

CASE STUDY



CLIENT GOALS

Client: Devils Arena Entertainment, LLC

Objective: A comprehensive voice and data communication system for the Prudential Center, home of the New Jersey Devils and one of the nation's newest, most advanced sports and entertainment arenas.

Solution: A voice and data communications system that supports current and future arena operations and facilities including:

- Seating for more than 17,000
- Two high-end club lounges
- A 350-seat gourmet restaurant
- 78 luxury suites
- 2,200 club seats
- An adjacent full-size practice facility with 800-seat capacity
- A fully equipped press facility
- A call center with more than 50 full-time agents
- Remote facilities and personnel
- Comprehensive maintenance support (24/7)



The Prudential Center

165 Mulberry Street
Newark, NJ 07102
973-757-6000

<http://www.prucenter.com/>

BACKGROUND

In March 2008, barely five months after opening its doors, New Jersey's Prudential Center entertainment arena welcomed its one millionth guest, who joined 17,000 other fans in one of the nation's newest, most advanced entertainment and sports arenas. The arena is home to the National Hockey League's New Jersey Devils, Seton Hall University's men's basketball team, and the New Jersey Ironmen professional indoor soccer team.

"We were committed to excellence in every aspect of the Prudential Center's development and operation, from the facility design by world-respected architects to a communication system that served our organization, our customers and the city of Newark, which has partnered with us in developing this landmark facility," said Joe Wyks, IT Representative for the New Jersey Devils.

TACKLING A HARD DEADLINE

From the beginning, everything about the Prudential Center was newsworthy. It is the first indoor entertainment and sports venue to be built in greater New York/New Jersey in more than 25 years. Occupying a 7-acre site in downtown Newark, the arena stands as a cornerstone of Newark's downtown revitalization and a driver of the city's \$2 billion in new downtown construction activity.

The center's 17,500+ seating capacity expands by 800 seats in an adjacent hockey practice arena. An eight-sided, 65,000-pound scoreboard makes it easy to check the score from anywhere in the stands, while an outdoor 4,800 square foot LED/HD-TV gives new meaning to "big screen." Under the arena's floor, a grid of piping keeps temperatures where they belong. Some 51,000 feet of steel pipe cool the ice while another 61,500 feet of Polypipe take care of heating. Seventy-six luxury suites offer the expected perks – and the unexpected, including touch-screen computers and a unique phone number in each suite.

The Prudential Center is home to the New Jersey Devils, Seton Hall University's men's basketball team and the Ironmen of the Major Indoor Soccer League. It is also a premier entertainment venue

for performances by such world-class talent as Tina Turner, Celine Dion, Bon Jovi and Cirque du Soleil. Supporting the facility's diverse entertainers, managers, vendors, customers and media is a voice and data communications system that integrates technologies from Avaya, Extreme Networks and Juniper Networks into a cohesive, scalable solution.

Despite constant construction on the facility, the design and installation of the communications system had a hard deadline. "Our deadline for completion of the facility, including the communication system, was October 25, 2007, when Bon Jovi performed at our grand opening. Two days later, the Devils were playing their season opener," said Joe Wyks, IT Representative for the New Jersey Devils. "We had to be up and running by that date. No excuse or delay was acceptable – no matter how difficult it may have been to complete any individual assignment."

A NEW ROLE TRIGGERS NEW NEEDS

Wyks was clear about what the new communications system should provide. Two years earlier, the Devils had been tenants at The Meadowlands Sports Complex in East Rutherford, NJ. They had just installed a Toshiba system to replace three aging AT&T systems that had been cobbled together. "The Toshiba system gave us much better control over our communications, but it wasn't going to do what we needed when our role changed from 'tenant' to 'owner' of the Prudential Center," said Wyks. "We were going to be responsible for much more than the Devils organization, so we wanted to expand to an enterprise model. Because of that, we were able to consider systems with much greater functionality than what we were accustomed to."

Customer service was all-important. "We wanted to add functionality that would enable the standard of service we always want to extend to our customers. Customer service has always been a priority for us but as the building's owner, we now have a much larger customer base that now includes concession operators, vendors and the media."

Wyks didn't want a system that only met current

needs – and he didn't need a system that was oversized. "Scalability was crucial. It was vital that our communications system be able to support us well into the future without imposing undue costs or overcapacity on our current operations," he explained. Already looking forward, Wyks said, "As an example, we plan to link the Prudential Center operations with our remote facilities – but not yet," he explained.

