

Customer Profile:

Reason Computer's customer is an aviation company and hangar operator based at Minnesota's Minneapolis-St. Paul airport. They were recently acquired by a larger, national operator. They needed IP surveillance cameras to monitor operations, archive security video, and maintain evidence for insurance claims. D-Link's solution helped them implement a simple, reliable solution at very attractive pricing, while delivering considerable ROI for the customer.

"The bottom line is that the D-Link IP cameras work very well. The system is IP based. It's easy to manage. You just point and click."

- Bob Dreis, Account Manager, Reason Computer, Inc.



DCS-3220 10/100TX Fast Ethernet
2-Way Audio Internet Camera

- Monitor Your Home or Office Over the Internet
- Listen and Talk with 2-Way Audio
- 4x Digital Zoom for Close-up Viewing
- Built-in Motion Detection with E-mail Notification

Minneapolis Airport Hangar Operator Reduces Insurance Claims with D-Link IP Surveillance Solution

D-Link VAR Helps Aviation Company Reduce Costs and Improve Operations

The Challenge

Storing airplanes overnight is serious business. If a \$30 million plane sustains damage while stored in an airport hangar, the costs associated with insurance claims can be significant. "Body, engine, or component damage on an airplane is 20 times or more expensive than on a car," explained Bob Dreis, account manager at Reason Computer Inc., a D-Link VAR that specializes in networking and IP surveillance systems. "A little scratch on a plane can cost big money. I saw a seemingly insignificant damaged shieling that the replacement cost was \$30,000."

In order to keep an eye on events within the hangars, activities around the hangars, and employees that handle customer aircraft, Reason's client needed a flexible IP surveillance system. The right system would allow them to record activities on their property; archive videos for easy, rapid retrieval; share video across secure IP networks; and establish clarity and certainty when liability comes into question. "With the right surveillance system in place, the ROI for cameras can be quick when you prove that the damage didn't occur in your hangars," said Dreis. They also wanted a system that would allow them to remotely view hangar space in order to manage their facility at a glance – scheduling arrivals and departures, and adjusting to changes.



D-Link's IP surveillance camera system monitors aviation hangar operations, archives security video, and maintains evidence for insurance claims.



Founded in 1986 and headquartered in Burnsville, Minnesota, Reason Computer Inc. is a leading provider of fully customizable IT solutions.

Analog cameras were already in use in one of the hangars, but they were not performing correctly. Image quality was sub-par, the camera system was not stable, and the placements did not provide adequate coverage for the areas they needed to view. Additionally, reviewing playback of the video system was time consuming, since the client had to view every minute recorded. "With the analog cams, they weren't getting the images they needed, so it wasn't protecting them from potential insurance claims," said Dreis. Completely new systems would need to be installed at their other hangars.

Reason's client wanted to eliminate their analog equipment and replace it with digital equipment that could be accessed by multiple people within their organization, including quality managers, upper management and line personnel. Ease of installation and operation were key needs. They also needed a flexible system that would allow them to manage user access and policies internally, without IT assistance.

The Solution

Reason Computer, Inc. recommended D-Link equipment for the installation. They initially deployed several D-Link DCS-3220 10/100TX Fast Ethernet 2-Way Audio Internet Cameras in one of the hangars as a trial. The cameras were tested for image quality. They tested the entire system – including the network and storage system – for reliability and real-life recording scenarios. The client required that two weeks of motion video be stored on disk for easy retrieval. Since airplanes can only be damaged when there are people around them, they set the cameras to record during motion events.

Business Class Surveillance



DCS-3420 Wireless Day & Night Internet Camera

- Day and Night Audio/Video Monitoring
- Supports Optional Auto Iris Lens- Built-in 0.5 Lux Sensor for Low-Light Conditions
- Aluminum Casing for Optimal Heat Dissipation and Superior Camera Protection



DWL-P50 Power over Ethernet (PoE) Adapter

- Deliver Power up to 328 Feet (100m) Away
- 802.3af Compliant Power over Ethernet
- 4x Digital Zoom for Close-up Viewing



DCS-60 Internet Camera Outdoor Industrial Grade Enclosure

- Built-in Heater, Blower, and Power Supply
- IP44 Certified
- Aluminum Housing

The trial was a success, and Reason's customer rolled out a complete surveillance system with 20 DCS-3220 cameras and one DCS-3420. The DCS-3420 allowed them to replace the lens with a higher power lens to improve picture detail monitoring an access gate to their facility. They also installed D-Link DWL-P50 Power over Ethernet (PoE) Adapters and DCS-60 Outdoor Enclosures to run power over Ethernet lines and protect the equipment in harsh Minneapolis conditions. The internal switches use a DES-1526 PoE Switch to get power to access points without requiring an electrical outlet plug. The external cameras and enclosures are hard wired, because they need more power to operate the heaters in the enclosures. All the cameras are housed in D-Link enclosures for protection from the elements.

The customer uses the system to monitor plane movements, fueling operations, procedural activities, and employee performance. Quality managers ensure that employees follow expected protocol when dealing with customer airplanes, and operations managers make sure all tasks are performed to exacting standards.

Even the president of the company uses the system to keep on top of day-to-day activities while traveling. "The president was on a trip, and he looked online to see the cameras," explained Dreis. "He saw an employee not following an important safety procedure. He fired off an email to his manager to notify him of the procedural error. He demands a high level of safety procedures and customer service from his employees at all times."

A secure, terminal services Web link ensures that only credentialed employees with specific access privileges can access the system outside their local area network through the Internet. Terminal services access was also set-up to view the images to provide easy access for the application while not on the premises for the management staff.

Video records provide evidence of mistakes or proof that an aircraft was not damaged on the client's premises. As a result, their insurance claims costs have been reduced, and their insurance carrier not only reduced their premiums, but they dramatically reduced the deductible level for this lower premium. The insurance underwriter viewed the surveillance as an addition to the supervisory staff of the client. **Flexible Workflow, Easy to Learn Software, Excellent Support.**

The monitoring and management software that comes with the cameras enables Reason's customer to easily create access policies and work groups for specific camera groupings and unique monitoring responsibilities. "The customer is very adept with the software," said Dreis. "They quickly learned everything on their own."

The customer opted for the Reason/D-Link solution because of the high level of support offered. Both D-Link and Reason provide a high level of assistance and assurances for success. "We guaranteed that we'd take care of them, and we did," said Dreis. "And D-Link stuck with us the whole way."

"The bottom line is that the D-Link IP cameras work very well," concluded Dreis. "The system is IP based. It's easy to manage. You just point and click. That's one of the most compelling selling points."