

INDUSTRIAL INTERNET IN ACTION

CASE STUDY

Beer Distributor Improves Security, Shipping Capacity, and Service

EXECUTIVE SUMMARY

Customer name: Del Papa Distributing

Industry: Distributor

Location: Texas City, Texas Employees: 375-400 Employees

CHALLENGE

- Secure new distribution center during and after construction
- Provide great customer experience
- Simplify collaboration among employees in different locations

SOLUTION

- Engaged Cisco partner Zones to build Cisco wired and wireless network
- Added Cisco solutions for video surveillance, physical access control, communications, telepresence, and digital signs

RESULTS

- Gained better control over all entrances and restricted areas
- Increased daily shipping capacity by 6 percent
- Freed up more time for sales reps to interact with customers

THE CHALLENGE

Enjoy a beer on the upper Texas Gulf Coast, and you can probably thank Del Papa Distributing Company. Founded more than a century ago, the company today distributes 10 million cases of beer annually, from 30 suppliers. More than 375 employees work at headquarters in Texas City and two other distribution centers.

The family-owned company has a simple aim: to be a great beer distribution company. So when Del Papa set out to build a new 27-acre headquarters, company leaders thought about how technology could contribute to its greatness. "We wanted the new distribution center to have a single, secure network we could use for physical security, communications, collaboration, and

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even monitoring the temperature of our inventory," says Steve Holtsclaw, Manager of Information Systems for Del Papa.

The old building, in contrast, had separate networks for voice, data, video, and physical security. Separate networks were expensive and got in the way of business. For example, personnel could only monitor video surveillance cameras from certain workstations. And Wi-Fi performance in the warehouse area wasn't reliable enough for the voice-activated order-picking system.

THE SOLUTION

During construction of the new headquarters building, Del Papa engaged Zones, a Cisco® partner, to design a network that would connect previously unconnected people and things. Zones built a reliable, highly secure Cisco IP network. It connects:

- Video surveillance cameras
- Physical access controls for gates and doors
- Wired and wireless IP phones
- Cisco TelePresence® systems for in-person collaboration across offices
- Digital signage for employee communications
- Temperature sensors in the warehouse and keg vaults

The same network can also connect any other systems that Del Papa adds in the future.

"The Internet of Things is here today," says Stephen Lurie, Vice President, Internet of Things (IoT) for Zones. "For Del Papa Distributing, 'connecting the unconnected' helped to increase physical security and improve business processes."

To protect employees and inventory, 60 high-definition Cisco Video Surveillance IP Cameras monitor the property perimeter, the 100,000-square-foot warehouse, office corridors, and all delivery gates. Gates and doors lock and unlock automatically, according to a schedule. Zones integrated the video surveillance system, physical access control system, and Cisco phones. "If a door to a restricted area is open, employees receive an alert with a link to the video so they can see what's going on," says Holtsclaw. "And employees who monitor entrances can open doors by pressing a button on their Cisco Unified IP Phone."

Phones in all three offices connect to Cisco Unified Communications Manager, at headquarters. "Costs are much lower than they were when we had separate PBX systems in each location," Holtsclaw says. "And the user experience is amazing, with great voice quality." Moving to a different office is as simple as picking up the phone and reconnecting it. No service provider visit, no fee.

In addition, employees no longer need to drive to another office for departmental meetings, performance reviews, quarterly all-company meetings, and first-round job interviews. Instead, they can just click to start a Cisco TelePresence session with high-quality video and audio. Executives from Anheuser-Busch, one of the brands Del Papa distributes, have used a Cisco

Telepresence system at headquarters to present sales forecasts and promotions to employees in the other locations. "Of all the things we can do with our new network, TelePresence is the leadership's favorite," Holtsclaw says. "It's made us more efficient because we can have an inperson experience without the time and costs of driving."

The network also keeps the workforce informed. The latest news and delivery schedules appear on nearly 30 digital signs in break rooms, cafeterias, hallways, workout rooms, and delivery entrances. Content is centrally scheduled.

For example, from 4 to 6 a.m., the signs in the delivery area display safety messages and weather. Signs in break rooms play the latest advertisements and product information.

RESULTS

Connecting previously unconnected people and things has improved safety and security. Made business processes more efficient. Improved customer service. And even increased daily shipping capacity.

