

IPTV in an Ethnic Niche Channel

James Careless on how ABS-CBN is using IPTV to bring Filipino expats a taste of home

About 9 million Filipinos live and work outside of the Philippines. To help them stay in touch with their homeland, Filipino broadcaster ABS-CBN has launched an international IPTV service called TFCko.

With the help of California-based content delivery provider StreamGuys, TFCko delivers up to three Philippine TV stations, two radio stations, and over 4,000 hours of video-on-demand (VOD) to subscribing Filipino expatriates' TV sets, using the Internet as its signal path. A web-based service branded as TFCnow! is available online.

"We launched our IPTV service more than a year ago, and so far we have about 27,000 subscribers in our three regional markets of Canada, Japan, and Europe," says Enrique Olives, ABS-CBN Global's director for business development.

"The potential market for ABS-CBN domestic programming is huge internationally.

ABS-CBN Global's end-to-end IPTV system starts in San Francisco, California, at ABS-CBN Global's satellite earth station. "We pull down the ABS-CBN satellite feeds from the Philippines," Delany says. "At this point, we encode the feeds into Internet Protocol (IP) data, then distribute them globally to our regional distribution centres in the US, Amsterdam and Tokyo."

The system mainly uses Dell PowerEdge 860 and 2950 servers for this work running Red Hat Linux. For VOD program storage, it uses 4 TB Dell PowerVault MD3000 media servers.

StreamGuys has co-located its server farms in Equinix's Internet Business Exchanges, to which many Tier One, Two and Three carriers are also connected.

This makes moving data from the relevant regional server farm in Amsterdam to its subscribers' ISPs straightforward and easy



load on the network. Meanwhile, Canadian cable TV provider/ISP Rogers is now imposing bandwidth caps. In this model, users are assigned a fixed monthly data limit based on their rate plan, then charged extra when this limit is exceeded.

"Bandwidth throttling is aimed at peer-to-peer file sharing," Olives explains. "However, it also affects services such as ourselves due to the high bandwidth required to deliver IPTV programming, by causing signal interruptions and delays."

In contrast, a bandwidth cap does not affect the actual signal flow, but it could discourage people from using IPTV due to its data rate requirement.

To deal with this problem, ABS-CBN Global is working with its IPTV partners to bring each IPTV channel feed down to 500-600 kbps. Still, there is little doubt that bandwidth throttling and capping is a challenge for any IPTV offering that delivers high quality video via the public Internet. By setting up regional server farms, the company has already reduced signal latency problems caused by trying to feed the world from one central location.

These challenges notwithstanding, ABS-CBN Global is pushing ahead; aggressively marketing its IPTV and online services to Filipino communities worldwide.

"Selling domestic content internationally offers huge potential," says Enrique Olives. "There are so many ethnic groups that live outside their homelands, who want to see programming from home. Delivering this content over the Web is a very effective way to satisfy their desires and turn a profit at the same time." ■

Selling domestic content internationally offers huge potential.

As the largest broadcaster in the Philippines, ABS-CBN is a natural choice for the best in Philippine drama, variety shows, comedies, movies and news."

The simplest way to understand ABS-CBN Global's IPTV network is to think of it as a form of Web-based cable TV. As with cable, ABS-CBN Global uses a wired backbone to move signals to its subscribers; the difference being that the signals travel over the public Internet, rather than a privately owned coaxial network.

At the receiving end, the subscriber uses a cable TV-style set-top box that sits between the Internet and his TV to access programming. "Our set-top box doesn't have a personal video recorder, but since ABS-CBN Global offers over 4,000 hours of its shows on demand, this is not a problem," says Kiriki Delany, president of StreamGuys. Sales of ABS-CBN Global programming and equipment is handled by local dealers in the company's target market.

The nuts-and-bolts of

to execute. "We typically move the signal down to the national level to each country's ISPs, with them providing the last mile to the customer," says Olives. "A typical IPTV channel requires about 700-800 kbps of bandwidth; something that is available to most people using today's broadband networks."

Challenges

Connecting new subscribers is not a big problem for ABS-CBN Global. "The system is pretty much plug-and-play," says Olives. "The customer simply arranges for service at his local dealer, takes the set-top box home, plugs the Internet into one side and the TV into the other, and they have access to our programming."

In contrast, bandwidth is a challenge; especially in countries like Canada where 'bandwidth throttling' and 'bandwidth caps' are taking place.

With bandwidth throttling, an ISP limits the amount of bandwidth a given subscriber has access to, in order to reduce traffic

