## ZONES

## Internet of Things (IOT) Zones Case Study

# Zones designs new network to help customer improve business processes



## 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 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® Gold 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<sup>®</sup> systems for in-person collaboration across offices
- Digital signage for employee communications
- Temperature sensors in the warehouse and keg vaults

## Customer:

Del Papa Distributing Location: 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:

- Zones solutions architects and engineers designed Cisco wired and wireless network
- 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

## Internet of Things (IoT)



## The Solution cont.

"The Internet of Things is here today," says Stephen Lurie, Vice President IoT Solution Sales 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 in-person 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.

## The 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<sup>®</sup> for instant messaging.

## Now a sales rep with a last-minute order can reach staff who have Cisco Unified Wireless IP Phones anywhere in the warehouse. By the time the rep is back at the warehouse, the order is sitting in the bay.

 Steve Holtsclaw, Manager of Information Systems, Del Papa Distributing

## Internet of Things (IoT)



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."

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Stephen Lurie,
 Vice President of IoT Solution Sales,
 Zones, Inc.

#### **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.

#### **Zones Technical Implementation**

Zones 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<sup>™</sup>, 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.

### **Products and Services List**

#### **Routing and Switches**

- Cisco Catalyst Switches 3850 Series
  and 3750-X Series
- Cisco 2921 Integrated Services Routers
- Cisco 1000 Series Connected Grid Router by fences and warehouse
- Cisco ASA 5500 Series Adaptive Security Appliance

#### Wireless

- Cisco Aironet<sup>®</sup> 3602i Access Points
- Cisco 5508 Wireless Controller

Connected Safety and Security

- Cisco Video Surveillance Manager
- Cisco Video Surveillance IP Cameras 6030, 6020, 5010, 4500
- Cisco Video Surveillance 6050
  IP Cameras, in trucks
- Cisco Physical Access Manager

#### **Communications and Collaboration**

- Cisco Unified Communications Manager
- Cisco Unified IP Phones 8900, 7965, 7945
- Cisco Unified Wireless IP Phones 7925G
- Cisco Unity<sup>®</sup> Connection
- Cisco TelePresence System C40, EX90, EX60
- Cisco Digital Signs
- · Cisco Digital Media Manager
- Cisco Jabber

#### **Data Center**

- Cisco Nexus<sup>®</sup> 7000 Series Switches
- Vblock Infrastructure Platform
  - > Cisco Unified Computing System (UCS) B-Series Blade Servers
  - > EMC Storage
  - > VMware

#### Services

- Zones Design and Implementation
- Cisco SMARTnet<sup>®</sup> Services

Gold Partner

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