Seven Ways to Simplify Windows Management

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Introduction

Today’s IT managers must deal with flat or shrinking budgets while maintaining service levels and complying with an increasing number of policy regulations. Operationally, they must also respond quickly to any problems to ensure all systems are reliable and secure. To maintain their organization’s productivity, IT managers must reduce the risks, costs and complexities of managing their Microsoft Windows-based infrastructures. In a word, they must simplify.

You can trust the experts at Quest, an Advanced Infrastructure Solutions Partner of the Year and two-time Microsoft Global ISV Partner of the Year, to provide and support solutions for Active Directory, Exchange, Office Communications Server (OCS), SharePoint, PowerShell, SQL Server and desktop virtualization. Quest simplifies Windows infrastructures in the following seven areas:

- Migrations, consolidations and restructuring
- Identity and access management
- Compliance, audits and security
- Recovery and availability
- Administration and automation
- Development and customization
- Desktop virtualization management
Simplifying Migrations, Consolidations and Restructuring

A successful migration, consolidation or restructuring has significant rewards. The budget and time commitment, as well as the risk to corporate data, can be easily justified in many cases, including:

- In the case of a merger and acquisition, a migration or consolidation may be necessary to fully integrate two or more formerly independent companies. The benefits of the merger or acquisition can’t be realized until the two IT infrastructures merge.

- Consolidation can be used to reduce operational overhead. Rather than managing duplicate instances of Active Directory, Exchange Server or SharePoint, consolidating onto fewer systems reduces management points, increases security, and reduces maintenance overhead.

- A migration is required to upgrade to new versions of many technologies, including Active Directory or Exchange Server. These new versions can offer enhanced security, improved manageability and useful features, as well as enhanced reliability and usability. A migration can also be a way of consolidating and standardizing, such as migrating from GroupWise or Notes platforms into a consolidated Exchange or SharePoint platform.

- Restructuring can improve manageability, often by allowing administrators to delegate key administrative tasks and intelligently distribute management overhead. Restructuring can also improve security and compliance; for example, Active Directory may be restructured to take advantage of desktop manageability improvements in components such as Group Policy.

The Risks

Although most businesses can benefit from a migration, consolidation, or restructuring project, many fear that they can’t properly assess and mitigate the project risks. Any time you start manipulating core infrastructure components—including Active Directory, Exchange Server, and other mission-critical technologies—there are significant risks that must not be underestimated or ignored. The key risks include:

You Could Miss Something

With complex infrastructure technologies, it’s extremely easy to overlook some seemingly minor detail that later ends up blocking the entire project.

Users Are Offline Too Long

When users are moved from one system to another, it’s usually assumed that at least some users are going to be “offline” for a period of time. That’s not always acceptable, especially if unforeseen problems cause that period of time to become unduly long, and prevent users from doing their work.

You Might Break Something

In any technically and logistically complex process, there’s a serious concern about what might go wrong—and whether you’ll be able to fix it. What if an administrator selects an incorrect setting during a migration? You could easily take your entire environment offline, especially when you’re dealing with something as core as Active Directory or as mission-critical as SharePoint.
The Project Requires Too Much Time and Effort

A migration, consolidation, or restructuring process is no easy thing. Multiple systems are almost always involved: for example, an Active Directory consolidation might also involve Exchange Servers, file servers, end-user client computers, service accounts, and more. A Lotus Notes-to-Microsoft migration could involve moving Notes e-mail and applications, some of which were custom built on the Notes platform. Coordinating and manually performing migration tasks can involve a lot of effort being heaped on to an already overburdened IT staff.

You Don’t Have an Expert

Migration, consolidation, and restructuring projects require skills beyond those needed for day-to-day operations, and many IT professionals don’t have enough experience to ensure the projects will be successful and efficient. This is especially true in the case of a merger or acquisition involving disparate systems, such as Lotus Notes, Novell GroupWise, or Exchange. Without the right skills and experience, your team will have difficulty anticipating and mitigating risks.

