

# Leading TV Network Deploys Optibase IPTV Solution for Its In-House Video Delivery System

**Customer:** A Leading TV Network in the United States

**Application:** H.264 IPTV Video Distribution

**Products:** MGW Streaming Platform & EZ TV IPTV System

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## The Customer

Network's headquarter is its main production center for news and entertainment programming. A world-class nucleus of state-of-the-art production facilities, sales operations and management, the Network's headquarter is a 24-hour hub of activity, creating and delivering content for the broadcast network and its affiliates as well as the cable news channel and local broadcast and cable TV outlets.

With more than one hundred remote feeds received at its headquarters, locally-generated programming and affiliates' content, the Network's thousands of employees are consuming hundreds of video feeds for various applications. Accommodating the growing demand to access feeds via TV monitors, computer workstations, public meeting rooms and new open space cubicles across 50 floors required the Network's Video Distribution and IT teams to rethink their legacy RF video delivery system and to look for a more advanced, cost-effective and scalable solution.

## The Challenge

The Network sought a technology for video distribution that would provide the scalability, flexibility and reliability suitable for a mission critical application such as feeding its News, Marketing, Sales and Operations groups real-time, high quality video to any location. Manageability was also one of the key requirements due to the scale of the channel line-up and the expected growth rate in the upcoming years. Last, with the vast amount of back-end gear in the facility, efficient rack-space utilization was presented as an important need.

Before the Optibase solution was implemented, TV programming was distributed via a local analog RF system. It was quickly evident that adding to the existing analog system with additional cabling and TV monitors was not a feasible option capacity wise and cost-wise and. As an alternative, a digital cable (QAM) technology was considered. However, this option would have required a new digital cable-ready TV for every user, a logistical challenge and an expensive choice. With PCs already in place in every office or studio, there was a clear advantage in using an IP-based solution.



Based on an intensive technology and vendor review, the Network found its best option: An IPTV system from Optibase, to be installed on the existing corporate LAN allowing all users access to content using existing PCs, laptops and TV monitors regardless of location in the facility. The Optibase EZ TV IPTV Portal along with the MGW 5100 carrier-grade H.264 encoding and streaming platforms were selected as the ideal platform to meet these requirements.

## The Optibase Advantage

In selecting Optibase, the Network was able to accommodate its needs in the three critical domains

- **Back-End:** The Optibase MGW 5100 Encoding and Streaming, blade-based platforms provided broadcast quality, 5th generation H.264 SD/HD encoding in a dense, rack-space efficient footprint. Offered with advanced Cluster Management software suite, the MGW platforms deliver reliability and automatic redundancy and failover capabilities suitable for 24x7 environments.

- **Middleware:** Optibase's EZ TV IPTV Portal is an ideal fit for a broadcast center. Its ability to organize live and on-demand content, regulate access to content with seamless integration to Active Directory and the customization options enabled the Network to deploy a solution to PC users and TV users that is easy to manage and maintain with workflows optimized specifically to its facility. Its ability to propagate channel line-up updates and text messages to the PC and set-top-box clients on-the-fly was critical with the dynamics of a broadcast center with multiple News channels.

- **Front-End:** Optibase browser-based EZ TV Player offered powerful playback features such as mosaic views and a unique CPU-Meter feature that ensured other mission critical applications running on the client machines will not be affected by the IPTV Player. Its Client-Server architecture allowed IT to launch the new IPTV service seamlessly to Windows and MAC users with no pre-requisites and with a minimal client signature.

Supplementing TV monitors with Amino IP Set-Top-Boxes, gave the Network the opportunity to take advantage of other Optibase-exclusive benefits: EZ TV Remote Control application was deployed in 17 new studios as an efficient video wall control solution. The EZ TV Remote Control application allows the operator to remotely assign IP streams to LCD and Plasma screens via a user-friendly visual user interface. The application allows the Network to utilize the video streams already on the network and eliminate the need for expensive analog/digital video switchers to control the various monitors mounted on walls.



### Fact Sheet

#### Encoding:

- 10 MGW 5100 platforms
- 250 H.264 encoders
- Video format: MPEG-4 Part-10 H.264
- Video bit rate: 1.5Mbps
- Audio format: AAC
- Management: Cluster Manager system for centralized management, email-alerts and redundancy

#### Playback:

- EZ TV Player installed and used on thousands of PC and MAC workstations
- EZ TV Player Lite as a floating, resizable single-channel player alternative
- Over 1000 IP Set-Top-Boxes to feed legacy TV monitors
- 17 Studios utilizing EZ TV Remote Control Application as a virtual video switcher

#### Networking:

- Cisco 6500 series routers for backbone
- Various Cisco routers and switches used as edge devices

Users that needed to keep using TV monitors were given Amino IP Set-Top-Boxes with an IR Remote control. These boxes automatically synchronize with the EZ TV IPTV Portal to provide up-to-date channel lineup information allowing the operator to manage content delivery to PC and TV from a centralized administration interface.

The Optibase advantage didn't stop at the technology. By selecting an end-to-end solution provider, the Network was able to eliminate integration risks and deploy a fully

verified, proven system with components that operate in harmony in large-scale deployments around the world. Meeting the timeline was crucial and with a single solution provider the Network was able to install, verify and launch 250 H.264 channels along with hundreds of Set-Top-Boxes within a single week. The complexity of the solution and the innovative workflows it was designed for provided the Network and Optibase with the Broadcast Engineering award for "Best IPTV System for 2008".

