



A Really Long Distance File-Based Workflow Running on Omneon MediaDecks

NBC Beijing Olympics

SOLUTION AT A GLANCE

For the Beijing Olympic Games, NBC made coverage of all events available to viewers in the U.S. through a variety of distribution outlets. In addition to offering the most complete coverage ever, the network needed to minimize the size of the production staff in China and move the majority of digital media production and repurposing efforts to the U.S. At the core of the solution were two Omneon MediaGrid™ active storage systems, one in Beijing and one in New York, multiple Omneon MediaDeck™ integrated media servers at both locations, and content transfer management systems by Omneon ProCast CDN™. By using an advanced proxy-based workflow, NBC was able to efficiently produce content packages in New York using material recorded in Beijing, while minimizing excess network traffic between the two cities.

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The Challenge

Broadcaster NBC owns the exclusive U.S. media rights to the Olympic Games through 2012. For the Beijing Games, NBC committed to make material from all events and venues – as opposed to only the most popular competitions – available to viewers in the U.S. The broadcaster needed to provide both long- and short-form content in a variety of formats for multi-platform distribution to NBCOlympics.com, video-on-demand (VoD), mobile applications, electronic sell-through (Amazon and others), and local NBC stations.

As NBC pledged to dramatically increase coverage and expand distribution, the International Olympic Committee mandated that broadcasters reduce the number of production staff in Beijing. This meant that “new media” production and package preparation would need to be performed by a production team at NBC’s New York facility. Remote production would require access to not only the actual video and audio material, but also all metadata (stats and logging info) throughout the production process. Additionally, the process needed to be resolution independent – anywhere from 50kbps to 1.5Gbs – to support a wide variety of distribution platforms. The challenge was to find a way to efficiently produce content packages in New York using material recorded in Beijing, while minimizing excess network traffic between the two cities.

The Solution

The solution was a “round-the-world” proxy-based workflow. In Beijing, NBC used 22 Omneon MediaDecks to record venue feeds. Each MediaDeck received two feeds simultaneously, and encoded each in both high resolution and proxy resolution, under the control of Cyradis automation, based on ScheduAll requests. As the feeds were recorded, each MediaDeck automatically directed its four output streams (two high res, two proxies) to a 180 TB Omneon MediaGrid active storage system. This system was connected via a series of multiplexed STM-1 connections to a second 120 TB Omneon MediaGrid storage system in New York. Omneon ProCast CDN WAN optimization software insured that all proxy files were immediately copied from Beijing to New York, even if the live event was still underway.