Industry experts around the world agree that Quest is the leader in migrations, consolidations and restructuring. Our solutions simplify migration, consolidation or restructuring projects with ZeroIMPACT on users and fewer resources than using native tools. With more than 20 million mailboxes migrated to Exchange and Exchange Online, nearly 45 million users migrated to Active Directory and OCS, and gigabytes of data migrated to SharePoint, Quest has the experience to ensure a seamless, accurate and stress-free migration.

Quest: A Migration Leader

Whether driven by a merger or acquisition, organizational growth, a need to change platforms or a new platform release, Quest has the experience you need: 20 million mailboxes migrated to Exchange, 45 million users migrated to Active Directory, thousands of desktops managed virtually, and gigabytes of data migrated to SharePoint. Industry experts around the world agree that Quest is the undisputed leader in migrations, restructuring, and consolidations, including to “the cloud.”

With the right solution, you can enjoy the benefits of a migration, consolidation, or restructuring without the massive risks to your business. Quest Software is a recognized leader in Windows migration, consolidation, and restructuring with award-winning, proven solutions that:

Evaluate Your Infrastructure

Quest can help you find the little details that might otherwise be overlooked. Quest tools for automated assessment and discovery can catch every last component involved in the project: for example, identify unused data that does not need to be migrated.

Minimize Impact on Users

You need a solution to help coordinate the migration or consolidation tasks to ensure users remain online and productive throughout the project. Quest tools for automation, along with our embedded knowledge and experience, will help you take the right steps in the correct order, in far less time than your IT team could do manually. Quest can also help two systems coexist during a lengthy migration or consolidation project, ensuring that users can always reach the resources they need.

Undo Mistakes

Quest’s migration and consolidation solutions offer the ability to “roll back” changes almost instantly, bringing your environment back to a known good state and significantly reducing downtime. This enables you to investigate the problem and rework your plan.

Provide Consistency and Workflow

Quest offers migration and consolidation solutions with customizable, pre-built workflows that define the appropriate migration tasks and execute them automatically, assuring a consistent multi-phase migration.
Automate Time-consuming Tasks

In most cases, performing migration tasks manually is too much work. Quest has solutions to enable your team to direct the project’s progress while automating the actual labor, including coordinating the necessary changes to multiple infrastructure components.

Embedded Skills and Experience

A mere tool can be satisfied with automating a few tasks; a migration/consolidation solution brings the embedded experience of multiple migration/consolidation experts. Quest solutions provide in-depth migration expertise, including prescriptive guidance, automated planning features, pre-built optimal workflows, and more. Quest helps your team complete the migration as if an experienced consultant were standing beside them the entire time.
Simplifying Identity and Access Management

For many companies, IAM consumes an immense amount of IT resources; day-to-day administration can be complex and repetitive. At the same time, IAM has become more important as companies grow increasingly aware of security needs, user productivity challenges and other concerns. Today, key business drivers for adopting IAM solutions include:

- The need to comply with legislative and industry requirements such as the Payment Card Industry Data Security Standard (PCI DSS), Sarbanes-Oxley (SOX), and others
- A desire to make users’ lives easier and more productive, as well as reduce support costs, through single sign-on, multiple-factor authentication, and self-service support tools
- Reducing costs, including the expense of IT support, overhead and lost productivity, due to IAM’s time-consuming and repetitive tasks
- Reducing the complexity and cost of the IT infrastructure through directory consolidation
- The need to improve security and efficiency through detailed auditing, management reporting, automation, and more

The Risks

If your environment lacks strong IAM capabilities, you’re facing significant operational risks. It’s easy to think that these risks are only about security, but the reality is a bit broader and more practical. Major risk areas include:

- You are Not in Compliance with Regulations and Policies
  It’s becoming more and more complex and difficult to comply with industry and legislative security requirements. You need powerful auditing capabilities, detailed reports, and management processes that are so complex they raise your overhead costs, not lower them. But being out of compliance can mean hefty fines, as well as the loss of business and customer confidence.

- You Spend Too Much on Support
  As much as one-third of your help desk’s time may be spent performing simple, repetitive tasks like resetting users’ passwords. With today’s tighter budgets and smaller headcount, it can be frustrating to watch valuable IT time spent on such minor tasks, but because they keep your users working, you accept it. Or should you?

