run.

Figure 1. License Management Vendor Matrix
(Source: Gartner Group)

A set of products specifically created for helping the LAN administrator, now offer tools for remote desktop management, network traffic monitoring, application monitoring, inventory management, monitoring of application usage, software distribution, licensing management, check inventory on workstations, and for Windows-based packages, INI file management. The four leading products in this class are: LAN Workstation from Saber Technologies, Fusion from McAffe Associates, LANDesk from Intel Corp., and Norton Administrator from Symantec Corporation.

THE CHALLENGES

Despite rising support, automated license management faces challenges. While many software vendors have pledges to incorporate license managers into their products, a pledge is quite different from implementation. Cross-system interoperability and networkwide access - both essential to effective license management - can be achieved through the partnership of license manager developers and platform vendors. Generally, license management vendors develop the core engine; then platform vendors distribute the engine, making sure it operate's with their platform subsystems.

Software vendors, both platform and independent, understand that the valuable data collected through technical license management can help users negotiate better enterprise deals. However, many vendors are faced with a quandary: they want some way of tracking compliance with licensing terms and conditions; yet are reluctant to provide users with tools that collect usage data which can be leveraged to negotiate favorable terms.

Cooperation among vendors is important, but user acceptance of automated license management is essential. Although license management satisfies the concerns of IS budget planners, IS staff members and end users fear that it will be invasive and intrusive. Case in point: the development of 'time bombs' by some vendors, capable of remotely and completely halting mission-critical software if a customer is late in paying the bill.

BOTTOM LINE

Enterprises should not sit back and wait for automated license management to come their way, they should take the lead. If enterprises communicate their requirements to vendors, they can customize the technology and practices of license compliance in their organization, not vice versa.

The following guidelines are offered:

- When evaluating license management software products, the product should satisfy the ten basic requirements outlined below in Figure 2.
- Some new software licensing contracts insist that users adopt the vendor's automated license manager when it eventually comes out. Be cautious of signing a contract that hinges on something that does not exist; the arrangement may impose hard-stop or intrusive compliance practices (see Figure 3).
- Software vendors have historically dictated compliance policies. This time around, users should develop and spell out their own compliance policies, then have their vendors work with them.
- While technical license management should be a prerequisite in the selection of vendors and products, nonintrusive licensing policies and user-friendly functions are critical.

1. Allow network administrators to monitor software usage on all platforms in a distributed processing environment.

2. Allow adminstrators to scan the installed software inventory of workstations and make modifications and/or deletions.

3. Permit sites to purchase only as many licenses as they are likely to use at one time (concurrent usage).

4. Permit users to 'check-out' licenses when they need to run a software app, and release the license when done.

5. include a license counter that tracks how many licenses are in use as users log on, and 'checks-out' licenses.

6. Using a license counter, lock out users once the limit of application use is reached and notify a systems manager who may reallocate license usage.

7. Create a 'reservation queue' so locked-out users can get in the line of those waiting to use a software application.

8. Provide 'load balancing,' i.e., distribution license usage over several servers to maintain performance levels.

9. Create a report on software usage and lockouts so management can determine when to purchase additional licenses.

10. Allow administrators to assign software to particular users, so that the CEO can always access specific software.

Figure 2. Requirements Of License Management Software

Commercial implementation of license management had been so slow and so piecemeal over the past few years that it might have thwarted new licensing models and hampered effective management of distributed assets. Users, however, are pushing for it, and automated license management is steadily becoming a mainstream reality.

Compliance Levels	Description	Issues
Paper and license contract only	- No control mechanism required - Based on trust and limited auditing rights	- Collection of use data - Compliance - Service and upgrade consistency
Soft passive	- User is notified when use limits are exceeded - User contacts vendor to adjust use entitlements to a new level - Most effective licensing model for charges based on resources consumed	- System messages inundate users and often are ignored or suppressed - Compliance
Soft stop	- User prevented from exceeding licensed use level - User administrator has capacity to unlock higher use levels - Vendor is notified on periodic basis for use adjustments - Effective for value-based pricing models (e.g. concurrent-use licenses)	- Ability to handle off-hour emergencies - Need grace period
Hard stop	- User prevented from exceeding licensed use levels - Vendor must provide user with key to unlock higher use levels.	- Lacks access flexibility and local control - Turnaround time for keys - Backup and emergencies - Needs grace period
Grace period	- User can access higher use levels for a limited time or for a certain number of accesses prior to use upgrade	- Atention to grace period deadline - Managing grace period status and taking appropriate action

Figure 3. Software License Compliance Policies and Adminsitration
(Source: Gartner Group)