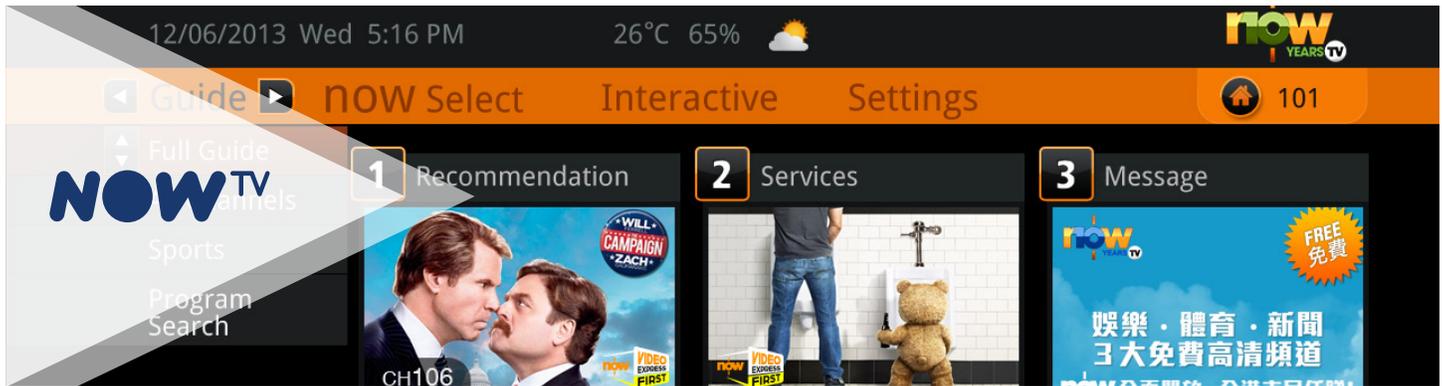


now TV

CASE STUDY



Challenge

Hong Kong's now TV, a broadcast service that includes more than 180 TV channels, as well as a variety of IP-based media-delivery services. The company, which is Hong Kong's largest pay-TV service provider, achieved a number of firsts in launching these services. First among these was its shift to HD broadcasting and its concurrent migration from MPEG-2 to MPEG-4 encoding.

In planning for this shift in its encoding technology, now TV identified a variety of requirements. The company's challenge was to select and implement an encoding solution that would, above all, provide high visual quality. Interoperability and compatibility with other components in the value chain were necessary to ensure smooth integration and operation. now TV's engineering team also considered factors such as the manageability of the workflow in providing 24/7 services to subscribers, as well as the reliability and resilience of the system in ensuring maximum uptime, even in the event of a crisis.

These same considerations were fundamental in the company's further infrastructure expansion, which was necessary to support the subsequent launches of VOD, IPTV, and OTT services. In addition to supporting now TV, the encoding systems and video infrastructure needed to support the IPTV services launched in 2010 and the OTT services launched in 2012 and delivered to 1.1 million subscribers across Hong Kong.

"Harmonic is way ahead of competitors in its solution offering for video technology. The company also is better at meeting customers' requirements."

Kevin Chu,
assistant vice president, broadcast engineering

SOLUTION AT A GLANCE

CHALLENGE:

Hong Kong's now TV wanted to establish a foundation for its new HD services by migrating to an efficient MPEG-4 encoding solution that not only would provide high visual quality, but also assure interoperability and compatibility with other components, straightforward management of a 24/7 media delivery workflow, and the reliability and resilience to ensure maximum uptime. The company took on a further challenge by initiating a video infrastructure expansion—designed and built according to the same requirements—that would support the subsequent launch of VOD, IPTV, and OTT services.

SOLUTION:

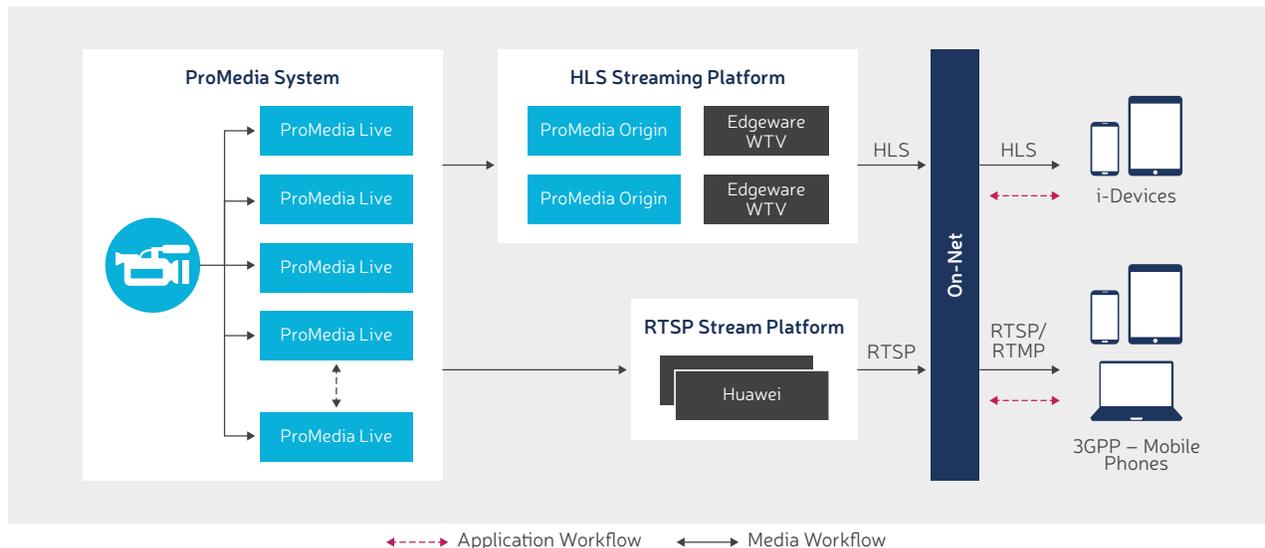
Harmonic first provided now TV with high-efficiency MPEG-4 systems that enable the output of more than 200 high-quality SD and HD broadcast channels, and then supplied the media company with an extensive video infrastructure incorporating more than half of the Harmonic product line. A full complement of Harmonic systems today powers now TV operations ranging from contribution and the headend to multiscreen content creation, playout, and delivery, all while providing high reliability, smooth interoperability, and consistent performance that enable the company to continue its rapid growth.