Safe and Secure Environment

Video surveillance and physical access controls help to prevent theft. "We can see everything that goes on or off our trucks," Holtsclaw says. Designated personnel receive alerts when a door to a restricted area is opened. They just click a link to play video from a nearby camera. Video surveillance and physical access control also help employees feel safe. That's a priority for the family-oriented company.

Great Customer Experience

Sometimes sales reps call the warehouse with a rush order. Maybe a customer needs a dozen extra cases for a special event today or tomorrow. The trouble is that warehouse employees are rarely at their desks. By the time they check voicemail, it might be too late to ship that day. "Now a sales rep with a last-minute order can reach someone in the warehouse who has a Cisco Unified Wireless IP Phone," Holtsclaw says. "By the time the rep is back at the warehouse, the order is sitting in the bay." When a phone call isn't practical, the company is starting to use Cisco Jabber® for instant messaging.

It has also become easier to answer customer questions about order status, billing, promotions, and so on. Any authorized employee in any office can connect to the company's private cloud in Texas City to find the answers.

Improved Collaboration, Less Travel Time

Teams spread across the three locations can come together with high-quality video and audio. Say the IT department wants to make a major purchase. The owner and chief financial officer need to approve the purchase. One of them used to have to drive to attend the presentation.

"Now we can present our proposal over Cisco TelePresence," says Holtsclaw. "We can all see each other's faces to gauge reactions, and even digitally sign a contract during the call."

Conducting departmental meetings with Cisco TelePresence saves still more travel time. "Del Papa isn't selling beer if the salesforce is driving to meetings," Holtsclaw says. "Meeting with Cisco TelePresence gives reps more time to interact with their customers."

More Efficient Warehouse Operations

Warehouse staff now build an average of 6.4 percent more cases each hour than they did in the old warehouse. The main reason is a Cisco wireless network that covers all of the 100,000-square-foot facility. Warehouse personnel build orders using a wireless voice-activated picking system. It says out loud which items to pick, and records each item as the bar code is scanned. "In our old warehouse, the order-picking system beeped constantly to tell us that wireless quality was not good enough," Holtsclaw says. In that case, warehouse personnel had to rescan items, wasting time. "Latency is no longer a problem since we started using a Cisco wireless network," says Holtsclaw.

Next Steps

Now Del Papa is starting a pilot using Cisco Video Surveillance IP Cameras on trucks. The video will upload automatically over the Wi-Fi network whenever a truck returns to the yard.

Technical Implementation

Zones, the partner, coordinated the infrastructure upgrade, the move to the new headquarters facility, and site-to-site replication across Del Papa's private cloud.

Instead of 60 physical servers in three locations, Del Papa now has a private cloud at headquarters. Forty virtual servers fit on just three blade servers.

The servers are hosted on Vblock preintegrated infrastructure, combining Cisco Unified Computing System™, EMC storage, and VMware. "By consolidating infrastructure, we reduced energy consumption by 9 percent," Holtsclaw says. Virtualized applications include Cisco Video Surveillance Manager, Cisco Physical Access Manager, and Cisco Unified Communications Manager.

Video surveillance cameras, phones, and wireless access points near the exterior gates receive Power over Ethernet (PoE) from Cisco Catalyst® 3850 Series Switches. In certain areas of the facility, Del Papa stacks these switches to provide more ports and capacity. All switches in a stack are managed as a single entity, saving time for the IT team.

ABOUT CISCO

Cisco is the worldwide leader in IT that helps companies seize the opportunities of tomorrow by proving that amazing things can happen when you connect the previously unconnected.

Cisco creates long-lasting customer partnerships and works with customers to identify their needs and provide solutions that support their success.

Cisco has shaped the future of the Internet by creating unprecedented value and opportunity for customers, employees, investors and ecosystem partners and has become the worldwide leader in networking - transforming how people connect, communicate and collaborate.

ABOUT THE INDUSTRIAL INTERNET CONSORTIUM

A founding member, Cisco has been a member of the Industrial Internet Consortium (IIC) since December, 2013. The Industrial Internet Consortium is a global public-private organization of over 140 members, formed to accelerate the development, adoption and wide-spread use of interconnected machines and devices, intelligent analytics, and people at work. Founded by AT&T, Cisco, General Electric, IBM and Intel in March 2014, the Industrial Internet Consortium catalyzes and coordinates the priorities and enabling technologies of the Industrial Internet. Visit www.iiconsortium.org.

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