



Armstrong Produce Profile

Environment

- Network users and devices: 226
- 3 large warehouses and distribution centers in Honolulu, Kona, and Kahului
- 87,000 square feet

Technology Needs

- Wired/wireless infrastructure
- Robust enterprise network to support warehouse management system implementation
- Deployment of new technology solutions
- Wireless coverage to support a paperless environment
- Network-wide visibility and control

Extreme Solution Components

- ExtremeSwitching[™]
- ExtremeWireless[™]
- ExtremeManagement[™]

Results

- Comprehensive, enterprise-grade wired
 and wireless network solution
- Enablement and support of Warehouse Management System (WMS)
- Streamlined efficiency, increased productivity, and decreased errors of all shipping operations
- Substantial cost-savings year-over-year



Extreme Wireless Network Enables Increased Efficiencies and Reduced Costs for Hawaii's Largest Produce Distributor

As the busiest produce company in paradise, every day Armstrong Produce supplies fresh fruits and vegetables to a wide range of customers throughout the islands of Hawaii – from local chefs to big box retailers. With warehouses and distribution centers in Honolulu, Kona, and Kahului, what started as a small family-run wholesale business has grown into Hawaii's largest leading produce wholesaler and distributor, handling over 600 orders daily.

When Armstrong was mandated to implement a Warehouse Management System (WMS) to allow them to have more efficiency and accuracy in their operations, they knew they would have to first install a new wireless enterprise system. Today, supported by a comprehensive Extreme Networks wired and wireless network solution, Armstrong has been able to realize operational savings of \$3,120 per year in paperwork and a 75% reduction in shipping errors.

A Mandate for Better Business Operations

Back in 2011, Armstrong Produce used "paper pick tickets" for every order. This required handwriting lot numbers and using line-by-line shipping information for each item. It was a significant amount of manual work and it was prone to errors. Armstrong wanted a better system that would allow them to increase their picking productivity, minimize shipping errors, streamline order checking, and ensure traceability for all their customers.

To comply with the Produce Traceability Initiative (PTI) guidelines and the Country of Origin Labeling (COOL) law, Armstrong Produce was mandated to implement a Warehouse Management System (WMS) requiring everything to be barcoded. While such a system promised to provide the benefits they desired, before they could install it, they would need to replace their current network, which consisted of home networking devices and access points, with an enterprise-class wired and wireless system.

"In order for us to implement the Warehouse Management System, the primary challenge was to find a wireless system that could cover the entire warehouse facility as well as the office facilities across our three locations covering 87,000 square feet," said Kevin Haga, IT Administrator of Armstrong Produce.

Extreme Networks Delivers More Than a Warehouse Management System

As Armstrong Produce looked at different networking vendors, such as Cisco, HP and Extreme, their key criteria contained multiple factors, such as cost, the relationship with the vendor, and product support. Armstrong selected an Extreme wired and wireless solution that included ExtremeManagement to gain visibility of the network traffic flow, switches, access points, and wireless controller.

"The implementation process was smooth and everything was planned out. Our Extreme solution engineer helped to do a heat map to show us exactly what was needed to ensure that we didn't purchase any more access points than we needed, and to show us exactly what type of coverage we'd be getting with the particular solution," said Haga. In addition to enabling them to implement their Warehouse Management System, the Extreme network has made it possible for Armstrong to introduce new technology solutions such as a building access control system, time keeping system, security cameras, and Smart TVs. The network has also created a noticeable improvement in wireless coverage and capability for Armstrong's 226 users and devices – all doing business in an all-paperless environment. There has been a significant increase in users on mobile devices, tablets, and Motorola handhelds.

"Armstrong's new Warehouse Management System, powered by our Extreme wireless network, has saved the company \$3,120 per year on paperwork savings and reduced errors by 75%."

Kevin Haga IT Administrator, Armstrong Produce

Paperless Environment Delivers Measurable Improvements

The major benefit of Armstrong's Extreme solution was being able to implement the WMS. According to Jingjing Verzosa, Systems Director at Armstrong Produce, "Although at the time we were forced into the WMS, we ended up finding it very useful. In fact, it paid for itself with improvements to productivity, reduced labor costs, less shipping errors, and paper savings."

The new Warehouse Management System, powered by Armstrong's Extreme wireless network has saved the company \$3,120 per year on paperwork savings and they have had a 75% reduction in errors.

The Extreme solution has made managing the large network much easier for the network team of two. "The Extreme B-Series managed switches have made a difference in reliability and visibility. We can check the individual ports, we no longer have to keep unplugging switches to reset them, and we have greater visibility," said Haga.

Support that Goes Beyond the Sale

One of the important factors in selecting a networking partner was the vendor relationship and product support, and Extreme has over-delivered on both fronts. "We have been working with our Extreme sales engineer for eight years now, and he always goes above and beyond to support our company," said Haga. He also says the technical support team is "just excellent" as he recalled the following story: "One time I remember it took about eight hours to troubleshoot a particular issue and the technical support team on the phone passed it over to next shift and they stayed on the line until we resolved the issue." As Armstrong Produce continues to look for ways to improve efficiencies, they plan to take their use of ExtremeManagement beyond network visibility to use the reporting and analytics features to troubleshoot and gain greater control over the network users and devices. They will also be enhancing the security of their network with the implementation of a captive portal on their guest wireless network and installing Extreme's new wireless APs with built-in security cameras.

For more information please contact Chi Corporation, your authorized Extreme Partner.



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