

### Customer Profile:



John H. Myers and Son provides construction services for contractors, homeowners and commercial businesses. Their staff contractors and designers help with blue prints, architectural plans and other construction-oriented consulting. The company maintains a document management system for scanning, storing and routing design images. Their network also includes a point of sale (POS) system for ordering and fulfillment.

The company's network supports approximately 120 users in five locations across Pennsylvania. Two of their locations use VoIP phone systems because they are beyond the company's local calling area. This saves them toll charges. All data and connectivity comes through their York, Pennsylvania headquarters. This includes data traffic, Internet, and POS data that uses Windows terminal servers.

"The amount of speed on the new system is amazing. Connectivity is much better. I can ping from my remote office to headquarters in about half the time as I used to, even though it's the exact same data lines."

- Jacob Evans, IT Administrator,  
John H. Myers and Son

## Construction Services Firm Solves Connectivity and Large File Printing Issues with D-Link Layer 2 and Layer 3 Switches

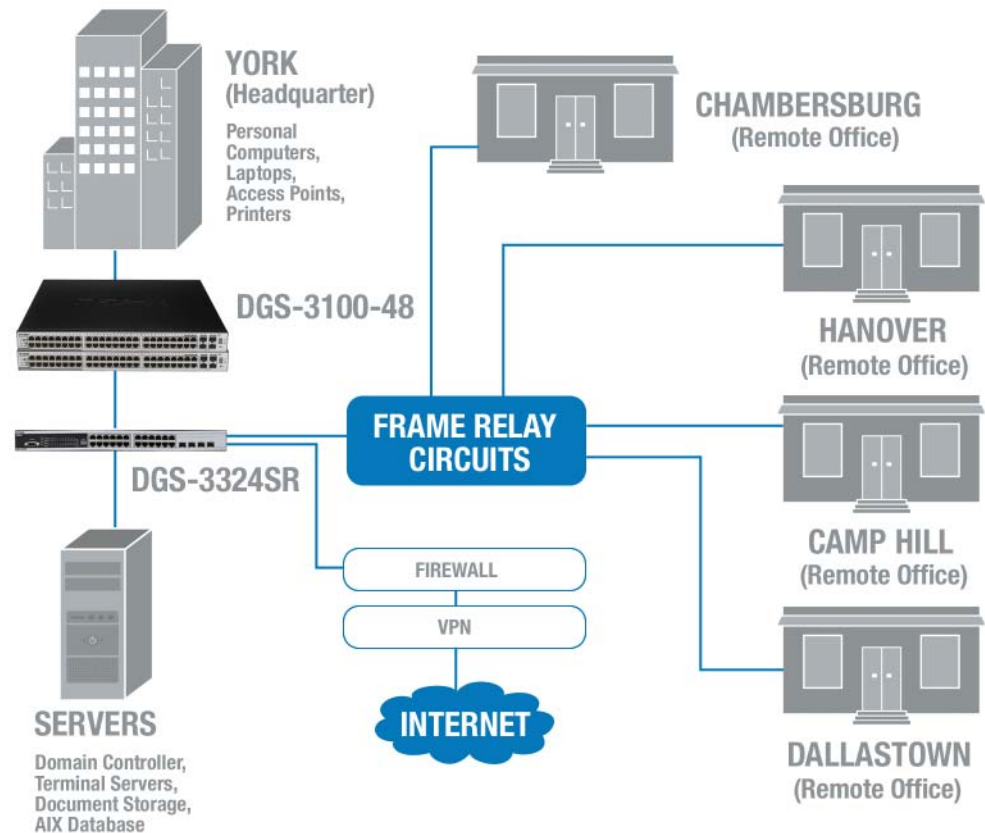
### The Challenge

The old network at John H. Myers and Son was causing trouble for suppliers, employees and, more importantly, customers. Their low-end routers could not keep up with growing business demands. Blueprints and design images frequently scanned at 50+MB. "It's not your standard point of sale traffic where you're just sending around ASCII data," said Jacob Evans, IT administrator at John H. Myers and Son.

Large print and file transfer jobs would get lost. Print queues would lock up at the most inopportune times. "Sometimes, if the job wouldn't go through and it got stuck, we'd have to reset the queue and reset the printer," said Evans.

Remote workers had trouble connecting to critical files, as well. "With the old routers, remote users couldn't communicate with another remote location without actually connecting to their desktop at work in the main office," said Evans.

In addition, the company was looking for a better support relationship with their networking vendor. Their previous vendor didn't provide adequate feedback or support. They were ready for a change, as well as significant performance and efficiency improvements. They contacted Steven Young, President of Hi Tech York, a local D-Link reseller, who recommended a new design for them.



John Myers and Son used two DGS-3100-48 Layer 2 switches for connecting their computers, printers and other network devices in its headquarter in York, PA and they also created four trunk ports to the DGS-3324SR Layer 3 switch for all communication between the servers, terminal servers, their AIX (IBM Unix) system and users.



### DGS-3100

- 48 Managed 48-Port Gigabit  
Stackable Layer 2 Switch + 4 combo  
SFP + 20 Gig Stacking

- Enhanced Features Including ACLs, RADIUS Authentication, IP-MAC Binding, Guest VLANs, and Stacking Up to 6 Units
- Brings Advanced Enterprise Network Management Features to a Cost-Effective Level
- Support Standards-Based Management Protocols Including SNMP, RMON, Telnet, a Web-Based GUI, and SSH/SSL



DGS-3324SR - 24-Port 10/100/1000  
Switch + 4 combo SFP,  
10Gig Stacking

- Integrated Dual 10Gig Stacking Ports
- Recoverable Ring or Star Stacking Architecture
- Stacks up to 12 Units per Stack
- Advanced Standards Based Enterprise Features

### The Solution

John H. Myers and Son ordered several managed switches from HI Tech York, including two stackable D-Link DGS-3100-48's and one DGS-3324SR. The implementation took a day. They used the two DGS-3100 Layer 2 switches for connecting their computers, printers and other network devices in York. This allowed them to create a 10GB backplane for switch communications. They created four trunk ports to the DGS-3324SR Layer 3 switch for all communication between the servers, terminal servers, their AIX (IBM Unix) system and users. Then they added static routes for the remote locations. "Now the printers print immediately, and I can shape the network to perfection," said Evans. "Thanks to the Layer 3 switch we can communicate between each remote yard. The whole installation went very smoothly."

"The amount of speed on the new system is amazing," continued Evans. "Connectivity is much better. I can ping from my remote office to headquarters in about half the time as I used to, even though it's the exact same data lines."

With the VoIP phones, Evans was now able to make a phone call and connect from one remote location to another remote location without having to make a pit stop in York. He also configured ports on the switches to manage specific amounts of traffic on specific IP addresses. This helps them restrict Internet traffic at the remote user locations.

The whole network is faster and more reliable. "The print jobs get pretty big, so the sooner it gets to the printer, the better," said Evans. "We've got customers at the counter waiting for documents. It's essential to hit print and get it in their hands right away."

"The solution is also fairly inexpensive for a company our size," explained Evans. "For a reasonable price, we get stackable Layer 2 switches that can be managed from one IP address. It has probably already paid for itself."



*John H. Myers and Son completed the installation of the D-Link managed switches smoothly and plans to add more 24-port managed switches to their remote locations.*

To improve connectivity even further, the company plans to add more 24-port switches at their remote locations.