PROVIDING THE SOLUTION

Consultedge, one of only nine Avaya National Business Partners, met the challenge head on, designing and installing a communications system that met the Prudential Center's operations needs, construction challenges and hard deadline. Consultedge's solution integrates technologies from Avaya, Extreme Networks and Juniper Networks to satisfy Wyks requirements for immediate functionality, scalability and reliability. Key features included:

- 824 active extensions, with active capacity for 1600 including 300-400 sets for press;
- Session initiation protocol (SIP) capabilities through Avaya's Communication Manager, enabling more productive performance by indicating when individuals are in the office and available to take a call;
- Avaya's S8720 media server, which assures 99.999% reliability and redundancy and provides a 50% improvement in busy hour call completions (BHCC) over earlier servers;
- Extreme Network's Black Diamond 8810 Core Switch, a single-switch network solution that enables the integration of gigabit and 10 Gigabit Ethernet connections with low power consumption, providing high availability and performance;
- Juniper Network's Virtual Private Networking (VPN), enabling network segmentation, dynamic routing and multiple deployment modes to simplify network integration. In addition, Juniper Network's integrated security application was installed to ensure security against threats including worms, Trojans, viruses and other malware;
- Avaya's Modular Messaging, which supports internal mobility and enables callers to "see" the availability of in-house personnel, and Meet-Me Messaging, which eliminated the need to outsource conferencing services;
- CALLSWEET Call Accounting and Facilities Management, enabling accurate monitoring, apportioning of costs and billing to customers by assigning phone numbers and automatically generating invoices;
- Avaya Extension to Cellular, enabling calls made to field recruiters and mobile employees to ring on both desk phones and cell phones, providing a single number for contact and a single voicemail inbox;
- Consultedge four-year 24x7 maintenance contract providing comprehensive support including remote monitoring and diagnosis, remote repair, on-site technical assistance, parts and materials replacement and access to Consultedge's complete technical and engineering expertise.

GOING BEYOND EXPECTATIONS

"We were developing a brand new building, so inevitably there are delays and complications," said Wyks. "Consultedge met every deadline and was ready to proceed, but not everyone on site was that committed." For Consultedge, the delays and missteps translated into a project management challenge.

"Good project management is both strategic and tactical," said Anthony Martucci, Consultedge's Project Manager for the Prudential Center. "In the end, all the pieces have to fit together. It's your job as project manager to make sure that happens. One of the most important components is scheduling because a delay in one part of the project can affect the rest of the project." Martucci illustrated his point by pointing to the construction of the arena's floor, which occurred early in its construction. "The infrastructure that supports the arena's IT cabling, Telco services, power and HVAC systems runs through the concrete floor of the arena. If one of those conduits were installed incorrectly or not installed on time, the whole construction schedule would have to change. The worst possibility is that the schedule wouldn't be changed and the concrete would be poured over inadequate or nonexistent cabling."

Martucci emphasized the importance of regular communication, "Bringing such a complex project to completion requires experienced project managers and consistent communication. We met with the Devils every week to review the entire IT system, whether there were construction delays that could impact the IT and telephony systems, how the schedules had to be adjusted and how we could get the project back on track. There wasn't any flexibility in the deadline. The arena was opening with a concert by Bon Jovi."

Problems and delays on a construction site aren't always the result of dramatic events that are quickly and easily recognized. Martucci explained, "Even an equipment delivery can throw off a schedule. We ran into that with one of our deliveries when the driver was refused entry to the site because he didn't meet a union rule. We rescheduled the delivery for the next day, but if a full-time manager hadn't been overseeing logistics, there could have been real logistics problems. It's a little thing, but even little things have to be watched so they don't turn into major problems." The Devils' Wyks agreed, noting how weather can present another variable. "The rain kept coming, day after day. Consultedge had the communications system ready to install, but the room wasn't closed, cooled or environmentally sound. For Consultedge to complete their project on time, they had to go 'outside the lines' of their own responsibilities and work with other contractors and crews to get the rooms ready. They knew what had to be done – and they did it."

The new communications system is producing the results Wyks wanted. "We have the system we want, with the functions we need today. Just as important, we have a system with the flexibility and scalability to meet our needs well into the future. Building the arena was a huge project and there were many contractors. Consultedge was one of the easiest contractors for us to work with. They know what they're doing, they never lose sight of the end goal, and they get the job done right. That's the kind of partner you want to have, no matter what the job is."