- You Spend Too Much on Administration
  Even higher-level IT staffers waste a great deal of time on manual, repetitive tasks like assigning permissions to resources. Your infrastructure’s native tools weren’t designed for efficiency, so rather than working on projects that could help support business growth and efficiency, your top IT team members are spending their days clicking little checkboxes and buttons.

- The Wrong People Can Access Important Data
  With so much of IAM performed manually, it’s common to find incorrect resource access permissions in almost all organizations. One mistake can result in leaked intellectual property, creating compliance audit failures, fines and lawsuits.
Your Administrators Have Too Much Power

Your infrastructure’s native security systems place absolute trust in a few highly-privileged individuals. However, in today’s business environment, you can’t risk placing that much power in those few hands. Even a simple mistake on the part of a well-meaning administrator can mean downtime, lost data, leaked information, failed audits, and more. Now try to imagine what a disgruntled administrator might cost your organization and its operations.

**Quest: A Leader in Identity and Access Management**

Quest’s identity and access management solution, the Quest One Identity Solution, can provide a single set of technologies—with one IT investment—that addresses all of the risks listed above. Quest One uses your existing Microsoft infrastructure to eliminate redundant effort, increase security, improve efficiency, and achieve compliance across heterogeneous systems. It simplifies identity and access management with the following capabilities:

**Single Sign-On**

Quest One reduces the need for users to remember passwords—as well as the support costs associated with managing them—by giving users a single login that will work across all of your enterprise systems.

**Strong Authentication**

The security of password-based login is increasingly being called into question. Quest One provides strong authentication by providing system access only to users who combine “something they know” (password) with “something they have” (one-time password tokens, smart cards, etc.). This dramatically increases security, often satisfies regulatory requirements and can be implemented without increasing costs or management overhead.

**Self-Service Support Tools**

When users forget a password, Quest One enables them to reset it and unlock their account on their own. Self-service capabilities free up significant IT support resources for more pressing projects, and enable fewer support staff to support larger user populations. Quest One can also allow users to update personal GAL information and self-enroll in specified IAM services.

**Directory Consolidation**

Quest One simplifies IAM by consolidating all of your directories; this reduces the number of management points. By bringing multiple systems under a simplified, streamlined Active Directory infrastructure and adding single-sign on and strong authentication, Quest helps you reduce overall management overhead and support costs. You’ll also improve IAM consistency, as well as system security.

**Efficient Compliance and Audits**

You need to enforce security policies and audit policy compliance from the top down through the use of centralized security policies. Quest One’s real-time auditing and powerful reports provide the system visibility you need to achieve and maintain compliance—with vastly less overhead than would be required with manual methods.

**Automated Provisioning**

By consolidating heterogeneous provisioning into Active Directory, Quest One automates user provisioning, re-provisioning, and de-provisioning. Your administrators will spend significantly less time clicking through dialog boxes, and your access security policy will be consistently applied and centrally managed. With Quest One, there’s no need to write complex scripts, and you can initiate provisioning activities from authoritative data sources, including human resources systems.
Privileged Account Management

Quest One enables you to granularly delegate security permissions; you can spread the IAM workload across your organization’s trusted individuals without putting the “keys to the kingdom” in any one person’s hands. By delegating control over privileged accounts, such as Unix/Linux “root” accounts and Windows administrators, Quest One helps your users stay productive, reduces the burden on your IT staff and increases your security levels.
Simplifying Compliance, Audits and Security

Each major component of your Windows-based infrastructure—Active Directory, Exchange, Office Communication Server, SharePoint, and SQL Server—has its own security needs and issues, including:

- Auditing and managing Windows-based resources can be time-consuming, and you could make better use of your IT staff’s time.
- When working with multiple platforms, native tools require you to audit each one separately, which increases manual effort and decreases cross-platform consistency.
- Organizations want their security policies to be consistently implemented. Today they tend to be applied somewhat indiscriminately—and sometimes they aren’t implemented until after a problem has occurred.
- These include requirements for auditing and reporting, and for proving compliance.
- Inadequate security threatens your organization’s infrastructure and proprietary data, and the immense cost of regulatory fines, lost productivity, system failure and information leakage can destroy your profitability.

