

## SUCCESS STORY

# MODERNIZING TECHNOLOGY ON A VAST SCALE for Montgomery County Public Schools



## What Data Networks Did for Montgomery County Schools

Rapidly deployed 6,500 computers and printers over summer break 2013, including:

- Ordering, receiving and delivery logistics to ensure just-in-time availability of devices
- Asset tagging, inventory tracking and inventory control
- Staging, configuration and imaging of devices with eight separate images
- Setup, integration and quality control testing of devices at 45 separate schools
- Green waste removal
- End-to-end project planning and management
- "Go Live" Support to ensure day one readiness

## Abstract

Data Networks delivered a technology modernization project for Maryland's largest school district, including MDM solutions for 6,500 devices.

## The challenge

Montgomery County Public Schools (MCPS) is Maryland's largest school district. Located minutes from Washington, DC, MCPS serves over 150,000 students across more than 200 schools. With so many students to educate and staff to support, keeping its computer equipment current is a constant concern.

MCPS' Technology Modernization Program (TechMod) targets roughly 20% of its end user computing technology assets for replacement each year. Large scale modernization in any school setting must be started AND completed over summer recess. Making this happen for one of the largest school districts in the country is particularly daunting. It is not only an exercise in the physical movement of equipment. It also involves a long list of other tasks that tend to be afterthoughts for many organizations - testing, inventory management, waste disposal, asset recovery. In short, technology modernization on this scale requires precise planning, execution, and attention to every detail.

## The solution: Precise, repeatable processes

MCPS has been working with Data Networks for almost 15 years on its TechMod program. The consistent processes Data Networks uses with MCPS begin well before summer break. Data Networks assigns a dedicated Project Manager who is responsible for all aspects of the engagement and communicates all TechMod planning, direction, structure and controls to ensure strict adherence to business requirements and specs. The Project Manager's most important tasks are to prepare a project plan that documents the schedule, resources and staffing, and to act as a central point-of-contact and problem resolution.

Data Networks uses a proven, flexible staffing approach to gear up for the project, carefully screening and hiring up to 80 temporary staff members (including many veteran resources) and gathering them for orientation prior to kickoff. By conducting comprehensive orientation sessions, Data Networks ensures that its site teams are fully-prepped and qualified to begin working with MCPS leadership and staff from day one.

## Equipment Staging

As the summer begins, Data Networks helps MCPS manage the receiving and inventory control associated with multiple, large Dell computer

shipments. Data Networks' status as a Premier Partner and one of Dell's largest education resellers allows us to pre-arrange the shipment and delivery of all new equipment to meet any customer's specific requirements.

For MCPS, equipment was staged, configured, and deployed from the school system's own facilities, putting the equipment close to the final installation sites and simplifying the engagement of MCPS staff where required.

For similar customer engagements we often bring our Maryland-based Staging and Configuration Center (SCC) into play. With access to 100,000 sq ft of storage, the SCC is purpose-built for storing and preparing computer hardware for installation. Fully-configurable pods are equipped with secure, high-speed Internet access and the latest equipment for PC imaging and testing, with particular attention paid to facility layout, security, ergonomics and automation of tasks.

Shipments of computers and peripherals can be scheduled to arrive at the SCC based on the timeline for school site installations. Because the facility is a single point of delivery for the project, Data Networks team members can perform complete pre-installation configuration on each piece of equipment from a controlled, central location.

## Configuration

To deploy specified operating systems and software to each computer, Data Networks uses hard drive duplicators to replicate the image of a "master" PC provided by MCPS. Each duplicator can image-replicate up to 16 PCs at a time in approximately 10 minutes, a significant accomplishment given that MCPS' master image is more than 60GB in size.

The duplicators are first used to replicate master images to three workstations that are used as test platforms connected to a temporary network. These test workstations are then configured by Data Networks and provided to MCPS team members for evaluation, verifying accurate image replication including disk partitioning and software installation. Once the "master" images and their replication have been validated, the duplicators are used to image individual school sites' computers.

## Deployment

Prior to installation at each school, Data Networks helps MCPS arrange the equipment paperwork including a site map (which shows exactly where each workstation is to be installed) and asset tagging that needs to be applied to each device indicating its machine name and IP address.

Each school also has an on-site staging area dedicated to pre-installation tasks. The school's equipment arrives

palletized at its staging area, all equipment including peripherals is counted and these counts are compared to the planned inventory for the site.

As the workstations are installed and asset tagged, onsite logistics frequently pose a significant challenge. Devices or peripherals sometimes need to have their room assignments changed. Equipment needs to be returned to the manufacturer and replaced. While events like these would normally delay a project's go-live schedule, Data Networks' experience keeps the project on track.

Once all workstations are connected, Data Networks leads a checklist-centered testing effort at the school to ensure each PC and its peripheral components function in accordance with Dell and MCPS specifications - from booting up to network connectivity to printing. A final "walk-through" on the last day of onsite activities confirms that there are no deviations.

## Go-live support

Just prior to the beginning of the new school year, school staff and teachers return to make final preparations. Data Networks simultaneously begins a final "go-live support" phase during which team leads are onsite observing and working with MCPS administrative staff and teachers to confirm all installed equipment performs daily in-school functions as expected. Data Networks resolves any issues as they arise through the use of a "Deviation List" circulated among Data Networks and MCPS team members regularly through go-live support.

MCPS' TechMod requires the experience, precision and responsiveness that Data Networks delivers to every deployment engagement, year after year. On-time performance is the only acceptable outcome.

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*"It takes real implementation process experts like Data Networks to meet this annual challenge," says Rich McCoy, End User Computing Manager for Data Networks. "We look forward to working with MCPS every summer!"*

## 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.

With our combination of innovative technology and inspired engineering, our goal is to become your trusted technology advisor.

We invite you to learn more at [datanetworks.com](http://datanetworks.com) or by calling 800-283-6387.