



Giant Eagle Uses AirWave to Operate a Highly Distributed, Multi-Vendor Retail Wireless Network

Centrally Managed Wi-Fi Network Covers More Than 400 Remote Locations

Giant Eagle, ranked thirty-second on Forbes magazine's list of the largest private corporations, is one of the nation's largest food retailers and food distributors with approximately \$7.1 billion in annual sales. Founded in 1931, Giant Eagle has grown to be the number one supermarket retailer in the western Pennsylvania, Ohio, north central West Virginia and Maryland regions. Today Giant Eagle has over 400 sites including corporate and independently owned and operated supermarkets, fuel and convenience stores, warehouses and corporate offices.

Giant Eagle has used wireless LANs (WLANs) for more than a decade. The network has become truly mission-critical and is used for everything from inventory control in the stores to data access in the corporate conference rooms. As the network has grown, it has also become increasingly heterogeneous and complex for Giant Eagle's small IT team to operate.

Multi-Vendor Management

Over the years Giant Eagle has deployed multiple models of access points (APs) from both Cisco and Motorola (Symbol), including both single- and dual-radio versions. APs may be located hundreds of miles away and configured depending on their purpose and location, presenting IT with a complex management challenge.

"When we upgrade our network, the new equipment is rolled out gradually across our locations, not overnight. We needed a way to configure and control our newer hardware without sacrificing manageability on our Cisco and Motorola infrastructure," said James Lersch, network services engineer for Giant Eagle. Using separate management consoles for each type of hardware was not practical. For Lersch, the key requirements for a wireless management system were the capability to:



- Support multiple configurations for the same hardware models
- Monitor individual interfaces (such as the 802.11a radio and 802.11b/g radio), as well as the access point itself
- Support multiple hardware manufacturers today and in the future
- Manage migrations from legacy hardware to newer technology without losing historical usage data

"We just completed a conversion from Cisco 350 to Cisco 1242. But if our needs change, who knows what manufacturer we might try next? We cannot afford to be locked to a single vendor," said Lersch.



Location Pittsburgh, Pennsylvania

Wireless LAN Size

- 1,300 wireless access points across 400 locations
- 7,000+ users

Hardware

- Cisco 350 and 1242 Wireless Access Points
- Motorola (Symbol) 4121, 4131, and 5131 Wireless Access Points

AirWave Product

- AirWave Wireless Management Suite

AirWave Benefits

- Client-level visibility
- Multi-vendor technology support
- Streamlined performance of routine management tasks such as updating AP configurations and security settings
- Ease of use
- Remote troubleshooting

After evaluating its options, Giant Eagle selected the AirWave Wireless Management Suite™ from Aruba Networks which exceeded their requirements. Earlier this year, Giant Eagle initiated a program to update the security settings across the entire wireless network, replacing less-secure protocols with 802.1X.



“This transition was very quick and painless. With AirWave, I no longer have to touch each access point to push a new configuration file. I just delete the old configuration template, add a new template, and select the groups to which I want to apply the change. I instruct AirWave to implement the change, and within minutes, the access points are reconfigured. Before Airwave, it would have taken me weeks just to implement a simple configuration change. Now I have time to do other things while AirWave does its job in the background,” said Lersch.

Visibility

Even as the wireless LAN became one of the primary access networks for Giant Eagle employees, IT had very little visibility into network performance and usage. “One day someone asked me, ‘How many wireless users do we have?’ I said, ‘I am not sure’ because we simply did not have the tools to track usage patterns. When we finally started managing our access points with AirWave, I saw the user count go up and up,” Lersch commented. “When we got the software installed, I saw that we had over 6,500 users, with peak usage reaching 7,000 simultaneous users. We knew that usage was increasing, but were surprised to see how many clients we actually had. Today, we often have far more than 7,000 users and AirWave is instrumental in helping us understand usage patterns and ensure that we have sufficient network capacity.”

Ease of Use

Giant Eagle has a four person network team that not only manages the WLAN, but is also responsible for firewalls, WAN, LAN, and field support calls. With a large and growing wireless LAN, an easy-to-use management tool is an absolute necessity. “We have a lot to do, and we all need to be able to backfill for one another when necessary. We cannot afford to send everyone to class for weeks to get certified on a new management tool. The AirWave Wireless Management Suite is simple to use, yet very powerful. It’s very easy to learn how things work,” said Lersch.

Rapid Problem Resolution

In a retail environment, it is essential to be able diagnose problems hundreds of miles away. “With AirWave, I can be virtually on site in a few clicks of the mouse, and I can usually resolve the problem without sending a technician onsite,” said Lersch. “When a store manager reports a problem, it’s easy for me to look up a specific user or client device with AirWave. I can see if the client has disconnected or if it appears to be connected to an access point that may be malfunctioning. Instead of spending hours investigating the problem, I can figure out what’s wrong in minutes. That both saves me time and allows me to provide better service to our users,” he added.

Organization Overview

Giant Eagle Inc., ranked 32 on Forbes magazine’s largest private corporations list, is one of the nation’s largest food retailers and food distributors with approximately \$7.1 billion in annual sales. Founded in 1931, Giant Eagle, Inc. is the number one supermarket retailer in the western Pennsylvania, Ohio, north central West Virginia and Maryland region. Today Giant Eagle Inc. has over 400 sites including corporate and independently owned and operated supermarkets, corporate office, fuel and convenience stores, and warehouses.

“AirWave has saved me hundreds of man-hours of work. Changing complex security settings on our WLAN used to take me weeks. Now I can tell AirWave what to change and go do other tasks while my network is updated.”

James Lersch

*Network Services Engineer
Giant Eagle*



WWW.ARUBANETWORKS.COM | 1344 Crossman Avenue. Sunnyvale, CA 94089

1-866-55-ARUBA | Tel. +1 408.227.4500 | Fax. +1 408.227.4550 | info@arubanetworks.com