The Challenges

Obviously, not being in compliance with internal and external security requirements is an enormous risk. But achieving compliance at all costs can be bad for business: you’ll distract critical IT resources, run the risk of applying security inconsistently, and more. Some of the major challenges include:

You Have to Secure Everything

You can’t apply security to just one IT system, like your file servers. Data and information live everywhere, and you have to consistently secure all of those disparate systems. You could choose to do so by purchasing point solutions for messaging, file servers, and so on, but doing so will still result in inconsistencies and “gaps” between systems.

You Are Unclear about Compliance Requirements

Most security requirements don’t specify technical requirements. What do you need to show on your reports? What systems do you need to look at? You run the risk of spending significant time trying to figure what’s actually required, not figuring it out correctly, and later finding out you’re still not compliant.

Auditing Can be a Resource Drain

Auditing is at the heart of most compliance and security efforts, and it can be a drain on time, money, and staff. Manual audits often miss critical security problems, leading to a false sense of security.

IT Costs are Increased

The sheer amount of manual effort involved in securing, maintaining, and auditing your various Windows-based systems will often require additional staff time, raise your IT costs and prevent you from tackling important projects that can help move the business forward.
You Can’t Plan Ahead

Your IT staff isn’t psychic; all they can normally do is respond to security failures after the damage is done. Without proactive security capabilities, you’re still open to damage, non-compliance, and other risks.

**Quest: A Leader in Compliance Solutions**

While the native security in Microsoft’s products is capable of meeting some of your needs, the native tools used to configure and audit that security require too much time-consuming manual effort. Without additional tools to supplement the native ones, compliance will remain a tedious, repetitive, inconsistent, and labor-intensive project.

Quest helps you easily meet the requirements of an ever-increasing number of internal policies and external regulations. You’ll be able to eliminate the distractions and complexity of protecting critical data and controlling usage in Windows and beyond.

Quest can configure, audit, alert, and maintain security across all of your Windows-based resources. Quest solutions provide:

**Central Control with Enterprise-Wide Reach**

Quest collects all of your security information—configuration, auditing, event collection, monitoring, and more—into a single, centralized solution set. You no longer need to poke around looking through dialog boxes in a dozen different places.

**Automated Discovery and Baseline Creation**

You can automatically inventory your infrastructure and create a security baseline using Quest solutions. You’ll finally know who has access to what, and be able to lock down and monitor key objects and resources.

**Custom and Regulation-Specific Reporting**

Stop trying to figure out what the lawyers meant, and rely on Quest’s pre-designed, regulation-specific reports to deliver the information you need. You’ll be able to align operational best practices with your security requirements, and complete audits.

**Automation**

Quest solutions reduce costs by automating repetitive tasks, such as applying new security permissions across your multi-platform environment.

**Fast, Smart, and Proactive Alerts**

Quest solutions automatically monitor for suspicious activity patterns and alert IT staffers in real time, enabling them to catch problems as they’re happening. You’ll be able to establish usage policies and access controls for more proactive monitoring of communication and data sharing.
Simplifying Recovery and Availability

Maintaining a reliable and secure Windows-based infrastructure is critical to organizations. Monitoring systems and performing data recovery using native tools can be incomplete, time-consuming and complicated, as well as jeopardize user productivity and business operations.

Recovery and availability capabilities must be implemented across your infrastructure and do much more than just back up the files on your servers. To protect your data from loss and systems from downtime, you must:

- Streamline the recovery of data lost through accidental deletion, malicious activity, or system failure
- Recover as little as one Active Directory object, Exchange message, or SharePoint document quickly and accurately
- Prevent downtime by detecting potential problems, and when they occur, resolve them quickly
- Define, meet, and manage service level agreements with other groups within the business
- Automate application monitoring and troubleshooting to help ensure availability and reduce downtime in case of a failure

The Challenges

Most IT teams feel that they have the backup and restore capabilities they need, but ensuring a fast and successful recovery and uninterrupted availability requires a lot more than just a good set of backup tapes. However, tasks like detecting potential problems and automating problem resolution can be difficult with today's complex infrastructure technologies. Some challenges include:

Recovery May Mean Downtime

Backups aren’t useful when you’re required to take a domain controller or other critical infrastructure component offline just to restore a single object, for example, a user account that was accidentally deleted. Unfortunately, many recovery technologies, such as native SQL Server tools, require time-consuming, multi-step restore processes.

