



# THE COMPUTERWORLD HONORS PROGRAM

---

## CASE STUDY

LOCATION:  
*Saukville, Wisconsin,  
United States*

YEAR:  
*2006*

STATUS:  
*Laureate*

CATEGORY:  
*Manufacturing*

NOMINATING COMPANY:  
*Avaya*

### ORGANIZATION:

**Charter Steel**

### PROJECT NAME:

**IP Integration**

### Summary

From its start during the Great Depression, Charter Manufacturing has thrived in the steel industry, one of the toughest and most challenging venues in the world. For a steel operator such as Charter, cost control is vitally important. Charter's goal is clear: Implement a highly reliable converged telephony solution while simultaneously cutting costs.

Because communication is key to the company's success, Charter sought to enhance its ability to communicate with associates and customers. A failure to communicate could cost Charter tens of thousands of dollars, slow its progress toward zero defects, or even jeopardize a customer relationship. But cost control is also a business imperative.

Charter's communication infrastructure enables it to give its customers the responsiveness they demand. Though they are among the biggest companies in the world, Charter's "Big Three" automaker customers commonly turn their just-in-time (JIT) production schedules on a dime. They forecast their requirements for Charter's steel products, for use in vehicles, weeks in advance. Yet they may telephone as little as two hours ahead to ask Charter to finish and ship their orders. If such a call failed to reach Charter's sales staff, it could cause a missed delivery. With an on-time delivery rate hovering around 95 percent — some 15 points above the industry average — Charter finds that possibility unacceptable.

Comprehensive, reliable communication is also an essential prerequisite for quality control. Charter melts steel in 90-ton increments, called "heats." In the event of a problem, the inability to contact a supervisor or metallurgist to troubleshoot the process could cause a heat to be scrapped, at a cost of up to \$15,000. Similarly, a communication problem might cause downtime at one of Charter's 24-hour-a-day rolling mills, to the tune of \$5,000 to \$7,000 per hour.

### Introductory Overview

The heart of Charter's IP Telephony Solution is Avaya Communication Manager 3.1 running on a foundation of Avaya DEFINITY® Communications Servers and the Avaya S8500 Media Server with an Avaya G650 Media Gateway. With Avaya, Charter was able to upgrade to IP Telephony, enable its existing servers, and enable it to build on its embedded base. The com-



# THE COMPUTERWORLD HONORS PROGRAM

## CASE STUDY

**ORGANIZATION:**  
*Charter Steel*

**PROJECT NAME:**  
*IP Integration*

**LOCATION:**  
*Saukville, Wisconsin,  
United States*

**YEAR:**  
*2006*

**STATUS:**  
*Laureate*

**CATEGORY:**  
*Manufacturing*

**NOMINATING COMPANY:**  
*Avaya*

pany upgraded from Avaya DEFINITY® Servers to Avaya S8500 and S8300 Media Servers, with Avaya Local Survivable Processors, re-using the circuit packs from their original installation.

Applications and Services

- Avaya MultiVantage™ Communications Applications
- Avaya Communication Manager 3.1
- Avaya IP Softphones
- Avaya INTUITY™ AUDIX® Server
- Avaya S8500 ESSMedia Server
- Avaya G700 Media Gateway
- Avaya G650 Media Gateway
- Avaya G350 Media Gateway
- Avaya G150 Media Gateway
- Avaya DEFINITY® Communications Servers
- Avaya Local Survivable Processor (LSP)
- Avaya Expanded Meet Me Conferencing
- UCC Speech Access

### Benefits

- Improved enterprise connectivity and mobility.

The Avaya Enterprise Branch Connect Solution extends main voice features to remote locations and telecommuters. The Avaya IP Softphone application on a laptop enables telecommuters to connect to the server using IP Telephony from anywhere over a secure virtual private network (VPN). Avaya INTUITY™ AUDIX®, Avaya Expanded Meet Me Conferencing, and UCC Speech Access keep its “Road Warriors” easily and safely in touch with the business from anywhere at any time, with easy access to voice, fax and e-mail messages, improving responsiveness and productivity.

- Reduced operating costs.

