# Ultimate X for the NFL Networks
Substantially improving backup and disaster recovery workflows of NFL programming

## EXECUTIVE SUMMARY

**Customer Name:** NFL

**Industry:** Franchise Sports and Entertainment

**Location:** US

**Audience Reach:** Global

**Challenge:**
Optimize the BCDR workflow to minimize escalating costs of network connections between two key NFL locations.

**Solution:**
Vcinity ULT X provided global workflow acceleration solution for the NFL. It offered significantly improved bandwidth utilization and enhanced remote data access leading to a lower cost structure for expanded data usage with increased productivity and simplified operator interaction with the BCDR workflow.

**Results:**
More robust BCDR workflow processes minimized the risk of experiencing broadcast interruptions of game video associated with potential data loss at the Atlanta Master Control Center. A data driven workflow versus a video recording based workflow reduced transfer time of 1 hour of HD content (equal to 27.7GB) down to <4 minutes over a 1Gbps link. The NFL also identified a new distributed workflow for digital media content generation and playback (previously not operationally viable) expanding ULT X's applicability to other workflow challenges besides BCDR.

### The NFL Challenge

Ensuring critical programming events – such as the Super Bowl, Combine, Draft, Thursday Night Football and pre-season games – are as "glitch-free" as possible is a major data challenge for the National Football League (NFL). Prior to bringing the Vcinity™ Ultimate X™ (ULT X) solution into the picture, the NFL faced the challenge of simplifying and optimizing bandwidth utilization for the time consuming, non-digital, video streaming based Business Continuity Disaster Recovery (BCDR) workflow processes used for digital video content (e.g., programming, commercials, and tagged media) backup. The costs of network usage and time required for streaming-based workflow posed challenges to improvement of and addition to video workflows envisioned by the NFL.

Two key NFL locations, connected over a 1Gbps optical link of approximately 3000km fiber length, are involved in this BCDR process: one is in Atlanta, Georgia and the other is in Stamford, Connecticut. The Atlanta site is the Master Control Center and hub for collecting, modifying and broadcasting live media feeds from all NFL venues/ events and over the NFL network. The Stamford site is the primary BCDR location for the content sent from Atlanta if a problem or outage arose in that location. While BCDR was the primary role for Stamford, various media workflow functions, such as tagging media to insert commercials, were also performed at Stamford. But the eventual vision for Stamford was also to use the existing satellite feeds to support direct live video playback – a workflow that had not been feasible due to the time consuming nature of the video streaming based BCDR process.

Ultimately the NFL replaced the video streaming workflow with one that was digital file based. However, the operators had to wait for individual files to be copied from Atlanta to Stamford, copy the files again into the designated workstation directories and then recopy for backup. Although the BCDR process and bandwidth utilization were improved, inherent network inefficiencies would continue to severely limit the utilization of the provisioned 1Gbps bandwidth. Additionally, this workflow was still not effective enough to consider Stamford for direct live video playback, which meant Atlanta would have to continue to be a potential "single point of failure" as the only location for this service. A better solution was needed that could further optimize and simplify the BCDR workflow and contain costs by making more efficient use of available bandwidth.

## The Vcinity Solution

The Vcinity ULT X solution met and surpassed these requirements with its proven, location-independent, lossless workflow acceleration solution which, amongst other benefits, seamlessly and consistently delivered over 95% utilization of available bandwidth compared to the prior file transfer based solution, whether at 1Gbps, 10Gbps, or beyond. Additionally, the ULT X made the NFL's BCDR process more transparent to personnel, significantly minimizing the time to access and copy files between Atlanta and Stamford. This new, streamlined process allowed personnel to reduce the amount of store-and-forward copy operations that had to be performed to access remotely stored data files and volumes. ULT X allowed a familiar "drag-and-drop" process that was not only simpler and faster, but it also reduced staff training and allowed multiple files or entire volumes to be quickly copied in a single operation. More importantly, this workflow migration to ULT X was carried out swiftly in less than an hour.

A significant, additional benefit was also realized by the NFL. The ULT X solution enabled simple, well understood operations to access and work on files and volumes stored remotely over distance as if they were local. Since a common set of editing tools is now available for both locations, either could support the direct video playback process. Many other geographically distributed NFL editing and production workflows, such as insertion of commercials into game video, could potentially leverage the same ULT X benefits demonstrated during the BCDR workflow testing. The NFL is actively looking at how this new enhancement can be further integrated into existing workflow processes.

In summary, Vcinity offered a workflow acceleration solution for the NFL with the following benefits:

- Seamless integration with existing workflows allows significant file transfer time savings and performance improvements
- Simplified workflow with familiar "drag-and-drop" operation minimizes the need for additional personnel training
- Distributed workflow experience enables the user to view and manipulate remotely stored media content as if it were local
- 95% bandwidth utilization results in significant cost savings as bandwidth needs scale
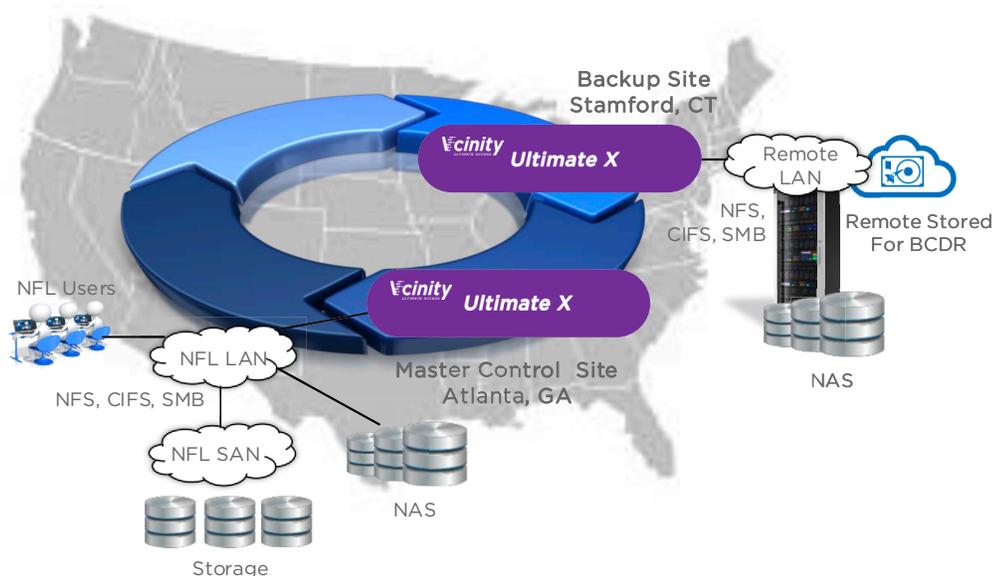


*Figure 1. The Vcinity Solution*