Full Recovery is Complex

Restoring an entire Active Directory forest or SharePoint farm, is a complex, multi-step process that few administrators have experienced. This means the IT staff must learn how to restore the system during a disaster, while the rest of the company waits.

Performance Data is Complicated

Administrators often struggle to interpret system performance charts, and when they see something that might be a problem, they engage in manual, seat-of-the-pants troubleshooting to find the cause.

Troubleshooting Isn’t Consistent

Every administrator follows a different troubleshooting process, and few of them use the same process every time. This results in inconsistencies that extend the time it takes to discover the root cause of a problem and resolve it.
Quest: A Leader in Data and System Recovery and Availability

Native tools simply aren’t designed for today’s business environments, where fast, granular recovery is a must, and where a thorough, consistent monitoring and troubleshooting methodology is a daily requirement. Quest provides you the most comprehensive solutions available to keep your systems available 24x7.

With Quest, you can monitor your environment’s health with easy-to-understand visual interfaces and be notified of pending issues before they become critical. Data backups can be automated and recoveries can be completed in minutes. In case of a disaster, Quest can help you recover data, domains, databases or even your entire system or forest.

Our tools provide a full spectrum of capabilities help you detect, diagnose and repair system problems in Active Directory, Exchange, OCS, BlackBerry, SharePoint and SQL Server, as well as address all of your infrastructure’s unique needs, capabilities, and problem areas, including:

Fast Recovery with Minimal or No Downtime

When something in your environment fails, Quest solutions can help you bring it back online quickly. And when a single piece of data, like an Active Directory user, an Exchange message, or a SQL Server database, is accidentally deleted, these solutions will help you recover it quickly, without taking resources offline.

Recover One Item… or Your Entire System

You need to recover quickly, no matter if you’ve lost a single Active Directory, SharePoint or Exchange object or your entire forest, farm or messaging system goes down. For a granular recovery, Quest has tools to help you easily find and restore the missing object. When the recovery is complex, such as an Active Directory forest, Quest tools will help you automate and streamline the process to prevent errors and increase efficiency.

Easy-to-Understand, Detailed Performance Information

You don’t need raw performance counters to improve uptime and performance—you need information. Quest solutions take raw performance data and translate it into meaningful trends to help you easily detect underlying issues, as well as offer meaningful guidance for improving performance and reliability.

Consistent, Efficient Troubleshooting

Quest solutions notify you about impending problems before those problems negatively impact productivity. And when problems occur, Quest tools support an efficient, consistent troubleshooting process that quickly identifies root causes, offers prescriptive guidance, and facilitates a fix.

With Quest solutions, you can monitor your environment’s health with easy-to-understand visual interfaces and be notified of pending issues before they become critical. Data backups can be automated and recoveries can be completed in minutes. In case of a disaster, Quest can help you recover data, domains, databases or even your entire system or forest.
Simplifying Administration and Automation

IT organizations limit their productivity by relying on most native tools. It takes too long to learn how to use them; when administrators are bogged down training on and managing multiple platforms and tools, help desk calls are unanswered, systems aren't monitored, and IT is forced to continually react to a constant barrage of problems.

Organizations require a high level of efficient administration and automation for tighter security, governance and IT process control. Also, as IT budgets tighten, requirements for availability, accuracy, and secure day-to-day automated management of the Windows infrastructure have increased.

But efficiency is about more than just cost savings; truly efficient administration brings a host of benefits, including:

- Administrators have more time to work on more valuable, innovative projects.
- Higher productivity helps control IT headcount.
- Automation improves security and reliability, with less opportunity for human error.
- Repetitive workflows that align to business processes means better IT governance and process control.

The Risks

Automation provides a more efficient, cost-effective, secure, and reliable IT infrastructure. When administrators spend a lot of time performing manual tasks, business operations can be negatively impacted, especially when the tasks involve mission-critical parts of the infrastructure, including:

Active Directory

Manual Active Directory administration is extremely time-consuming and leaves plenty of room for errors that lead to security problems, inconsistencies, or downtime. The problem is worse if the environment includes multiple directories, causing the help desk to be overwhelmed with users who forget one or more of their many user names or passwords.

