

azamTV

Case Study

Reducing the Cost of Adding New
TV and Radio Channels By Using
the Internet

Azam TV Rapidly Expands Content Contribution Across Africa Using VideoFlow's Products Over Unmanaged Networks

“We tried the VideoFlow DVP products and they worked perfectly first time – and has been working perfectly since, giving very stable video over unmanaged Internet connections.”

Mr. Sivajith Sadasivan,
Manager of Broadcast Media,
azamTV

Broadcast with Confidence over Microwave Links

As African countries upgrade from varied legacy media infrastructures to newer technologies, this evolution has resulted in a complex mix of content delivery systems with variable quality levels. This was one of the challenges facing azamTV, a Direct to Home (DTH) satellite TV service provider in Tanzania, which needed a way to ensure reliable, high-quality live content contribution over unmanaged networks.

azamTV's live video feed from the island of Zanzibar to Dar es Salaam on the mainland is based on microwave radio links. Despite using primary and backup radio links to ensure uninterrupted service, the video stream suffered from errors over both radio links. The root of the problem was the sensitivity of microwave technology to temperature changes and weather conditions, which degraded the video quality and caused a steady stream of customer complaints.

“The bandwidth fluctuations of the radio link were causing us major headaches with frequent loss of quality and picture breakdown,” explained Sivajith Sadasivan, Manager of Broadcast Media at azamTV. *“This was just not acceptable as customers are paying for content.”*

Transforming Poor Quality Connections into Reliable Broadcast TV

To address these quality issues, azamTV decided to deploy VideoFlow's Digital Video Protection (DVP) product, which ensures high quality, 24/7 live video delivery over unmanaged, inexpensive networks, including the public internet. VideoFlow's Emmy® award-winning packet recovery technology recovers 100% of lost packets with the lowest bitrate overhead and delay, ensuring picture-perfect video.

azamTV deployed a pair of DVP units – a "sender" at the Zanzibar site and a "receiver" at the Dar es Salaam NOC - connected over two microwave radio links. The DVP sender duplicates the input stream and sends it over both links at the same time. The hitless stream redundancy feature in the DVP receiver maintains high video quality even when one of the links fails. The live content is then sent to France, where it is uplinked to a satellite for azamTV's forty-channel Direct to Home (DTH) service in Africa.

Since deploying the VideoFlow DVP in Zanzibar and Dar es Salaam, azamTV's video quality issues have disappeared, enabling its viewers to enjoy live video content 24/7. *“This works perfectly in practice,”* explained Balaji L Nagalgave, IT Manager at azamTV. *“If one link goes bad, it switches seamlessly to the other link with no interruption to the video.”*

In fact, azamTV was so impressed with the results of the Zanzibar contribution link to Dar es Salaam that it decided to expand its cooperation with VideoFlow. azamTV is now using VideoFlow DVP technology as its standard for channels contribution from the rest of Africa as well.

VideoFlow's "Fit and Forget" Approach to Adding New TV Channels

To drive business growth, azamTV sought to add new TV channels from a variety of African markets to its service package. From a technical standpoint, this was a complicated, time-consuming, and often costly process due to the lack of uniformity in each country's transport infrastructure. Furthermore, a solution selected for one site could not be easily replicated to another due to the disparity of available infrastructure technologies. These factors slowed the development of azamTV's TV market in Africa.

The 'fit and forget' approach used to connect Zanzibar to Dar es Salaam was developed by VideoFlow and azamTV into a 'cookie-cutter' solution, which could be easily replicated to other markets. Using this approach, azamTV has been able to accelerate the expansion of its content contribution network. The first phase included adding eight new TV channels from Uganda to azamTV's NOC at Dar es Salaam over fiber. It subsequently deployed VideoFlow-protected links from eight additional countries include Kenya, Rwanda, Malawi, and Mozambique. Since that time, azamTV has continued to roll out additional VideoFlow-protected links to extend its offering in the African market.

"One of the biggest challenges of adding a new TV channel to the azamTV network used to be determining what kind of links were available for the video stream and how reliable they were. With VideoFlow DVP, this is no longer a problem because we now know the answers to most technical questions," said Nagalgave.

VideoFlow DVP ensures link reliability regardless of the technology used to transport the video stream -- from Internet to Ka-band satellite to microwave to leased line. This is the key to delivering the perfect video quality required to maintain azamTV's brand image.

"VideoFlow's DVP speeds up the deployment of new connections considerably and makes my life much easier. I know that whatever kind of link, VideoFlow will make it work perfectly and reliably," added Nagalgave. *"This is very important as azam has built its success and brand on delivering quality broadcasts, and viewers expect that the quality of their favorite programs that they watch will be no less than perfect."*

Results and Benefits

By using VideoFlow's DVP, azamTV has met its technical and business goals:

- **High reliability live broadcast** – Emmy® award patented packet recovery, along with bitrate adaptation technologies, ensure reliable live broadcast over unmanaged networks, including microwave links.
- **Compelling ROI** – Revenue streams from new TV channels more than cover the cost of DVP products and low-cost unmanaged connections.
- **Reduced operational costs** – Using standard Internet connections rather than expensive leased lines.
- **Fast time to revenue** – "Fit and forget" deployment model reduces complexity and accelerates azamTV's presence in new markets.
- **Enhanced business agility** – VideoFlow DVP is interoperable with any transport link technology, including the internet, leased line, fiber, satellite, and microwave.

About azamTV

azamTV is part of Azam Media Limited, one of the Bakhresa Group of companies (www.bakhresa.com). Bakhresa Group is one of Tanzania's leading Industrial Houses with a turnover of \$600 million and over 5000 employees. Its business interests extend from food to transportation and from media to real estate.