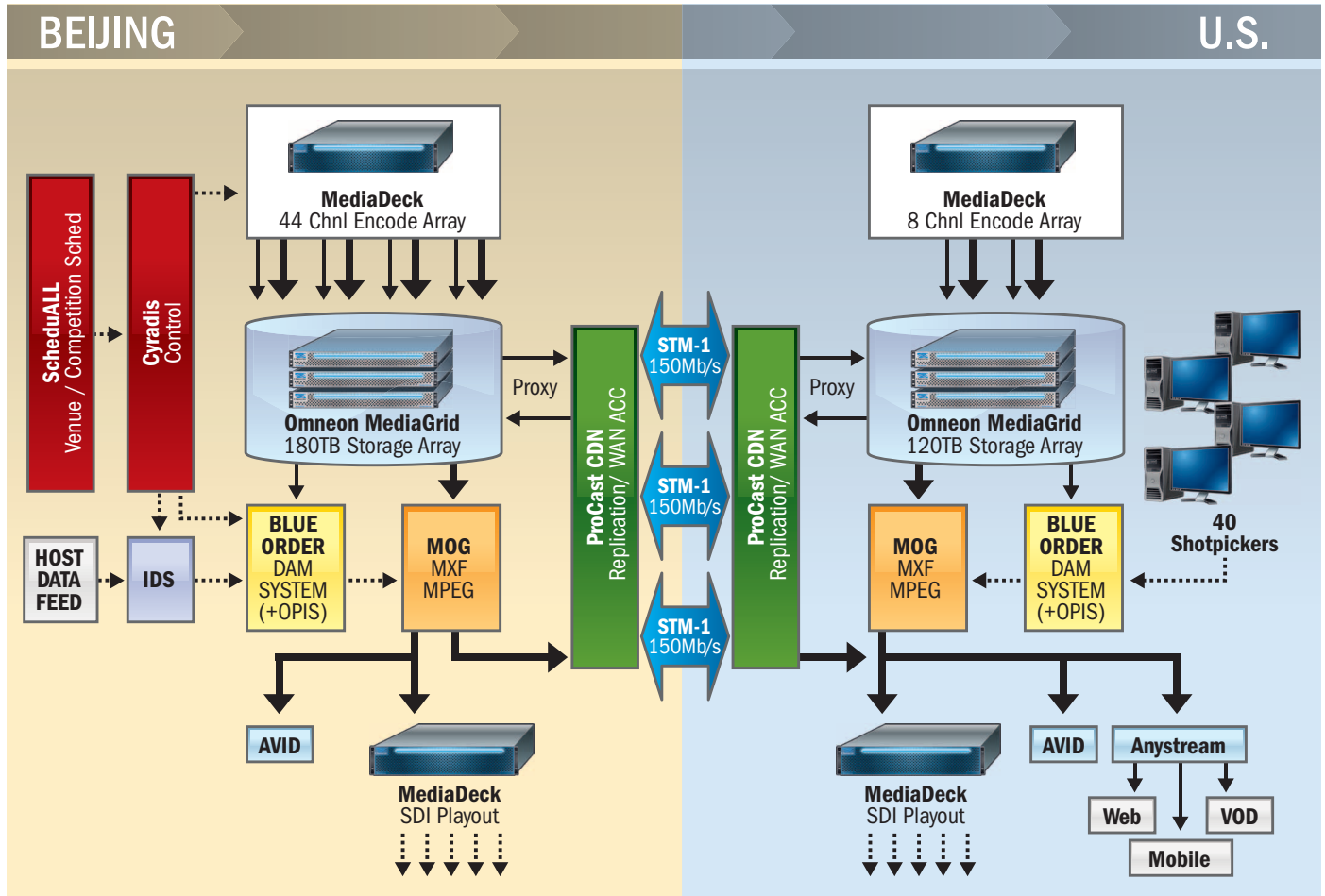
Producers in New York used Blue Order work stations to view proxies, add logging notes, select shots, and create edit decision lists (EDLs). The EDLs triggered requests back to Beijing for the high-resolution material that matched the specific EDL. ProCast CDN and MOG Solutions took the EDL and created MXF-wrapped flattened files of EDL packages and transferred the high-resolution material from Beijing to New York. The content was then sent to craft edit stations, transcoding, etc. to create final content packages for distribution. These sophisticated WAN transfers, managed and accelerated by ProCast CDN, allowed an efficient workflow that minimized turn-around time, optimized network usage and guaranteed quality of service by transferring only the specific high-resolution content segments requested, not the entire file.

■ CASE STUDY

The Result

For the Beijing Olympics, NBC presented more than 3,600 hours of broadcast, cable and broadband coverage during the 17 day event. NBCOlympics.com alone served 75.5 million video streams. An unprecedented amount of content was distributed to a broad number of outlets, each with its own specific requirements. By using an efficient, proxy-based workflow in conjunction with optimized file transfers, NBC met its goals of offering complete coverage while minimizing the number of production personnel in China.

Proxy-Based Workflow



Omneon ProCast CDN: Optimized Content Distribution

The Omneon ProCast CDN content distribution platform, integrated with Omneon MediaGrid active storage and Omneon MediaDeck and Spectrum media servers, provides managed, secure and efficient content distribution across multiple sites, anywhere in the world. It is ideal for collaborative production, content distribution and disaster recovery, and both site-to-site and multi-site solutions are available. ProCast CDN provides fully automated management, scheduling, monitoring and tracking, and is cost-effective and easy to deploy.



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