Identity and Access Management

Applying permissions to files, folders, mailboxes, and other data resources—including cross-platform permissions—is time-consuming when done manually, and creates an environment that is almost impossible to manage and audit. The result tends to be a “dumbed down” level of security that administrators feel they can manage more easily—but that doesn't meet the security needs of the business.

Exchange and Unified Communications

Companies need management reports about their messaging infrastructure, but most messaging products don’t come with any native reporting capability, leaving administrators to manually assemble data. Monitoring the health of these critical infrastructure elements using the native toolset is also largely manual, increasing the probability that administrators will miss a growing problem condition until it results in actual downtime. Even recovering a single e-mail message using the native toolset consumes a great deal of end user and administrator time.

SharePoint

As organizations move more of their data and collaboration efforts into SharePoint, they realize that it, too, requires a great deal of labor to manage. Gathering statistics to report on usage and plan for growth
is difficult and time-consuming, and managing numerous SharePoint sites natively is extremely repetitive and open to inconsistency, which leads to diminished security and reliability.

SQL Server
Organizations face “SQL Server creep” as this important infrastructure platform finds its way into more and more products. Gathering statistics to manage capacity and growth is entirely manual, and imprecise; likewise, reporting on individual database performance is entirely manual—and so difficult that few administrators bother even trying.

Enterprise-level Issues
Businesses also struggle to align their administrators’ day-to-day tasks with IT management workflows and processes designed to improve change control, transparency, and governance.

Meeting business needs requires centralization and automation, so that administrators can be more effective with less manual work. Matching workflows to your business processes increases manageability and visibility, while also improving consistency, security, and reliability.

**Quest: A Leader in Windows Administration and Automation**

Quest Software is a recognized leader in Windows infrastructure management, with a special focus on making administration faster, more consistent, and more secure. Quest’s solutions help administrators automate day-to-day management of Microsoft infrastructures, and extend this control to Unix, Linux, Java, and Mac platforms as well as a number of enterprise applications.

Quest’s experience spans the breadth of Microsoft infrastructure products, including Active Directory, Exchange Server, SharePoint, Office Communication Server, SQL Server, and much more. With award-winning, proven solutions, Quest can help reduce risk, automate IT operations, and help you efficiently manage your Windows infrastructure with:

**Active Directory Administration and Automation**

Quest’s automated provisioning tools add efficiency, consistency, and security to Active Directory. Provisioning, re-provisioning and de-provisioning is simplified and accelerated and you will be able to more easily and quickly control users, groups, and resources. In addition, Quest can help you create identity synchronization between directories to make life easier for users and reduce the calls to your help desk for forgotten passwords.

**Automated Identity and Access Management**

Quest solutions can consolidate your identity infrastructure into fewer directories and management points, reducing overhead. You will be able to automate resource access permissions through centralized, role-based policies, and eliminate manual access control. Quest solutions have current and historical reporting capabilities, providing you with consistent security, and the ability to create practical processes for managing access permissions.

**Automated Exchange and Unified Communications Administration**

Get the reports you need with a click of a button using Quest solutions, instead of using up a week’s worth of manual labor. Quest adds automated monitoring and alerting to your Exchange, Office Communications Server, Windows Mobile, and Blackberry infrastructure, so pending problems no longer go unnoticed. You can even automate e-mail recovery, provide self-service options to users, and vastly increase the speed of completing recovery requests.

**Automated SharePoint Administration**

Quest solutions can help you access and compile reports on usage metrics and trends, plan for growth, and set policies—all with the click of a button. Quest enables you to centralize the management of multiple SharePoint instances with a single solution, increasing efficiency and consistency. You’ll gain better control over SharePoint, and have visibility into how it’s working and being used.
Automated SQL Server Administration

With Quest tools, you’ll be able to automate capacity management, including developing reports, as well as automate database performance across multiple servers. Quest helps you standardize SQL Server monitoring, configuration, and auditing with centralized tools.
Simplifying Windows Platform Customization

IT organizations often need to customize or enhance Microsoft Windows-based platforms to get the most from their investment and meet unique business objectives. They need solutions that improve the efficiency and decrease the costs and risks of application development and customization.