Routing voice traffic over an IP network reduces long distance charges. The Avaya Enterprise Branch Connect Solution allows management of the network as a single system, maximizing efficiencies.

- Enhanced productivity; do more with less.

Simplified network administration enables existing staff to manage new locations without additional resources. Avaya IP Telephony provides additional feature/functionality, enabling cost reductions.

- Provided a smooth migration to converged networking.

Existing Avaya DEFINITY® Communications Servers are easily upgraded with Avaya Commu-



# THE COMPUTERWORLD HONORS PROGRAM

## CASE STUDY

**ORGANIZATION:**  
*Charter Steel*

**PROJECT NAME:**  
*IP Integration*

**LOCATION:**  
*Saukville, Wisconsin,  
United States*

**YEAR:**  
*2006*

**STATUS:**  
*Laureate*

**CATEGORY:**  
*Manufacturing*

**NOMINATING COMPANY:**  
*Avaya*

nication Manager, extending the useful life of existing platforms and enabling Charter Manufacturing to preserve significant parts of its communication investment. Avaya Global Services helps ensure smooth transition by assessing IP readiness of network configuration and recommends steps for optimal performance.

As charter grows we will have the ability for road warriors, telecommuters and Field Sales to communicate any place anywhere anytime. with consolidated voice, email and fax messaging in a single mailbox. Accessable either on the Local Network, from the Web, or by the phone.

### The Importance of Technology

Installing the Avaya platform ensured us of keeping current with the market leader. Voice over IP has many uses for many companies. For Charter the ability to have a single converged simple smart network that allows voice, video and data to use was essential.

Due to the harsh nature of the manufacturing areas the need for analog phones with external ringers is a must. In the offices and other environmentally friendly areas we have mostly digital telephones with a trend toward IP endpoints.

Having the flexibility to install telephones to meet the end users needs is also key to the decision to use a Avaya phone system.

### Originality

Previously, we had 5 different systems to maintain, change, expand and backup. When dedicated tie lines or equipment failed, entire divisions would loose connectivity and access to our centralized voice mail system that routed a majority of the company customer calls. Now we have one system that has multiple levels of survivability that will self heal if the main call server would lose connection to the gateways that handle the calls.

With one system we have the ability to bring calls into the voice network at any point, adding the flexibility of routing calls to other switches if incoming lines are to fail.

We removed the complexity of systems that had been in existence for several decades and ensured that standards and best practices would replace the legacy systems.

### Success

In the past with several systems to program, if an individual moved from one facility to another we had to make modifications in each system to achieve the move.

It will also set the way for future additions and new sites. As we Charter Manufacturing Co, Inc. expands at current sites and future sites we have a standard solution.

Our customers care about on-time delivery, zero defects and zero downtime. These expectations depend on our ability to flawlessly execute our customer service processes, and that's really our competitive advantage." Tony Bares - IT Technical Consultant

We are finishing phase one of this project and that is the installation and stabilization of the systems. We have a few contractual agreements to fulfill, at that point we will complete the install and incorporate the few remaining stand alone systems.



# THE COMPUTERWORLD HONORS PROGRAM

## CASE STUDY

ORGANIZATION:  
*Charter Steel*

PROJECT NAME:  
*IP Integration*

LOCATION:  
*Saukville, Wisconsin,  
United States*

YEAR:  
*2006*

STATUS:  
*Laureate*

CATEGORY:  
*Manufacturing*

NOMINATING COMPANY:  
*Avaya*

### Difficulty

Our first effort with convergence involved an IP Telephony pilot that was driven by the telecom group. We learned a lot in the trial, and one of the key learning's was that the data team needed to be fully on board. Handling the IPT pilot as a 'voice project' had the effect of distancing the data people. As a result, IPT wasn't on their short-list of priorities. When telecom needed the data team's help with IP addressing or working on Quality of Service issues, things didn't always get done in a timely fashion. It was really frustrating not having everyone on the same page.

Despite the organizational difficulties, the IP Telephony trial was deemed a success. When the decision was made to formally roll out IPT, the Director of IT made sure that everyone understood that this was a joint project and that everyone on the voice and data teams had a role in making convergence a success. Our experience with the pilot underscored the importance of having someone at the top to set the expectation for collaboration.