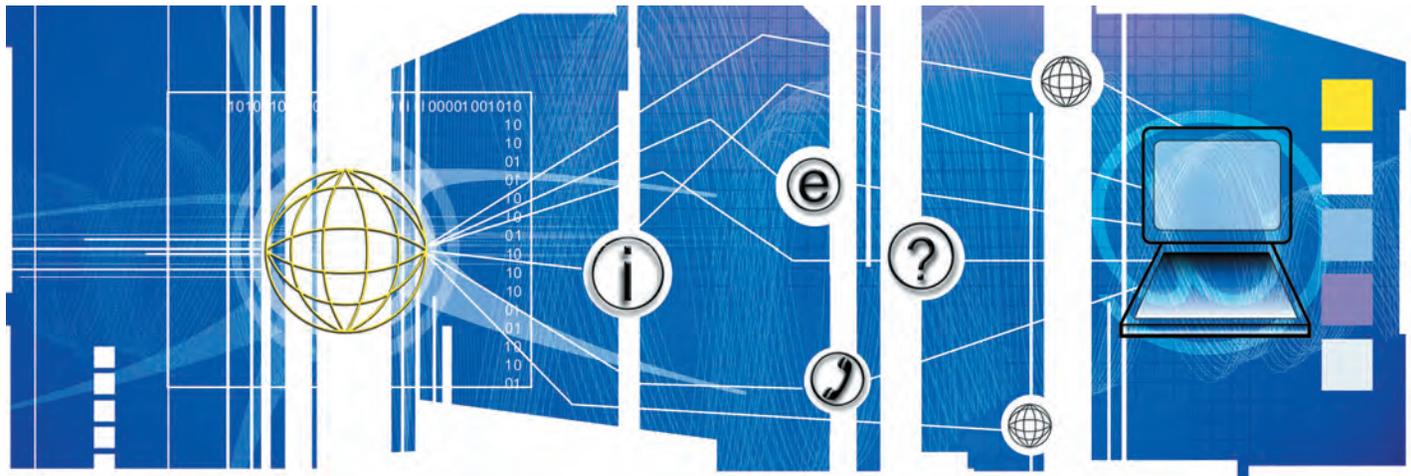


**Microsoft® Desktop  
Optimization Pack for  
Software Assurance**

SIMPLIFIES AND  
ENRICHES  
PC COMPUTING



# At last, Desktop management becomes *truly manageable*



*In the past,* managing PC environments has been a challenge not only for end users, but also for IT staffs dealing with desktop issues such as integrating multiple applications and troubleshooting machines as well as the networking issues that arise in today's complex enterprises.

Microsoft has listened to its customers, assimilated their feedback and assembled a package of products that goes a long way toward completing the seamless, end-to-end computing experience that customers have long requested.

By rolling out its Microsoft Desktop Optimization Pack for Software Assurance, Microsoft is providing a multifunction

package exclusively for Software Assurance users that not only addresses several key desktop management pain points, but also emphasizes Microsoft's appreciation of this influential customer market segment.

The company has unveiled this combination of technologies on Jan. 1, 2007 so it can rapidly get the functionality in the hands of Software Assurance users, many of whom made long-term investments in Microsoft through the Enterprise Agreement volume licensing program.

The four components in this package—which will cost approximately \$7-\$10 per machine for Software Assurance customers, depending on their volume purchase level—reduce application deployment costs, enable the delivery of applications as services and allow for better management and control of

**Microsoft®**



Custom Solutions Group

enterprise desktop environments. They further enable organizations to manage their software assets, predict and accelerate software deployment and management, and enhance IT responsiveness and end-user uptime. The result for end users is a reduced total cost of ownership relating to the operating system and the entire application management lifecycle.

In addition to their exclusive access to the Microsoft Desktop Optimization Pack for Software Assurance, Software Assurance users also have access to Windows Vista™ Enterprise, which includes additional desktop management resources such as data protection, application compatibility and multi-language support.

According to Laura DiDio, a research fellow at Yankee Group, these capabilities are sorely needed by IT organizations. “Lost productivity and increased management costs associated with today’s large and complex corporate IT systems take a massive toll on enterprises and IT resources,” DiDio notes. “More than ever, these companies need the ability to instantly access and control all of the applications on employee desktops, mobile PCs and other machines. And for companies to get their money’s worth from their IT investment, employees need unhampered and virtually uninterrupted use of these programs.

“The Microsoft Desktop Optimization Pack directly addresses these issues, and will enable businesses to significantly reduce the time and number of administrators needed to successfully resolve help desk problems.”

As noted by Microsoft, “It’s about making sure our Windows offering—especially with a new release on the horizon—continues to be a very valuable experience for our customers in terms of both usage and management.”

