



Country: United States

Employees: 3,500

Industry: Government

Website: www.howardcountymd.gov

Today, government agencies, just like businesses, run on IT. Systems, applications and data simply have to be reliable and available. It's bad enough if some fishing license applications or building permit records go missing, but what happens if a 911 operator gets locked out of the 911 service application, or a misconfigured setting takes down a critical database that firefighters or police rely on? If you're the IT pro responsible for those systems, you never want to find out. That's why the IT team in Howard County, Maryland, depends on solutions from Quest for accurate account provisioning, Group Policy administration, change auditing, disaster recovery, and more.

### About this case study

Howard County, Maryland, provides a wide range of services to its 300,000 residents, from public safety to permits and licenses to health services to corrections facilities. Behind the scenes, a small IT team must ensure that systems and data are available and accessible to exactly the right people. With native tools, that was proving to be a serious challenge.

#### **Solution**

The county now relies on a set of Microsoft platform management solutions from Quest, which enable accurate and efficient account provisioning, Group Policy administration, change auditing, disaster recovery, and more — while saving the IT team hours of work.

#### **Benefits**

- Improves security by eliminating the need to grant domain admin rights to departmental IT teams
- Ensures high service availability with accurate user provisioning and deprovisioning in just one or two clicks
- Protects security and system availability by making proper Group Policy management easy
- Speeds troubleshooting and compliance reporting with automated change auditing
- Ensures business continuity with reliable backup and recovery, and disaster recovery

### Solutions at a glance

Microsoft platform management

If an account is accidentally deprovisioned, we can use Active Roles to bring it back — with all the same permissions — in just two clicks, one to locate the account and one to re-provision it. This one tool saves us hours of work.

Terrance Diggs, Service Desk Manager, Howard County

Howard County is one of the most affluent, advanced and educated communities in the United States. Located in the heart of central Maryland between Baltimore and Washington, the county enjoys a thriving economy, due in part to its close proximity to a wide range of federal agencies, universities, and technology, defense and healthcare organizations.

Behind the scenes, a small team in the Department of Technology and Communication Services (DTCS) enables the county to deliver a wide range of services to its 300,000 residents by supporting a dozen different departments. Of course, the county's emergency services and first responders need access to IT applications and data 24/7/365 in order to protect lives and ensure public safety. But IT is equally essential to the county's other departments, which need to be able to issue permits and licenses, manage community planning and grants, coordinate vaccination schedules and monitor food-borne illnesses, run corrections facilities, and much more, day in and day out.

Therefore, ensuring the reliability and availability of data and applications is a top priority for the DTCS team. They have built a large and powerful IT ecosystem, with 3,500 user accounts, nearly 2,800 endpoints, and some 400 servers hosting a variety of applications and SQL Server databases. The Active Directory (AD) environment is divided into two forests, one devoted to the critical 911 services and another shared by the other departments, with a two-way

trust between them. In addition to this on-premises infrastructure, the county has moved its Exchange mailboxes to Office 365 and is in the process of establishing a disaster recovery procedure in the cloud as well.

With Quest® solutions, the small IT team is able to efficiently manage and secure this complex hybrid environment — something that was nearly impossible with the native tools they used before.

# Enabling admins to do their jobs without giving them excessive privileges

Having multiple large departments usually means having multiple siloed IT teams — and those teams have a legitimate need for some level of control over their systems and data. But when the DTCS pros at Howard County were armed only with native tools, providing appropriate rights without sacrificing security was extremely difficult. "We have siloed IT shops within departments such as public safety, and IT staff in the health department are actually state employees who reside on our domain," explains John Eckard, server team manager for Howard County. "We needed to give these other departments the tools they need to do specific work, such as group manipulation and organization within Active Directory, yet maintain a secure AD environment."

Active Roles fills the bill exactly, delivering easy, role-based access control and granular delegation of admin privileges. "Before, in order for us to enable IT departments outside of DTCS to manage their OUs, the managers needed to be domain admins — which gave them more power than they needed," notes Terrance Diggs, service desk manager for Howard County. "Active Roles has enabled us to give them the rights they need to do their jobs without giving them the keys to the city. That way, we prevent any mistakes or other issues in areas outside of what we want them to be able to manage. Plus, with the product's templates and policies, we can enforce certain practices to ensure a consistent look and feel in AD."



# Easy, accurate provisioning and deprovisioning in just one or two clicks

Active Roles also enables the team to quickly and reliably provision, deprovision or re-provision user accounts, saving them hours of work over native tools. "Active Roles has a very robust workflow procedure for account provisioning," Eckard notes. "It enables us to easily check all the boxes when an account is created, including who has to approve it and what has to be done. Because we're focused on customer service, having those workflows in place is essential. It has exceeded our expectations — and I know there's still a lot more to the tool that we haven't even explored yet."

Changing or removing accounts is just as easy as creating them. "With Active Roles, my service desk team can deprovision a user account and be assured that all the services are being removed from that particular account," explains Diggs. "Similarly, if an account is accidentally deprovisioned, we can use Active Roles to bring it back — with all the same permissions — in just two clicks, one to locate the account and one to re-provision it. This one tool saves us hours of work."