Custom software development can be an enormous undertaking, even when working with mature technology platforms like SharePoint and SQL Server. Here are some of the common goals businesses have when customizing applications:

- Shorter development project cycles, producing usable customizations in less time
- Increased customization quality, often by simply reducing the number of human errors in the code
- Improved management practices, increasing visibility and aligning development more closely to core business values
- Improved application performance and reliability

The Challenges

Many businesses have quickly realized that custom development is filled with risk and challenge. However, there are specific areas that contribute most of the risk. Identifying these can help mitigate or remove these risks entirely.

SharePoint Development

SharePoint development can be complicated and intimidating, even for a simple site customization or a straightforward dashboard. Even if SharePoint development resources are available, investing weeks of development time may not be justified. Moreover, it’s often difficult for developers to accurately estimate the time needed for the project and maintaining custom code over the long term is an expensive proposition.

Scripting

Windows PowerShell can automate administrative tasks while better aligning IT to business needs. However, it has a steep learning curve that is well outside the experience of many administrators. Self-taught administrators are also often unaware of best practices such as version control, leading them to create scripts that are difficult to use and maintain.

SQL Server Development

While any good developer can create SQL statements, minor changes in statement construction can mean the difference between excellent and horrible performance. Developers often work from habit and experience; getting them to identify potential problems in SQL statements and learn a new way of constructing them can be difficult. Worse, developers often have few ways of validating the performance of their database applications, making much of their “optimization” efforts nothing more than guesswork.

Quest: A Leader in Windows Development and Customization

Mitigating the challenges outlined above may seem impossible, but with the right tools, the risks can be overcome and the business goals met. However, a few performance-tuning tools aren’t sufficient. Quest solutions provide the flexibility to build on the native functionality of the Microsoft environment to help you easily configure, script, build and test new applications in SharePoint, SQL Server and PowerShell by:
Automating SharePoint Development

Quest has solutions that enable you to deliver SharePoint customizations up to 80 percent faster than manual coding alone by using automated tools. You can easily produce anything from a dashboard to a custom application. Quest helps you customize SharePoint to meet your organization’s needs, while reducing or eliminating the need to write and support custom code.

Automating and Simplifying Windows PowerShell

Pre-packaged scripts and “PowerPacks” from Quest can help administrators leverage Windows PowerShell to accelerate administrative tasks, without a lengthy learning process. At the same time, administrators will gradually learn PowerShell syntax, as well as scripting best practices to improve accuracy. Quest’s integrated version control tools help make PowerShell a formal, supportable part of the infrastructure.

Automating and Tuning SQL Server Statements

Quest solutions improve database application performance and reliability with automated scans for problematic SQL Server statements, and with one click, identify the most efficient alternative. With tools based on embedded expertise and real-world performance, developers will work more efficiently and applications will run better. You’ll be able to easily validate the performance by testing under user load scenarios, ensuring that deployed applications are ready for the real world.
Simplifying Desktop Virtualization Management

The traditional model of providing every user with a desktop workstation computer, complete with a full copy of Windows and all their applications is vulnerable, inflexible and costly to maintain and support. However, a desktop virtualization deployment can be complex, cumbersome to manage and provide a poor user experience. Regardless, many organizations are now turning to desktop virtualization to:

- Control maintenance, support, and hardware costs
- Secure and controlling the desktop, applications and data
- Enable better disaster recovery and business continuity
- Support mobile users by providing them with access to their workspace from anywhere

The Challenges

Today, desktop virtualization can be implemented using a variety of technologies, such as Microsoft’s Session Virtualization (formerly known as Terminal Services), hypervisor-based platforms, virtual desktop infrastructure (VDI), or even data center-based blade computers. Each of these models comes with its own unique challenges, including:

Management

Many organizations use a variety of server-based models, such as a mix of VDI, Session Virtualization/Terminal Services, or blade PCs. But since each has its own native tools, configurations, and more, managing them consistently can be challenging.