**Alamance Regional Medical Center (ARMC) should have counted its blessings. Instead of managing the hundreds of software applications needed to run many national and international companies, it only had to maintain a comparatively modest 75. But until recently, it would have been hard to convince the healthcare firm that its glass was half full, not half empty.**

**The problem was, those 75 applications felt like a thousand to the center’s IT team, which was struggling to update and manage**

## **Alamance Regional Medical Center case study**



**the diverse, and often incompatible, medical records, research and other software on its 1,500 PCs and thin clients at its facilities in**

**Alamance County, N.C.**

“It was a nightmare,” says Andy Gerring, ARMC’s senior network administrator. Deploying new applications took more than 5,000 hours per year, an average of 96 hours a week. Doctors, nurses and other employees lost nearly as much time when the IT system was down, and logged a total of more than 2,000 calls to the IT help desk annually.

ARMC’s deployment and management challenges were due in part to the compatibility problems created when applications require different versions of Web programming languages or management programs, but the operating system can only run one.

The firm has taken back control of its applications with the virtualization technology in Microsoft SoftGrid, which Microsoft acquired with the purchase of

### **Microsoft® SoftGrid®**

Based on application virtualization technology, Microsoft SoftGrid enables dynamic delivery of virtualized applications. Critical applications are served when needed—easily and quickly, without conflicts, and with a reduced footprint for the operating system. This strategy greatly decreases a longstanding pain point. For example, Microsoft is nearing the introduction of the Microsoft® Office 2007 system, but when it is ready to ship, many LAN-based applications built on Microsoft Office 2003 and, in some cases, Microsoft Office XP will still be in use, which means that many users will likely end up running multiple versions of Microsoft Office. Currently, managing these multiple versions must be handled locally. This creates complex desktop management scenarios, including potential conflicts in user experience and overall support.

SoftGrid mitigates this issue by virtualizing the application, allowing normally conflicting applications to

run simultaneously. In this example, the previous version of Microsoft Office 2003 can be delivered as a virtualized application while Microsoft Office 2007 is loaded on the main operating system. This allows the administrators to standardize on Microsoft Office 2007 without forcing users off Microsoft Office 2003.

With SoftGrid, operating system migration and patching are also simplified, because the application layer can be separated from the OS image management and the applications can be patched at the server and streamed with the next session without interrupting the users. Virtual applications can also be streamed to the virtual OS session, which enables users to continue running in their existing operating system environments, which remain easily—and virtually—accessible. Laptop security, which is a nettlesome problem for many IT organizations, is also enhanced, because if a laptop is stolen, the thief who takes it does not have access to

Softgrid in July, 2006. When an employee uses a virtualized program, dynamic streaming technology quickly sends just the portions of the program's code needed to get up and running from a central server to a desktop. When the session terminates, the code, settings, and profiles are saved on the central server.

Virtualization has also eliminated most of the deployment and management challenges ARMC experienced, including the hundreds of hours that IT staff spent testing application compatibility. It now takes the firm less than eight hours to deploy a new application—roughly a tenth of the time required previously. In addition, annual upgrades are now done on a central server and delivered automatically to employee PCs, allowing ARMC to more frequently add upgrades and hot fixes.

the software that's on it because it's virtualized. When it comes to operating system migration, SoftGrid takes the pressure off users, because they don't have to port all their applications over right away. They can continue running them in the existing operating system environment on remote servers and simply stream them to their desktops.

With SoftGrid, any child process spawned from a virtualized parent process will operate inside the virtual environment of the parent process. This means that a local application like Internet Explorer, which cannot be streamed directly, can have a completely different set of security permissions, toolbars, home page, security template, and so on delivered in a virtual environment, and have the local `iexplore.exe` pulled into that environment. As a result, that instance of Internet Explorer will operate in a completely different environment, despite being a locally installed application.

### **Microsoft® Asset Inventory Service**

All the acquisitions, downsizing, upsizing and reorganizations taking place in the corporate world are creating highly complex licensing environments for IT shops, which have to scrutinize their networks to determine what types of software they have deployed, where it is deployed, how it is being used, and who is using it.

In addition, they have to ensure that they are licensed appropriately for the software packages they are using. For example, it is not unlikely that an IT organization with 5,000 seats may have an Enterprise Agreement for only 4,000. This could be the result of the company purchasing a significant amount of new hardware, leading to it being licensed on some desktops through its OEM, and on others through different types of licensing contracts.

Asset Inventory Service helps bring order to this chaos by enabling organizations to categorize and inventory those software licenses. It offers added value because it is not limited to Microsoft software licenses, but includes a multivendor collection of over 400,000 software titles as part of its inventory database. And customers who have their own applications can add them or others to the list, which is constantly updated.

Terry Baker is director of IT Procurement for Expedia, the Bellevue, WA-based online travel company. He says Expedia relies on Microsoft Asset Inventory Service to reduce its IT management and support problems, as well as to gain insight into the software running on the company's 5,700 desktops and other PCs. According to him, Expedia's first inventory recouped the cost of the service—which it licensed separately prior to its inclusion in the Desktop Optimization Pack—eight times over. As it turned out, the company had thought it was running many more versions of a vendor's software than it actually was.

