



MYTV
SUPER



**OTT SERVICE DELIVERS NEW TV EXPERIENCE
TO MORE THAN 5M USERS IN HONG KONG**

OVERVIEW

ABOUT MYTV SUPER:

myTV SUPER is an OTT service provided by Television Broadcasts Limited (TVB), one of the largest commercial Chinese programme producers in the world, providing TV entertainment and news to over seven million Hong Kong viewers. myTV SUPER is built and operated by myTV SUPER Limited, the digital media business unit of TVB. The service has succeeded in garnering over five million users in Hong Kong in April 2016.

CHALLENGE:

- ✔ Launch an innovative portfolio of online TV services
- ✔ Deliver a rich set of time-shift TV functionality and an innovative set of new personalized advertising insertion options
- ✔ Support subtitling in multiple languages, with a diverse range of character sets

SOLUTION:

- ✔ A self-built TV CDN, using Edgware TV servers, with 1Tbps streaming capacity
- ✔ Automated subtitling provided by Edgware's TV Repackager, integrated with technology from Cavena Image Products

RESULTS:

- ✔ Attained over five million users in less than two years
- ✔ Live channels and VOD content is in 4K, a better picture quality
- ✔ Provides an innovative range of new personalized advertising options, with frame accurate precision
- ✔ Highly scalable system, delivering 50 linear channels



CASE STUDY

ABOUT MYTV SUPER LIMITED:

myTV SUPER Limited is a digital media business unit of Television Broadcasts Limited. The company designs, builds and operates myTV SUPER, the leading OTT platform in Hong Kong. The service was successfully launched on 18 April 2016 and was delivered via a TVB branded set-top box and mobile application. It provides unrivalled picture quality, seamless catch-up, and a rich content offering consisting of TVB's terrestrial and thematic channels, as well as other international brand channels, together with a vast selection of VOD content from TVB's archive and third party content providers. Exclusive first-run local dramas and variety programmes are also available to strengthen the content offering. To facilitate consumer viewing convenience, myTV SUPER incorporates a three-hour instant rewind capability on TVB-branded linear TV channels.

CHALLENGE:

Traditional TV models are changing. Viewers in Hong Kong want to watch TV programmes anytime and anywhere on any device, at the highest quality. Therefore, myTV SUPER was launched to provide viewers with an innovative portfolio of online TV services.

myTV SUPER set out to offer a rich set of time-shift TV functionality, including catch-up, pause-live and start-over. It also offers an innovative set of new personalized advertising options. myTV SUPER has to support multiple languages with a diverse range of character sets, so it is important that the solution supports live subtitling which is able to display accurately across a wide range of screen sizes and devices. But most importantly, OTT services are delivered at high picture quality, i.e. in 4K UHD.

"Our customers expect the highest quality, even if they are watching videos over the Internet," Rex Ching, CTO of myTV SUPER Limited said. "We wanted to build a TV delivery platform that would deliver amazing quality, scale to millions of users, and enable us to offer innovative services."

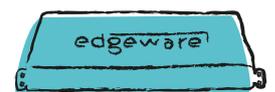
SOLUTION:

Rather than rent capacity on a generic public CDN service, myTV SUPER decided that the best way to meet its objectives was to build its own TV CDN, to control the delivery of its new OTT services. It selected Edgware to provide both its CDN technology and elements of its origin solution.

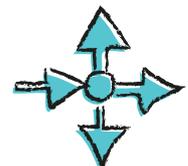
The TV CDN was built using 60 Edgware [TV servers](#), with streaming capacities from 20Gbps to 80Gbps each, controlled by Edgware's [TV Director](#) request routing software. This created a CDN with a total streaming capacity of more than 1Tbps. The TV servers are distributed across Hong Kong, so they can cache popular content and stream it in high quality directly to viewers, reducing the risk of network congestion. Some are located inside local ISP networks and some in rented data center rack-space with peering arrangements to ISPs. TVB also connects directly to some ISPs through its own private network and others via a high-speed link to the Hong Kong Internet Exchange.

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Rex Ching, CTO of myTV SUPER Limited



Edgware TV Server



Edgware TV Director



Edgware TV Repackager

The CDN platform delivers both live channels and VOD to multiple device types, including set-top-boxes, mobile devices and PCs, using HTTP OTT delivery.

