# *THE DENVER BRONCOS TAKE HOME-FIELD ADVANTAGE TO A NEW LEVEL WITH COMCAST BUSINESS*



## SITUATION

- Professional football team plays at Sports Authority Field at Mile High in Denver
- Visitors to the stadium expect immersive multimedia experience on gameday and at events during off-season

## CHALLENGE

- Expand Internet, TV, and voice services at stadium to support fans and employees
- Upgrade private network capacity between facilities to help boost productivity of football operations and other business departments

## SOLUTION

- Comcast Business Ethernet Dedicated Internet
- Comcast Business
  Ethernet Private Line
- Comcast Business PRI Trunks
- Comcast Business TV

# RESULTS

- Scalable, advanced communications infrastructure
- Increased Wi-Fi capacity
- Tapeless backup
- Improved collaboration for administrators, staff and players

With a dynamic network foundation and HDTV on more than 1,000 TVs stadium-wide, pro football team gives attending fans a superior game-day experience

## PROFESSIONAL FOOTBALL TEAM AIMS TO DELIVER IMMERSIVE MULTIMEDIA EXPERIENCE FOR FANS ON GAME DAY

The Denver Broncos are a professional football team established in 1960. The team plays at the Sports Authority Field at Mile High, and the organization's executive office and training facility are located approximately 20 miles south in Englewood, Colorado.

The Broncos' use of Sports Authority Field at Mile High is confined to 10-12 games per season yet the facility is used year round. The stadium is also a popular location for nearly 300 concerts, festivals, trade shows, corporate events and other large gatherings annually. The stadium seats approximately 76,000 fans and includes 135 suites, three large club areas and four designated party suites equipped with 1,000+ high-definition TV screens.

Guests at the stadium, whether there to watch the Broncos or to attend another event, expect a compelling multimedia experience, including state-of-the-art video service and fast, consistent Internet connectivity. They also expect to be able to use their mobile devices seamlessly.

"We're competing with the 60-inch HDTV at home and the couch is comfortable," said Russ Trainor, VP of Information Technology for the Denver Broncos. "Today's fans expect an immersive multimedia experience when they attend a game. In addition to watching the action on the field, they want to see replays on HD television monitors. They also expect to use their mobile devices to communicate and connect to social media while at the game."

#### SCALABLE ETHERNET, VOICE AND TV SERVICES CRITICAL TO SUPPORT ROLL-OUT OF NEW FAN SERVICES; IMPROVE COLLABORATION BETWEEN PLAYERS AND STAFF

Since the stadium was built in 2001, the Broncos have been using Comcast Business Voice, Ethernet and TV services both at the stadium and at their executive offices and training facility. Though the Broncos were happy with their service, they needed to add capacity to support the number of users, applications and devices on the network, which has increased substantially over the past few years thanks to increasing reliance on the Internet to access shared corporate applications, the transfer of game day footage, and overall communication for staff, players and attending media. Also, the growing use of mobile devices among fans on game day was taxing the network.



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While upgrading the stadium's network backbone in 2012, the Broncos sought to upgrade the communications infrastructure in both locations, and improve the network service between them. With plans to expand their Wi-Fi service, it was essential that the Broncos add service capacity because any new offering depends on having a scalable Internet connection.

## COMCAST DELIVERS 100 MBPS ETHERNET DEDICATED INTERNET, 100 MBPS ETHERNET PRIVATE LINE, PRI TRUNKS AND HDTV SERVICE

The Broncos had a 40 Megabit per second (Mbps) Comcast Business Ethernet Dedicated Internet (EDI) connection at the stadium and a 40 Mbps Ethernet Private Line (EPL) service that connected the stadium to headquarters, but wanted to ratchet up capacity to support new fan services and to provide high-performance file transfer and data access for their 300 employees. Comcast therefore installed two Ethernet circuits – a 100 Mbps link out to the Internet and another 100 Mpbs link – between the offices. The high-performance connection between facilities gives players the ability to access game video, individual multi-media preparation packages and playbook information from either the stadium or its training facility located in Dove Valley.

"We are very excited about the upgrade to a 100 Mbps link out to the Internet – the fact that it is upgradable to 10 Gigabits per second is the most attractive, and that we can do it in increments as our needs dictate. Comcast is very flexible in this regard as we anticipate only growth in the future," added Trainor.

Comcast also installed PRI Trunks over the upgraded fiber circuit to provide scalable voice service to the employees, players, local radio and television stations that all rely on the stadium's phone circuits for local and long distance calls.

According to Russ Seifert, communications manager for the Denver Broncos, "Our Comcast Business Voice service has been fantastic over the years. We've gone through a couple of different upgrades, including adding PRI Trunks over our 100 Mbps fiber circuit, and the service has been seamless."

The new 100 Mbps EDI connection now provides the foundation for the Broncos Wi-Fi Service. Combined with the stadium's new network backbone – which is scalable to 10G – the facility is now able to support 25,000 simultaneous Wi-Fi connections.

## NEW SERVICE BUNDLE FROM COMCAST FACILITATES TEAMWORK AND COMPETITIVE ADVANTAGE

With its 100 Mbps EPL connection, the Broncos have also achieved the highly coveted "tape-free" status for data storage and back up. Business continuity and disaster recovery efforts are dramatically improved with each location backing up to the other.

The EPL connection between the stadium and the Broncos practice facility also allows for faster video transmission – which is critical during the football season. The video staff is able to quickly cut footage and send it while the game is happening so that it's there first thing in the morning for the Broncos' coaching staff, which wants to immediately begin analyzing team performance and preparing for upcoming opponents, schemes and plays.

Trainor added: "It's an exciting time to be in IT – we're just at the beginning of a launching point for the types of services and applications we'll be able to offer our staff, our players, and our fans. Comcast Business services are a critical enabler."

Denver Broncos