“For the first time, we had solid proof,” Baker declares. “Before, we just had to guess. If you don't perform accurate inventories, you are either spending money on software you aren't using or don't possess, or you are increasing your unfunded liabilities.”

### **Microsoft® Diagnostics and Recovery Tool Set**

A fundamental responsibility of enterprise IT departments is protecting corporate and employee data. Although many of these groups take a proactive approach to backing up network data, they tend to be reactive in planning for desktop system failures. Unfortunately, the cost of not having an effective diagnostics and recovery plan in place can be devastating. Think of what it costs each time employees can't work because their desktops are down, or because an IT staff member is pulled from other important tasks in order to restore an end user's machine.

Microsoft Diagnostics and Recovery Tool Set can save significant time and reduce the headaches associated with troubleshooting and repairing system failures. It offers system administrators the possibility of quickly restoring failed systems with minimal manual effort.

It also provides many options for recovery, rather than simply forcing IT to “reinstall Windows.” Even when safe mode or normal boot will not function, the toolset provides an offline environment in which IT staff can attempt several types of recovery not otherwise available. It is easy to use, because the offline boot environment allows rapid recovery for problem computers, including the recovery of deleted files, and the manipulation of services, devices, and local passwords.

With the Diagnostics and Recovery Tool Set, both IT staff and end users realize faster, more accurate resolutions and greater productivity.

## Microsoft® Advanced Group Policy Management

The Microsoft Advanced Group Policy Management capability provides more granular administrative control of group policy objects—the component rules within Windows’ administrative management system—and enables IT administrators to delegate or assign administrative control of specific tasks based on employees’ titles or roles.

Currently, the group management console maintains a very binary delegation authority, which translates into someone having either full authority to change group policy objects, or no authority at all. Microsoft Advanced Group Policy Management breaks that down so appropriate IT personnel can assign one individual to, for example, edit group policy objects, while another employee is authorized to create or delete them. The product also automates the workflow associated with that delegation authority, so it is only necessary to indicate the various levels of approval and who has them, and the workflow auto-generates e-mails when it is time for someone to approve a change.

The current group policy management environment requires that changes to group policy objects be made in either a live environment or a lab. With Advanced Group Policy Management, it is possible to edit changes and do testing offline and then bring the revised objects back into live operation.

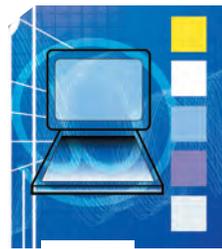
The product also features a full versioning record and complete history of all changes—including who made them and when they were made. Administrators have access to audit logs and difference reporting that describe how changes impact performance. If a change has an undesired effect, the system can be instructed to delete it and roll back to a previous state.

## Additional Desktop Management Resources from Windows Vista Enterprise

The customer who purchased Software Assurance on the Windows Desktop also gains additional desktop management resources by using Windows Vista Enterprise.

**Data protection:** Windows Vista Enterprise includes Windows BitLocker™ Drive Encryption, a new technology that helps prevent sensitive data and intellectual property from falling into the wrong hands if a computer is lost or stolen. Windows BitLocker uses hardware-based data encryption technology that gives you greater peace of mind knowing that your corporate intellectual property is safer and will remain your strategic asset. Also, since the entire hard drive

“Our goal is to put companies back in control of their IT systems.”



is encrypted, Windows BitLocker reduces the cost associated with decommissioning old PCs.

**Application compatibility:** Windows Vista Enterprise includes built-in tools to improve application compatibility with previous versions of Microsoft operating systems, as well as with UNIX operating systems. Included in Windows Vista Enterprise is the license to run four virtual OS sessions, which enables you to run a legacy application on a legacy Windows operating system in a virtual environment on top of Windows Vista Enterprise. This feature saves you time and money if you are unable to easily migrate a legacy application directly to Windows Vista.

**Multi-language support:** An interface language controls which language a user sees in the Windows

Start menu, in the help system, in built-in management tools, and in Windows dialog boxes. Windows Vista Enterprise includes all available interface languages in one offering. Access to all worldwide interface languages enables organizations to build a single deployment image that can be used worldwide, and to deploy individual PCs that simultaneously offer different interface languages for different users.

## Conclusion

By offering the Microsoft Desktop Optimization Pack exclusively to its Software Assurance customers, Microsoft is returning the loyalty these large customers have shown through their long-term commitments to the company’s key technologies.

Microsoft is also addressing key management pain points shared by these organizations, making it easier for both IT staffs and end users to maximize their productivity.

“Our goal with the Microsoft Desktop Optimization Pack is to put companies back in control of their IT systems,” says Gavriella Schuster, senior director of the Windows Client Product marketing group at Microsoft. “This pack creates truly dynamic desktops, with applications that can be managed and maintained with much less effort than today, regardless of where employees access them, be it on desktop PCs in the home office or on a company laptop in a distant airport.”



For more information, go to [www.windowsvista.com/optimizeddesktop](http://www.windowsvista.com/optimizeddesktop)