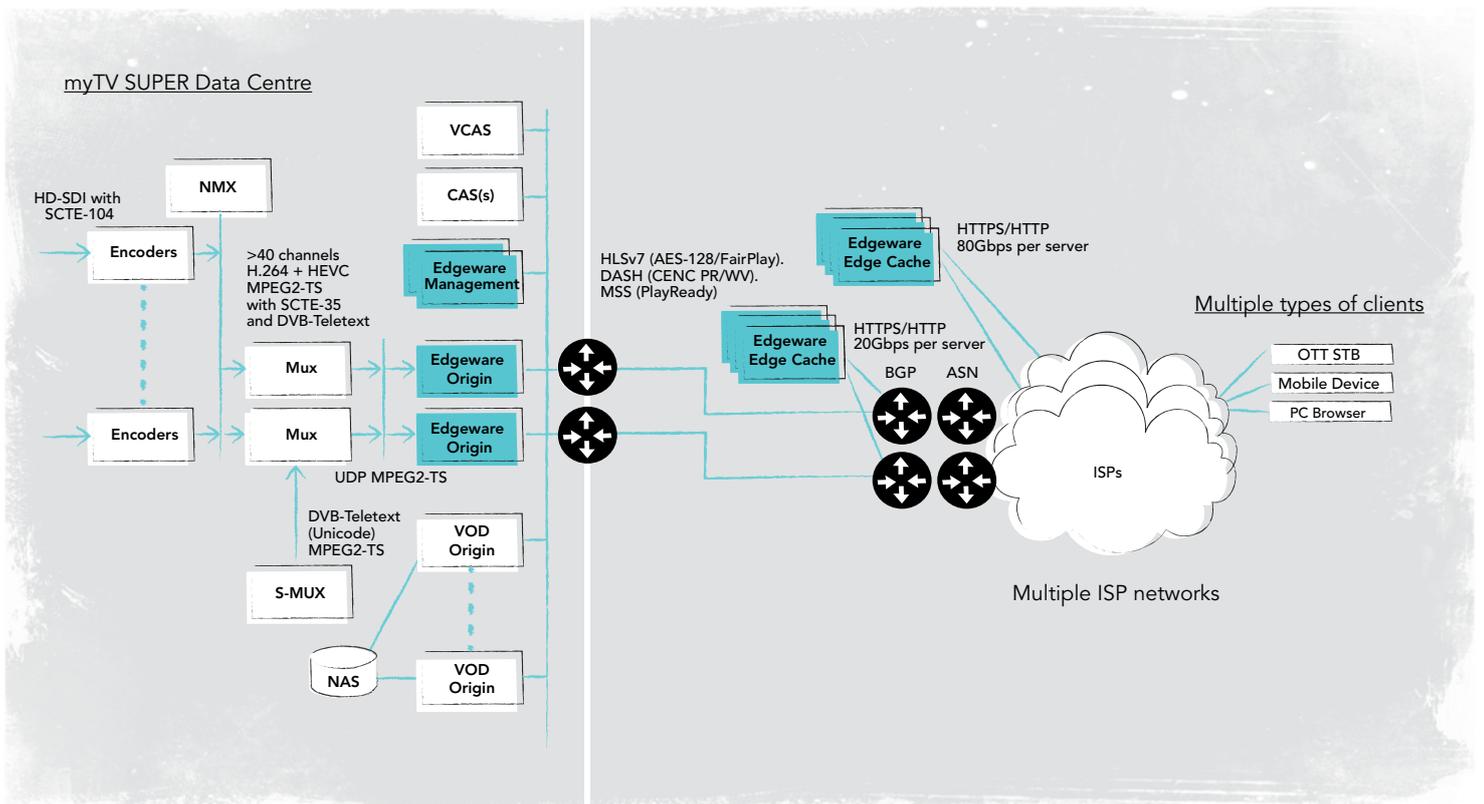
“Edgware’s technology allows us to build a single delivery platform that can deliver very high quality online TV for both our live channels and VOD library,” Ching explained, “and it allows us to offer extra services like time-shift-TV and personalized ads valued by both our viewers and our advertisers.”

At the origin, myTV SUPER deployed Edgware’s [TV Repackager](#), integrated with technology from subtitling specialist Cavena Image Products. Edgware’s TV Repackager takes in the EBU teletext in any language, then integrates the text into the video stream on-the-fly and repackages the stream into the format required by the client, whether that is HLS, Smooth or DASH, for example. The system supports any language, including Asian character sets, and renders high quality subtitles on any screen format.

THE TVB ECOSYSTEM

Edgware’s TV CDN and origin TV Repackager were integrated with several other vendors’ technologies to create a seamless solution for TVB, including:

- ✓ Encoding – Harmonic
- ✓ Subtitling – Cavena Image Products
- ✓ DRM – Verimatrix, Play Ready, Widevine, MPS (in-house)
- ✓ STB client – NexStreaming



RESULTS:

The new myTV SUPER service launched in time to offer 4K coverage of the Rio 2016 Olympic Games, and has since attracted over five million new users in less than two years.

"The live channels are in Full HD quality," Ching added. "We can offer three hours of time-shift TV on the premium channels and VOD content in 4K."

The system is highly scalable, delivering 100 live channels at broadcast quality and higher. 50 channels are delivered in each of two encoding formats – 1080p25 and 1080p50 high quality live video broadcast with HEVC codecs at 4 and 6Mbps – as well as 4K HEVC VOD. It provides broadcast levels of service stability.

myTV SUPER has also launched an innovative range of new advertising options, allowing companies to offer targeted ads to display during the program. It uses Edgware's client-side ad insertion technology, integrated with customer profiles from Google, to insert a U-shape banner around the show while it continues to play. It also allows advertisers to display personalized ads in the pause/play bar, as well as personalizing and adapting the ads played during time-shifted shows.

"Better quality TV attracts more viewers, which in turn brings more value to our advertisers," Ching explained, "and now we can offer them even more innovative and targeted advertising options. Using Edgware's client-side ad insertion enables us to deliver ads with frame accurate precision."

The origin solution enables live subtitling in multiple languages. Shows with a single source of unicode subtitles can now be subtitled automatically and displayed on standard clients and devices, whether they are in traditional Chinese, simplified Chinese or English.

"Building our own TV CDN delivery system allows us to take full control over our OTT services," Ching concluded. "We can scale better, increase the value to our advertisers and, most importantly, offer our viewers amazing OTT services."



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ABOUT EDGEWARE

Edgware offers leading operators and content providers the solutions to deliver modern TV services on a huge scale and at a low cost. Edgware's unique technology gives control and insight back to the content provider with an outstanding viewing experience.

Edgware is headquartered in Stockholm, Sweden, with a subsidiary in the US and offices in Hong Kong and Mexico. Edgware also has sales and technical sales support staff in several locations in Europe, Asia and North and Latin America.

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Let's make TV amazing again.

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