

MDX for the NFL Networks

Workflow acceleration solution achieves significant improvements in WAN bandwidth utilization for backup and disaster recovery of NFL programming. . . and gets added benefits as well!

Executive Summary

Customer Name: NFL

Industry: Franchise Sports and Entertainment

Location: US

Audience Reach: Global

Challenge:

Optimize the Business Continuity/ Disaster Recovery (BC/DR) workflow to minimize escalating costs of network connections between two key NFL locations.

Solution:

Bay MDX – global workflow acceleration solution – 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 BC/DR workflow.

Results:

More robust BC/DR 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 MDX's applicability to other workflow challenges besides BC/DR.

The NFL Challenge

Ensuring critical programming events – such as 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 Bay Max Data Xchange™ (MDX™) solution into the picture, the NFL faced the challenge of simplifying and optimizing bandwidth utilization for the time consuming, non-digital, video streaming based BC/DR 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 BC/DR 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 BC/DR location for the content sent from Atlanta if a problem or outage arose in that location. While BC/DR 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 BC/DR 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 BC/DR 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 BC/DR workflow and contain costs by making more efficient use of available bandwidth.

The Bay Solution

The Bay MDX 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. Also the MDX made the NFL's BC/DR 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. MDX 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 MDX was carried out swiftly in less than an hour.

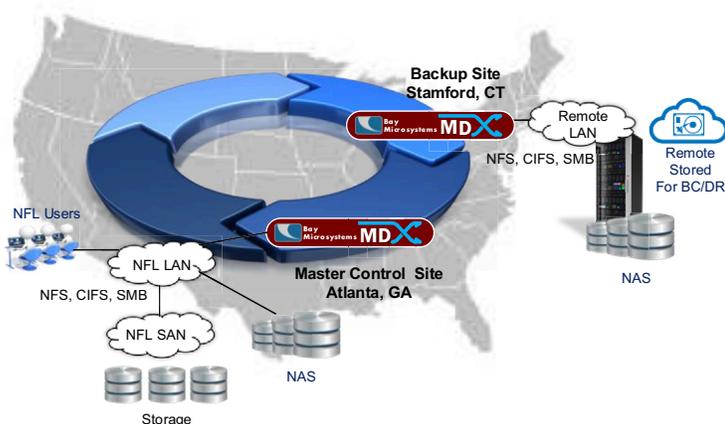


Figure 1. The Bay Solution

A significant, additional benefit was also realized by the NFL. The MDX solution enabled simple, well understood operation 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 MDX benefits demonstrated during the BC/DR workflow testing. The NFL is actively looking at how this new enhancement can be further integrated into existing workflow processes.

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

About Bay

Bay's innovative, patented technologies have enabled some of the most mission-critical, big data applications around the world since 2006. New generation products from Bay enhance these proven technologies providing a seamless, application-independent data platform for commercial market segments. Coupled with state-of-the-art web-based management and orchestration tools, these data solutions enable organizations to enhance workflows, achieve faster time to revenue, and penetrate new markets, while lowering operational costs.



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