

## TESTIMONIAL

# Satellite Service Provider Deploys WAN Optimization to Improve Availability & Performance



Headquartered in the United Arab Emirates, Horizon Satellite Services (HorizonSat) is a satellite service provider serving the Middle East, Africa and Asia. They operate teleports in Germany and France, have an IP backbone network, and utilize over 12 satellites – from 12 degrees west to 75 degrees east. And, with a state-of-the-art Network Operations Center, HorizonSat is able to maintain uninterrupted transmission and 24/7 technical support.

HorizonSat offers a broad range of services, specifically:

- **Network Services** – WAN, IP trunking, backbone connectivity and VoIP/GSM backhauling via a redundant Tier 1 backbone and teleport infrastructures with powerful satellites to support the communication needs of telcos, ISPs and large corporations
- **Media & Broadcast Services** – