

BEST PRACTICES OF SYSTEMS ADMINISTRATION: A PATH TO COMPETITIVE ADVANTAGE

INCREASE PRODUCTIVITY AND LOWER IT COSTS
THROUGH PROACTIVE ASSET MANAGEMENT

CONTENTS

IT CHALLENGES	2
SAS VALUE PROPOSITION	3
NETOCTOPUS	3
CONCLUSION	5

RECENT DATA SUGGEST THE TECH ECONOMY IS BEGINNING TO RECOVER AND THAT the market nadir may be behind us. It will surprise few that today's competitive economy continues to challenge businesses. Most still operate with pared-down staff and reduced budgets. Customers and their expectations, however, were not similarly impacted by the economic recession. Both old and new customers want what they've always wanted — the latest, greatest products or the best services. And they want them on-time and within budget.

The crux for businesses today is meeting this client demand, even as companies generally begin to emerge from survival mode and years of reactive reductions and cutbacks.



IT CHALLENGES IN THE MARKETPLACE

As they transition to proactive growth, the first tentative steps will likely be executed and supported by existent resources (human, financial and IT). With these first steps, businesses need to do more with the same resources or even fewer resources. The only way to do more with less is to first do better, and then do more as new bandwidth becomes available.

Doing better requires greater productivity and efficiency, less redundancy and minimal waste. To maximize productivity and efficiency, organizations routinely rely on technology to support operations, everything from simple productivity conveniences to mission-critical applications.

A WORD ON THE NETWORK – YOUR CORPORATE BACKBONE

Whether it is an e-mail traveling down the hall or across the country or a vendor-partner extranet, organizations rely on technology to support day-to-day operations. And at the heart of every organization's technology infrastructure resides the network, connecting PCs, servers, printers and the like. A fine-tuned and managed network serves as a competitive advantage, empowering employees to collaborate and share information, applications and resources thereby increasing productivity and lowering expenses. Conversely, a neglected and inefficient network eats away at your competitive advantage. It slows corporate communication by choking off timely collaboration and information sharing. It inhibits employee productivity and taxes your IT staff with innumerable technical support requests.

The corporate network therefore, or the facile management thereof, becomes both a challenge and an opportunity. The challenge emerges with the many companies operating with trimmed IT budgets and staff, yet still facing increased demand on the technology infrastructure from customers and employees alike. Opportunity arises with the new tools available to streamline network manage-

ment; tools that allow one to manage and maintain all networked resources – hardware and software – in a more efficient and cost-effective manner. These tools not only help one do more with less – they also proactively resolve some inefficiencies and risks present in most companies of which, however, few are aware.

POOR ASSET MANAGEMENT

In the IT arena, the oft-uttered, down-market mantra “do more with less” (fewer staff, smaller budgets and your current hardware) is a difficult hurdle to overcome. How can one meet the same IT objectives with less of everything? It's only by managing IT assets more closely, more efficiently and more effectively – in a word, better.

Corporate IT efficiency is lost in many ways: by maintaining unnecessary software; by failing to purchase new software or keep existent software updated; through overspending on upgrades; or failing to track hardware and software assets. At first glance, the

being used, what new software has been installed by employees and is it licensed. This information and the ease and efficiency with which it can be obtained are critical to facile asset management.

Sometimes one can do more with less – but only when one has superior tools that provide the information you need, when you need it.

KEEPING PACE WITH GROWTH

Keeping up is a particularly taxing problem for IT divisions in small and mid-sized companies undergoing a corporate growth phase. Although corporate growth is a good problem to have, it becomes sticky when required technology infrastructure grows faster than the IT staff required to support it, which is often the case.

In the mad dash to get the next laptop in the hands of your newest sales associate, the IT department typically loads whatever standard software bundle has been determined to serve the majority of people most of the time. If this particular employee will never use three of the six

SOFTWARE OEMS ARE BECOMING MORE AGGRESSIVE IN IDENTIFYING AND PUNISHING THE USE OF UNLICENSED SOFTWARE. GARTNER PROJECTS THAT 40 PERCENT OF MIDSIZE TO LARGE ENTERPRISES CAN EXPECT AN EXTERNAL SOFTWARE LICENSING AUDIT BEFORE 2006.

basis for these problems may appear to be insufficient IT resources, human resources in particular – there are just too few people to keep track of everything. But that isn't the whole picture. The more germane issue is the sufficiency or accuracy of the information available to your pared-down IT staff.

Most companies have at least basic information on their hardware and software assets. They know generally what hardware they have, what software they've installed and whether the software is properly licensed. What they may not know is how the hardware and software

applications loaded on his laptop, that's a license that the company is wasting and fees that it is unnecessarily expending. Similarly, if the desktop at the receptionist's station has the same RAM as the desktop your chief tech engineer uses, one is likely wasting resources (memory, in this case) because your receptionist RAM needs are likely far less than those of your chief engineer.

SOFTWARE LICENSING

Even more difficult is tracking all the software (and their requisite licenses) that your new sales force, now crisscrossing

the country, is loading onto their laptops. The market downturn affected everyone – including software OEMs. Perhaps as a result of these contractions, software OEMs are becoming more aggressive in identifying and punishing the use of unlicensed software. Gartner Inc., projects that 40 percent of mid-sized to large enterprises can expect an external software licensing audit before 2006.

The costs of an audit are two-fold. First, there are the unavoidable and often enormous costs in staff time and effort expended in preparation for and participation in the audit. Note that these costs are incurred regardless of whether one's audit uncovers any licensing infractions at all. These up-front costs are just part of doing business – audit business, that is. Second, there are the penalties, which can be significant. In 2003 for example, the Business Software Alliance collected more than \$3.1 million in settlements with 37 organizations deemed non-compliant with licensing agreements.

This renewed attention to software licensing is not limited to the corporate arena. Schools – K-12 through university levels – have also experienced heightened scrutiny. Some major OEMs have targeted the education sector for licensing audits in recent years. For example, Microsoft contacted 24 school districts in Oregon and Washington state in 2002, asking the districts for audits to ensure compliance with software licensing agreements regarding 261 products. Microsoft requested that each school inventory all 261 products on every machine within 60 days or risk facing potentially costly penalties.

This incident is by no means isolated. Microsoft also requested an audit of Philadelphia's entire public school system – a total of 264 schools. Another software company requested a similar audit of the San Jose (Calif.) Metropolitan Education District, which teaches vocational classes to about 70,000 adults and high-school students. As far afield as Birmingham, England, teachers and edu-

cational professionals have reportedly received letters from software OEMs identifying licensing breaches and the legal implications should the breaches remain unresolved.

In short, IT departments need to manage the corporate network and all tech assets, both hard and soft. This task may be more difficult with reduced budgets and pared staff, but still remains critical to effective operations. Moreover, not knowing exactly what one is running on one's systems and networks, is exceeding-

EFFECTIVE SYSTEMS ADMINISTRATION SOLUTIONS REDUCE OVERALL OPERATION COSTS BY LOWERING THE TOTAL COST OF OWNERSHIP (TCO) ASSOCIATED WITH COMPUTING RESOURCES.

ly risky. Leading organizations meet the challenge of this task by turning to systems administration solutions (SAS).

THE VALUE PROPOSITION FOR SYSTEMS ADMINISTRATION SOLUTIONS

Systems administration solutions allow organizations to manage and maintain technology assets, ranging from computers and peripherals to myriad software applications and their respective configurations, easily and inexpensively. Effective systems administration solutions reduce overall operation costs by lowering the total cost of ownership (TCO) associated with computing resources. SAS tools also ensure that employees are always allocated the networked resources they need to maximize productivity, increasing overall organizational competitiveness.

To illustrate the SAS value proposition, consider the following examples. An organization with 1,000 networked computers needs to install a new software application. The organization only has a few IT staff members, who are

busily working on other projects. Were the entire IT staff to discontinue their current projects and focus exclusively on the software installation, it would still take several days to complete the deployment. Compounding the issue is the fact that the 1,000 computers are located in different offices across the country.

While it may be manageable for an organization with only 10 computers, or perhaps even 50 computers, to have IT staff manually check each machine for requisite specifications – processor, memory,

hard drive space – and manually install the software, doing so for 1,000 machines is impractical in the extreme. It is also a grossly inefficient use of staff members' time. First, such a practice unnecessarily consumes the time of IT staff. Second, it consumes

the time of regular employees who are forced to sit by and wait for the IT support technician to arrive and then continue waiting as he or she fixed the problem.

An effective systems administration solution would allow the organization in this example to check the specifications of – and deploy to – each machine remotely, sending IT staff on-site only when absolutely necessary, saving both time and money.

Consider another example, a small to mid-sized company with multiple departments, each with different computing needs. Employees in the engineering or design department work with CAD files primarily. Their computing needs are intensive – they require processor power and memory. The marketing and HR department for this company, on the other hand require relatively less in terms of technology resources. Without a systems administration solution to manage assets, a company may likely purchase additional hard drives for the engineering department, and remain unaware that there are other options. A better solution, easily identifiable with effective asset

management, may be to reallocate resources according to need. An SAS solution would give IT staff the option to move underutilized hard drives from marketing to engineering systems and replace them with cheaper, smaller hard drives that will more than meet the marketing department's needs.

Finally, consider software licensing. Software installed on the desktop represents a significant cost for many organizations. Organizations often install applications regardless of whether they are actually being used or not. Effective asset management through a systems administration solution ensures that an organization buys only what it needs and nothing more or less.

NETOCTOPUS ENTERPRISE SYSTEMS MANAGER

Netopia netOctopus provides small and mid-sized businesses with an invaluable tool to align their current technological environment with business and operational goals, resulting in increased competitiveness and efficiency, even as budgets shrink and profit margins grow thinner. The netOctopus system offers effective, proactive management of networked resources across an organization, whether next door or in a satellite office. Organizations can have flexibility, customization and responsiveness without compromising thoroughness, capacity, performance or effectiveness. It is quick to implement, easy to use, and compatible in cross-platform environments. Companies with a design division that uses Macintosh hardware and OS can still be supported by the IT group, which runs Windows-based PCs.

With best-in-class functionality like remote configuration and analysis, one-touch software delivery and powerful asset management features, Netopia's netOctopus is an integrated, comprehensive SAS that supports the entire organization. As such, it's cheaper to acquire and easier to maintain than a hodge-

podge solution of individual applications that provide a fraction of the functionality. netOctopus transforms one's network from a simple information pathway into a strategic asset. Using it, one can manage all IT assets smarter and more efficiently than ever before. Tasks like software installations, system configurations, asset tracking and inventory and technical support can all be handled simply, easily and quickly via netOctopus.

AN INTEGRATED, COMPREHENSIVE SAS THAT SUPPORTS THE ENTIRE ORGANIZATION IS CHEAPER TO ACQUIRE AND EASIER TO MAINTAIN THAN A HODGE-PODGE SOLUTION OF INDIVIDUAL APPLICATIONS THAT PROVIDE A FRACTION OF THE FUNCTIONALITY.

WHERE AND HOW YOU WORK

The remote configuration ability of netOctopus is perhaps its greatest single contribution to streamlining efficiencies. It largely eliminates the need for IT staff to travel to and from nodes on your network. Whether traveling down the hall or across town to a branch office, every moment spent traveling is time not spent resolving the problem or addressing other duties. With netOctopus, all networked resources – local and remote – can be monitored, modified and managed from the administrator's desktop. As a result, just a few IT staff members can accomplish what formerly would have taken many.

With netOctopus, administrators and users view one another's screens in real time, thereby allowing administrators to guide users through the solutions and reducing the need for travel to various workstations and tedious telephonic support. By saving time and effort for both administrators and users, netOctopus enables IT staff to get more done, effectively and efficiently.

SDS: SOFTWARE DELIVERY SYSTEM

With netOctopus, software updates, new software roll-outs, patches, and upgrades can be scheduled and run from a centralized location, using custom installer packages created by the administrator to best fit the needs of each group in the company. With netOctopus, the administrator can determine whether the company is in compliance with software licensing agree-

ments, determine which systems need upgrades, and find out which systems need OS or hardware upgrades before new software is even installed, dramatically reducing preparation and planning time for every software roll out.

In addition to netOctopus' remote configuration features,

SDS also allows administrators to deploy software to all remote locations from a central server without staffers traveling to each remote office. Whereas multi-point installations might have taken weeks in the past, netOctopus accomplishes deployments within hours or even minutes (often during non-work hours). Even routine deliveries, like virus protection updates and software patches, can be kept current from a central location, maximizing security and efficiency.

