
Challenge: After being in business for over ten years and amassing an impressive client list that included some notable clientele such as Airborne Express and Costco, ImageSource’s success had started to take a toll on its own infrastructure. With a flourishing document, content, and image processing business, the amount of data in the form of scanned documents and images continued to grow exponentially, taxing the company’s Netgear-based information technology infrastructure.

The range of services offered by ImageSource grew over time. As a result, more servers were added, scanning capacity was increased to over 1100 pages per minute, printing activity surged, and storage requirements ballooned to over 300 Gigabytes. Traffic on the network infrastructure was increasing with every right move that ImageSource took to expand and grow their business. Unfortunately, ImageSource also experienced a few other increases. Five Megabyte file transfer times increased to over twelve minutes and data backups over the network were taking upwards of eighteen hours to complete.

ImageSource knew that in order to continue on their growth path, they would need to overhaul their gridlocked internal networking infrastructure. The ImageSource team set out to find a new reliable, high performance switching solution to power their demanding data-intensive imaging applications. Increasing the bandwidth of the network was an essential requirement, so features such as high-density gigabit support, link aggregation, and VLAN segregation were key components to a new solution. Another important feature for ImageSource was reliable layer 3 switching. Their installed layer 2 switches were choking, and upgrading the infrastructure to support routing offered them both better performance and more design flexibility. With these requirements in mind, the ImageSource team set out to find their ideal switching solution and spoke to the usual set of vendors during their product evaluation and selection.

Solution: During the product consideration phase, ImageSource was introduced to the D-Link xStackTM line of business class switches. Jon Sutherland, Senior Systems Engineer on the project, knew of D-Link for their reputation of performance and reliability in their Consumer and SOHO products, which he had some previous experience with.

“We looked at competing products and could have selected those put out by another industry leader, but we just couldn’t justify the inflated price tags against what D-Link was offering us,” commented Sutherland. “For our needs, the D-Link switches matched up feature to feature and offered us a much better overall value. The D-Link offer was just too compelling,” added Sutherland.

After product evaluations, ImageSource decided to deploy D-Link xStack DXS-3350SR multilayer stackable switches for its core backbone at its Olympia headquarters. The D-Link DXS-3350SR switches with their high-density gigabit Ethernet support easily handled the direct attachment of over 15 servers each with dual 1Gbps interfaces in them. The link aggregation function of the switch was used to combine the bandwidth of the multiple links to provide the high-end servers as much network bandwidth as possible. The combo ports on the stacked D-Link DXS-3350SR switches were deployed to interconnect multiple D-Link DES-3350SR 10/100Mbits distribution switches to complete the site infrastructure. ImageSource also installed a D-Link DGS-3324SR 24-port gigabit switch in its Seattle branch office.

The complete installation of the new network infrastructure took about a day and went well with no unexpected issues. “I’m used to the Cisco command line interface, so the D-Link CLI was fairly easy to pick up. The web interface required no learning curve at all. It was very straightforward and simple to use. It sped the installation along as we were easily and quickly able to configure the switches for the features that we wanted to deploy,” commented Sutherland.

Conclusion: ImageSource successfully deployed its new network infrastructure with little to no outside support needed. Overall, Sutherland and team were very pleased by the whole installation experience and were anxious to see what the new infrastructure was capable of. Their new D-Link xStack layer 3 gigabit backbone did not let them down. The same five Megabyte file transfer times were improved.
by over 75% and had been reduced from twelve minutes down to a swift two minutes and forty seconds.

The most impressive and most business impacting results that the new switching infrastructure provided was the reduction in backup times. With their previous network infrastructure, the time to backup their 300+ Gigabytes of data was about eighteen hours. The first backup on the new D-Link network took less than nine hours. “We are very pleased to see the significant decreases in file transfer times and our system backup times have been literally cut in half after installing our new D-Link xStack infrastructure. Our critical infrastructure needs have been solved by D-Link,” commented Shadrach White, Chief Technology Officer with ImageSource. With a little further tuning and some additional changes to some storage devices, ImageSource now has their backup times down to six hours, or one third of what it was prior to installing their D-Link infrastructure.

Since the initial installation, the new D-Link network has continued to operate without a hitch and has delivered the performance and reliability that has allowed ImageSource to significantly accelerate their business.

Image Source Networking Diagram