APPLICATIONS:

- Encoding of assets to digital library
- High-volume media storage
- Multiscreen encoding and transcoding
- Network management
- Adaptive bit rate delivery
- Contribution encoding
- Stream processing

“With our massive programming library, the entire workflow for our video servers must run smoothly,” says Keith Huang, vice president, product management, at PCCW—the holding company of now TV. We need to be able to air our programs on time and maximize our profit. Furthermore, it is critical that we ensure the workflow is interoperable with other products and that we have back up and can call for support if needed.”

PCCW Mobile



The Solution and Workflow

now TV became Hong Kong’s first HD broadcaster in 2006, when the company migrated from MPEG-2 to MPEG-4 and launched its HD channels using Harmonic Electra 5022/5400 and 7000 to output both SD and HD channels. now TV transitioned to the Electra encoders because it was unable to find any product to match the quality and efficiency of Harmonic’s MPEG-4 encoding products. Since then, now TV has not only transitioned all of its MPEG-4 encoding onto Harmonic systems, but also adopted the entire range of Harmonic video infrastructure solutions to power everything from contribution and the headend to multiscreen content creation, playout, and delivery.

“Harmonic MPEG-4 encoders were stronger technologically, making them far ahead of competitors’ offerings,” says Huang. “Harmonic’s leading video technology was a key driver, as were the company’s level of commitment and local support services.”

now TV has extended its installation of Harmonic systems to include a ProStream 1000 that supports IPTV services, ProStream 8000 digital generators for sports events, Ellipse contribution encoders, Streamliner VOD servers, and ClearCut Studio for VOD and OTT services. To support these services, the company also deployed streaming servers, database, storage, and library services based on Harmonic technology, including ProMedia Live, ProMedia Carbon, MediaGrid shared storage, ProMedia Origin, as well as NMX Management tools for network management.

In addition to ensuring encoding efficiency, the Harmonic systems at now TV allow VOD servers to stream live programs without any interruption and enable the company’s customers to record their programs in HD quality and view their programs without delay. The Harmonic technology deployed is interoperable both with now TV’s existing and new equipment, including the media company’s current and legacy set-top boxes. Management of the system with Harmonic’s NMX solution ensures smooth operation, which is essential, as the volume of video being encoded rises each month.

“Harmonic is way ahead of competitors in its solution offering for video technology,” says Kevin Chu, assistant vice president, broadcast engineering, PCCW Media. “The company also is better at meeting customers’ requirements.”

The now TV team worked closely with Harmonic to test the features and capabilities of the equipment and to ensure both a smooth migration to Harmonic systems and the implementation of a seamless workflow.

“It is important to us that our technology is always ready for the next great challenge,” says Huang. “Six years ago it was HD, then two years ago it was OTT, so we continue to keep up with where the world is heading. When there is a new wave of technology, or when the market is ready, we will be the first to engage in new services for our customers. Working with Harmonic, we share our business ideas and discuss how to facilitate a better overall workflow for our operations.”

The Result

The high encoding efficiency of the Harmonic systems has enabled now TV to grow through the continual expansion of its content library. now TV today boasts one of the world's largest commercial IPTV deployments, as well as the largest video library in Hong Kong. At the same time, the Harmonic video infrastructure as a whole has provided a simple, cost-effective model for performing and managing the many elements of the company's multiplatform media distribution operations.

"Harmonic products provide the reliability we require, as well as a straightforward upgrade path that ensures future-proof operation," says Chu. "Function collapse is another key benefit of our Harmonic installation. Using just one system, instead of several, to manage all key functions, we have simplified the video-delivery workflow while lowering our operations costs."

With a single platform supporting much of the media delivery workflow, now TV has been able keep its capital investment and maintenance costs low while offering an array of revenue-generating services. This approach is in line with the company's strategy for offering "TV everywhere"—content that can be viewed on the TV, PC, or mobile device, anywhere."

now TV has been able to grow exponentially as a service provider, and also to become a content provider supplying homegrown content to Thailand, Malaysia, Singapore, USA and Canada.



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