One of the most difficult obstacles in deploying new software precedes the actual software installation. It is determining what computers require upgrades to hardware or operating system in order to be compatible with a newly deployed application. This is also a frequent source of unanticipated costs. With netOctopus's simple filters and powerful inventory, administrators can easily identify needed upgrades prior to deploying, or even purchasing software, making budgeting more accurate and purchasing decisions better informed.

In line with the needs of growing companies, applications can be configured to the

EVERY BUSINESS OR ORGANIZATION IN EVERY INDUSTRY RECOGNIZES THE “MIND THE STORE” ELEMENT TO DOING BUSINESS. THE KEY IS TO MIND YOUR STORE AS EFFICIENTLY AND EFFECTIVELY AS POSSIBLE SO YOU CAN SPEND THE MAJORITY OF YOUR RESOURCES AND TIME ON STRATEGIC INITIATIVES.

specific needs of users within your organization. Using the included Mindvision InstallerVISE software, administrators can create custom packages for Windows or Mac OS using comparative snapshots of drive contents. In addition, netOctopus can push and execute a variety of installers such as PKG, MSI and EXE.

The Distribution Center Server (DCS) resides at the heart of netOctopus’ SDS and maintains lists of distribution groups, packages to be deployed, rules for each package, and staging servers where the packages are located. All aspects of the SDS are alterable – the Agent check interval, user options on install, distribution groups, and prioritization of packages. This allows adaptation of the system to the specific needs of each company. Administrators can also “set and forget” packages: The DCS directs traffic between managed agents and the staging servers from which agents pull software. Each agent can be assigned to a distribution group (or groups). Agents can check to see if the DCS has software available to be installed at a future date. When the software becomes available, installation can begin.

Because some users only connect to the network sporadically, all installations are persistent. In other words, if interrupted, netOctopus will resume installations whenever the connection is restored, without having to re-send data already transferred. In addition, as some remote users may use slow connections from time to time, packages may be configured to only install on fast connections. Even on ideal connec-

tions, the DCS balances server loads between staging servers, optimizing package availability and speed of transfer.

ASSET MANAGEMENT

The netOctopus system tracks – in real time – enterprise IT assets, applications and software licenses throughout a LAN, WAN or global distributed enterprise. netOctopus supports over 500 hardware, software and system data types, organized for easy searching, sorting and reporting. This wealth of data makes asset management far more effective. For example, using the netOctopus system, administrators can identify rarely used software and reconsider its deployment to save companies the unnecessary licensing costs. Licensing for software can be kept up-to-date, preventing improper use of unlicensed software and minimizing the risk of audits. In the education arena this is especially valuable because administrators can monitor the network for files as well as applications, such as MP3s on the network. Once identified, the files can be deleted en masse or according to a more nuanced copyright infringement policy.

Software acquisition decisions can be better informed and more easily executed with netOctopus powerful data-tracking capabilities. Smart asset management allows business – any business – to function better. And as the number and variety of IT products grow, a sound, comprehensive asset management solution is essential to effectively evaluate, implement, monitor, maintain and manage one’s IT resources.

CONCLUSION

Business success, by any measure, isn’t easy. It never has been and likely never will be. Despite the anticipated economic recovery, businesses face considerable challenges. Indeed, customers haven’t curbed their appetites or expectations simply because business as a whole has endured several years of belt-tightening. At the end of the day, customers and clients want what they’ve always wanted – the best of everything.

The challenges of retaining and growing customer bases; beating competitors on quality, price, service or value; staying ahead of technology, globalization and market-consolidation curves are challenge enough. Businesses need not create nor endure new challenges unnecessarily; poor asset management and inefficient networks are two such challenges. They are identifiable and avoidable – with the proper SAS solution.

Every business or organization in every industry recognizes the “mind the store” element to doing business. The key is to mind your store as efficiently and effectively as possible so you can spend the majority of your resources and time on strategic initiatives.

Simply stated, you cannot properly mind the store unless you know what you have, how it’s being used and what you need. The easiest, most accurate and cost-effective way to answer these questions is with a sound SAS solution.

Sponsored by Netopia

For more information call 1-800-485-5741 or visit www.netoctopus.com.

Copyright© August 2004 Ziff Davis Media Custom Publishing. All Rights Reserved. Reproduction in whole or in part in any form or medium without express written permission of Ziff Davis Media Inc. is prohibited. The information contained herein is accurate only as of the date of publication, and is subject to change without notice.