Moreover, the tool is so easy to use that even lessexperienced IT admins can easily use it as well. "Departments like public safety need IT services 24/7/365. But some of the techs who are on call are network or telephone specialists, so they aren't too familiar with using AD," adds Diggs. "Now they don't have struggle with the administrative tools of ADUC and other native tools. We just give them the web link to Active Roles, and they can do a quick search and do what they need to do, such as resetting a password. In fact, when an account is locked down, the little icon turns red, so it's easy to find, say, the Smith who's locked out from among all the users named Smith. That really speeds things up a lot, especially if it's 3 o'clock in the morning. It's really a great product."

When something goes wrong, managers always ask IT for a report on what changed, and they need it now. Native tools didn't enable us to respond to those requests quickly, especially since we are a limited IT staff. But with Change Auditor, we can start pulling up reports right away. That's really critical for us.

John Eckard, Server Team Manager, Howard County

# Saving time and preventing errors with automated group policy management

Howard County also knows the importance of proper Group Policy management, and found that native tools and manual processes were putting security and system availability at risk. Group Policy objects (GPOs) regulate everything, from critical business processes and security settings to individual workstations and printers, so they need to be accurate and consistent. "We were having a lot of pain points with GPOs being created by different teams," says Eckard. "They were done with good intentions, but caused a lot of problems." And since GPOs are rolled out across hundreds of machines, correcting a single mistake was a very difficult and time-consuming endeavor with only native tools at the team's disposal.

Now the team relies on Quest GPOADmin®. An admin can quickly roll back an incorrect or unwanted change to a GPO, or simply revert to a known good version. Plus, GPOADmin includes prepackaged PowerShell scripts to automate administrative tasks, saving time and reducing the risk of errors. Approval-based workflows with optional email notifications ensure that modifications adhere to change management best practices, and GPOs can be tested before they are rolled out to production. Administrators can even prevent critical GPO settings from being modified.



# Ensuring compliance with comprehensive, real-time change auditing

Comprehensive, real-time change auditing is critical to both security and regulatory compliance, and the Howard County IT team gets both with one Quest solution, Change Auditor. "With Change Auditor, we can easily track all changes in our environment," says Rose Davis, server team engineer for Howard County. "Before, we would spend hours trying to track down the root cause of an issue, such as someone getting locked out or adding themselves as an admin."

Change reports also save time when management comes knocking. "When something goes wrong, managers always ask IT for a report on what changed, and they need it now," Eckard adds. "Native tools didn't enable us to respond to those requests quickly, especially since we are a limited IT staff. But with Change Auditor, we can start pulling up reports right away. That's really critical for us."

The solution is equally valuable when auditors come around. "Change Auditor is the biggest hitter on compliance for us," says Eckard. "Our police department has to meet Criminal Justice Information Systems (CJIS) requirements, and now we can pull up whatever information they need to meet those requirements."

Quest professional services and technical support have been fantastic. They helped us configure the tools the way we needed them and walked us through a lot of the workflows. They also go out of their way to show us all the things that we can do with the tool, so we get the most value from it."

Rose Davis, Server Team Engineer, Howard County

## **Planning for disaster recovery**

Howard County is committed to also ensuring reliable backup and recovery, as well as disaster recovery, and they rely on Quest Recovery Manager for Active Directory. The solution enables IT to automate backups and quickly recover everything — from a single object to an entire forest — in the event of a major disaster or corruption of Active Directory. The team particularly values the online granular restore capabilities, which offer far more functionality than native tools, including the restore of individual attributes, such as account settings and group membership, even when the object itself has not been deleted. Recovery Manager also simplifies compliance by creating a virtual lab to test disaster recovery plans and provides detailed reporting on the recovery effort.

## Reducing storage costs with Exchange mailbox assessment

The IT team at Howard County used Quest Unified Communications Analytics prior to migrating to Office 365 to help control on-premises storage costs. "We used the solution to create different storage groups of different sizes when we were hosting a lot of on-premises mailboxes," says Eckard. "It helped us determine how to break out users and create an environment where everyone's email operated smoothly."

Moving forward, the team is eager to explore the solution's other capabilities, including Office 365 user and mailbox reporting, and Skype for Business and Cisco usage, trends and chargeback insights.

# First-class support

Throughout their experience with all these Quest solutions, Howard County has been able to count on Quest for the support they need. "Quest professional services and technical support have been fantastic," reports Davis. "They helped us configure the tools the way we needed them and walked us through a lot of the workflows. They also go out of their way to show us all the things that we can do with the tool, so we get the most value from it. The expandability



is just fantastic — you purchase a software product, and it just continues to get better and better and better through updates and enhancements."

Having top-notch support enables the county's IT small team to focus on their own priorities. "We recognize that our focus is operations and maintenance and keeping things moving — meeting our customers' needs," explains Eckard. "When it comes to an installation, it really benefits us to bring in professional services to get it installed and configured correctly the first time. I don't find that same level of support all the time with other vendors."

### **PRODUCTS AND SERVICES**

#### Software

- Active Roles
- Change Auditor for Active Directory
- Change Auditor for Exchange
- Change Auditor for Logon Activity
- GPOADmin
- Unified Communications Analytics

### **About Quest**

Quest creates software solutions that make the benefits of new technology real in an increasingly complex IT landscape. From database and systems management, to Active Directory and Office 365 management, and cyber security resilience, Quest helps customers solve their next IT challenge now. Quest Software. Where next meets now.

