

Network Performance and Security Efforts Take Off at Pangborn Memorial Airport, Thanks to D-Link Solutions

Excellent price, performance and value prove to be the right combination for this regional airport in North Central Washington.

Background:

Jointly owned and operated by the Ports of Chelan and Douglas Counties, Pangborn Memorial Airport plays a vital role in connecting the North Central Washington region to the national and international air transport systems. The airport's daily scheduled service to Seattle-Tacoma International Airport provides the region with one-stop connecting service to 20 major international and 75 domestic destinations. A 2001 study commissioned by the Washington Department of Transportation found that Pangborn Memorial Airport directly and indirectly supports 632 jobs and contributes over \$47 million annually to the local economy.

The Vision: Upgrade network infrastructure to accommodate growth and support new IP-based technologies

For Pangborn Memorial Airport, the reasons for a network refresh were many. Airport growth was prompting the addition of new technologies—such as VoIP phones, an IP-based TV system, a new security access control system, a parking payment kiosk and an IP surveillance system—all of which required a stronger and more robust network to handle the increased traffic.

The airport's previous Cisco network gear was severely limited by 100 Mbps switching, which made network performance slow and unreliable. In order to carry the airport's new IP surveillance data, VoIP and IP-based TV traffic, its network needed a Gigabit backbone, Power over Ethernet functionality and the ability to prioritize data traffic across VLANs.

While these changes were planned to take place gradually over the course of two budget cycles,

other factors prompted the need for a quicker timetable.

On April 30, 2015, a community partnership between the Douglas County Sheriff's Office, Douglas County Fire District, Pangborn Memorial Airport, RiverCom Dispatch and Ballard/Lifeline Ambulance had planned to conduct a full-scale mock "Active Shooter" training and functional emergency exercise at the Pangborn Memorial Airport. To capture the important footage from this exercise, Pangborn Memorial Airport moved the installation of IP surveillance cameras to the top of the priority list.

The Solution: Network cameras for IP surveillance, plus managed Layer 2 switches that provide secure connections, faster speed, enhanced performance and improved manageability

With a pending network overhaul and the fast-approaching emergency exercise, Pangborn Memorial Airport was driven to action. It needed full network performance and comprehensive IP surveillance coverage quickly, all within a very tight budget. Since the Cisco upgrade was too expensive, the airport began to explore a more affordable solution.

For assistance, Pangborn turned to its technology reseller, Firefly Technology, which also serves as the outsourced IT department for the airport, as well as the Ports of Chelan and Douglas Counties. Because Firefly was already familiar with D-Link's business-class switching and networking gear, recommending D-Link was an easy choice.

"Although the Cisco gear had all the capabilities Pangborn needed, the cost was significantly

Key D-Link Purchase Drivers

Performance

An mix of xStack® L2 managed switches and SmartPro Gigabit switches from D-Link help Pangborn Memorial Airport achieve a high level of network speed, security and uptime.

Surveillance

D-Link 7100 Cloud cameras offers remote viewing from mobile devices, trigger recording and email alerts.

Value

D-Link's affordable pricing, lifetime warranty and Next Business Day advanced replacement help Pangborn Memorial Airport ensure reliability and optimize budget dollars.

Innovation

D-Link's DGS-3120 Series switches support physical stacking, multicast and enhanced security, making them an ideal Gigabit access layer solution.

case study

higher, especially when you consider all the ongoing SMARTnet contracts to keep the firmware warranties and support active," said Denton Meier, CEO and Chairman of Firefly. "With D-Link, all of the support and warranties are included for life. It just came down to price-per-performance. Pangborn realized they could get a lot more for their money—and get everything installed more quickly—with D-Link."

"In addition, the Port of Chelan County had already been using D-Link networking equipment for a number of years and was more than satisfied with its performance," he added. "They felt confident D-Link products could deliver on their promise."

With that decision made, Pangborn Memorial Airport began purchasing and installing D-Link networking equipment in stages as budget dollars became available. During this time, Firefly was able to upgrade various parts of the airport's network infrastructure, linking the main terminal to the maintenance facility, the fire station and the general aviation terminal (located about a half-mile away).

"The airport purchased half of the gear last year and the other half this year," added Meier. "We were all set to deploy the final portions of the solution this year, but the installation got ramped up to a very quick deployment due to the live shooter exercise."

To get the job done, Firefly installed D-Link managed switches at the network core and D-Link light-managed (Smart) switches on the periphery.

"The Smart switches are great because they can do all the VLAN functionality needed for the network edge, while the midrange managed switches had the right feature set for the heavy lifting at the core," said Meier.

With less than two weeks' notice, Firefly also installed a variety of D-Link IP cameras—two to upgrade those supervising the payment kiosk in the parking area and another 11 cameras to monitor other areas of the airport. All footage is currently running through Video Insights video management software.

"Once the maintenance team finished the wiring, the whole implementation only took a couple days," said Meier. "We installed all the cameras, configured them, integrated them with PoE and the NVR software—and finished just in time. I did the final test the night before the shooter exercise. There was a little pressure, but everything worked out great."

D-Link in Action: High-performance switches and IP surveillance solutions set the stage for better security and faster, more robust network performance

Today, Pangborn Memorial Airport is very satisfied with its D-Link equipment—and its improved network performance.

"The setup was very easy, and now Pangborn enjoys way more functionality and faster overall networking speed and support for their new services," said Meier. "Furthermore, with proactive alerts, our company can do a lot of the airport's network management remotely, which saves us time and helps keep the airport's costs low."

In addition, the IP surveillance is doing an excellent job of monitoring multiple locations around the airport and increasing overall security. Recently, the cameras captured high-quality footage of an after-hours vandalism incident in progress—complete with a perfect face shot of the vandal. The footage was turned over to the authorities for follow-up.

In addition, the active shooter exercise proved extremely helpful. Footage collected from the IP cameras was turned over to the North Central Washington Skill Center, where video production students created a recap documentary of the event to be used for future training of police departments, sheriff's offices, fire departments and other emergency responders in the community.

In the next 12 months, Pangborn Memorial Airport plans to expand its IP surveillance network with at least three more D-Link cameras. One will be a high-speed PTZ (pan-tilt-zoom) outdoor dome camera that can quickly zoom onto the runway or other areas to

Pangborn Memorial Airport's complete product integration includes:

Quantity	Part Number	Description
2	DCS-3716	Full HD WDR PoE Day/Night Fixed Network Camera
9	DCS-7010L	HD Mini Bullet Outdoor IP Camera
2	DGS-3120	xStack Gigabit L2 Stackable Managed Switches
1	DGS-1210-28P	28-port Gigabit Web Smart Switch
1	DGS-3100-48	xStack L2+ Managed Gigabit Switch
2	DGS-3200-10	xStack 10-port Gigabit L2 Managed Switches
1	DGS-1500-28P	28-port Gigabit Smart Pro Switch

Call or visit the web address below for more information on the complete line of business products.

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