

## SUCCESS STORY

# MIGRATING FROM NOVELL TO MICROSOFT ACTIVE DIRECTORY Future Proofs Gaston County Schools Network



## What Data Networks did for Gaston County Public Schools

- Performed an Active Directory and network health assessment
- Developed a Novell to AD migration strategy and implementation plan
- Implemented and integrated district level Active Directory
- Migrated Hyper-V servers to VMware ESXi cluster
- Performed site level migration pilot (4 schools) and migration production (60 sites)
- Consolidated file servers to district data center
- Detailed validation and testing to ensure acceptable performance

## LOCATED IN THE PIEDMONT REGION OF CENTRAL NORTH

**CAROLINA**, Gaston County Schools is the 9th largest school district in the state. With 56 schools serving an enrollment of approximately 32,000 students, one of the schools district's goals is to provide each school with up-to-date technology to support teaching and learning to meet the unique needs of every student.

## The challenge

Gaston County Schools had already made the strategic decision to migrate from their Novell environment to Microsoft Active Directory, when they contacted Data Networks. But they still faced a number of challenges. Support ending for Windows XP created an urgency to have the Novell to AD migration completed quickly - prior to the planned upgrade from XP to Windows 7 - to prevent sacrificing end user productivity. They also needed to consolidate and centralize their Microsoft Server 2012 domain controllers, file servers, print servers, and DHCP in the central data center, all of which were currently being delivered locally. Most challenging, however, was the district IT staff's relative unfamiliarity with Microsoft technologies as most had been working primarily in Novell environments to this point.

## The solution

An AD environment (running on Hyper-V on an MS Server 2012 cluster) and 1-school pilot were created prior to Data Networks' engagement on the project. Data Networks performed a AD and general network health assessment and found the AD environment to be generally sound and in line with Microsoft best practices. However, it was determined that, in order to best scale out to the number of sites required for this project, the existing Hyper-V servers would need to be migrated to the VMware ESXi cluster and additional configurations would need to be performed.

The Data Networks recommended migration solution was broken down into phases, the implementation of which was coordinated with the XP to Win 7 upgrade. Data Networks recommended

centralizing the MS Controller (authentication), print services, and DHCP services as part of the site level migration phase, leaving the file servers and access to file shares local until all sites had been migrated and all eligible workstations upgraded from XP to Win 7. The consolidation of file servers to the GCS district data center would be done as the final phase. Major phases included:

- Implementation plan development building upon GCS's existing architecture; develop an overall Novell to AD migration strategy
- District level implementation and integration (based on AD assessment results and including the Hyper-V to ESXi migration)
- Site level migration pilots (4 schools); validation and testing
- Site level migration production (remaining 60 sites) using pilots as a benchmark
- District level file server/file share centralization
- Overall validation and testing
- Knowledge transfer
- Documentation

A detailed validation and testing check was developed as part of the migration plan. As each site migration was completed, a sample set of workstations was logged into, applications launched, file shares accessed, and documents printed to test the basic services to be utilized by end users. With each site migration, Data Networks monitored WAN links as well as CPU, RAM, Network Traffic, Disk reads, Disk Writes and the MS domain controllers, allowing Infrastructure changes to be recommended and implemented to ensure acceptable performance.

## Mission accomplished

Data Networks' planning and implementation experience allowed the AD migration to be coordinated with the XP to Windows 7 upgrade preventing any interruption to end user productivity. Throughout the project Data Networks had school district staff members shadow the lead engineers as the migrations were performed. By accomplishing knowledge transfer as the project progressed, Data Networks ensured Gaston County Schools' staff has a solid understanding of the infrastructure and the ability to troubleshoot and make enhancements in the future. This large migration project was accomplished within specified time and budget restrictions and put GCS on a robust, supported platform that will grow along with their needs.

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*"We couldn't be happier with the results," says Cindee Matson, Assistant Superintendent at GCS. "There were a lot of moving parts to this project, but Data Networks made it happen and our new environment is performing well."*

## About Data Networks

Data Networks provides effective technology-based solutions to meet your unique needs. Our solutions are specifically developed to help you drive productivity and manage change.

### INNOVATIVE TECHNOLOGY

By partnering at the highest levels with the industry's most respected manufacturers, Data Networks can deliver the right products for your environment with the most aggressive pricing possible. Our strong vendor relationships also bring technical training opportunities, expedited help desk resources, and professional service liaisons for consulting and project engagements.

### INSPIRED ENGINEERING

Our goal is to be your trusted technology advisor. So we staff highly-qualified engineers who bring years of experience and the most advanced technical certifications to every engagement. We assign them a single area of technical focus, a unique approach that allows them to continually update their skills and expand their specialized technical knowledge. And we arm them with documented best practices developed over more than 30 years of public-sector service.

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