User Experience

Adoption of virtual desktops and applications can be compromised when the user experience differs from that of the physical desktop. Slow rendering of display content, bandwidth requirements for WAN or remote users and ability to use peripheral devices (printers, multi-monitors, and various USB-enabled devices) need to be addressed.

Maintenance

Virtual desktops still require operating system and application patches. Without the right tools, a virtual desktop can require the same effort to maintain as a physical one.

Storage

Virtual desktop technologies based on hypervisors can consume enormous quantities of disk space to store virtual machine images and their associated data; this presents management and cost issues.

Security

Virtual desktops can create security issues; it is critical to ensure that only authorized users are accessing desktops and applications. Authenticating users to the virtual workspace can be complex without the right tools. Delegating administration over portions of the virtual infrastructure is nearly non-existent with native platforms; the ability to securely spread management and maintenance workloads among greater numbers of IT staff can save time and increase efficiency.
Quest: A Leader in Desktop Virtualization Management

Quest Software has deep experience in helping administrators and users manage their desktop virtualization infrastructure more efficiently. Quest offers cross-platform, cross-vendor solutions that help centralize and unify a desktop virtualization infrastructure, providing better accessibility and manageability, along with increased and more consistent security. Quest's award-winning, proven solutions can help reduce risk, automate IT operations, streamline your virtual infrastructure, reduce IT costs and enhance the following desktop virtualization benefits:

**Simplified Management**

To reduce complexity and simplify tasks. Quest offers a single console to manage VDI, Remote Desktop Session Hosts/Terminal Server, and blade PCs. Quest also enables you to automate and schedule desktop provisioning and application deployment, as well as manage power consumption, providing you with a unified and scalable desktop virtualization infrastructure.

**Automated Recovery and Maintenance**

Quest solutions automatically re-create virtual desktops in seconds, and accelerate the deployment of patches. You can easily control power consumption, provision user profiles, and configure other infrastructure-wide settings for large numbers of users.

**Smarter Storage**

Reduce storage costs and overhead with Quest's centralized image management. It supports numerous storage reduction technologies, including NetApp's FlexClone, Microsoft's Differencing Disks, and VMware's Linked Clones.

**Vendor-Agnostic Flexibility**

By providing VDI hypervisor choices (Microsoft, VMware, and Parallels), Quest enables you to easily test and migrate other technologies without the expense of ripping and replacing your current management solution.

**Robust Security**

Quest enables you to use two-factor authentication, data encryption, single sign-on, and Active Directory integration to streamline and strengthen the security of your desktop virtualization infrastructure. You will be able to easily delegate administrative control while remaining compliant with security guidelines, allowing the infrastructure owners to control who and what administrators have the right to manage.

**A Powerful User Experience**

To deliver excellent performance over both local and wide-area network connections, Quest allows users to access their virtual desktops from any place, at any time, using a variety of display protocols, operating systems, and access devices.
Conclusion

Microsoft Windows-based infrastructures are the foundation of many IT organizations, but managing these systems using only native tools can be difficult and time-consuming. Quest Software is the only trusted vendor that provides a full spectrum of Windows management solutions for physical and virtual infrastructures. Our solutions reduce the risk, cost and complexity of managing both Windows and non-Windows systems. Quest solutions help IT organizations:

- Respond to problems quickly, speeding time to resolution and minimizing the impact on already drained resources.
- Eliminate complexity and doing more with the resources they have.
- Be more productive and efficient doing everyday tasks so they can spend more time on higher-value projects and less time worrying about managing the platforms.
About Quest Software, Inc.

Now more than ever, organizations need to work smart and improve efficiency. Quest Software creates and supports smart systems management products—helping our customers solve everyday IT challenges faster and easier. Visit www.quest.com for more information.

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Quest Support is available to customers who have a trial version of a Quest product or who have purchased a commercial version and have a valid maintenance contract.


SupportLink gives users of Quest Software products the ability to:

• Search Quest’s online Knowledgebase
• Download the latest releases, documentation, and patches for Quest products
• Log support cases
• Manage existing support cases

View the Global Support Guide for a detailed explanation of support programs, online services, contact information, and policies and procedures.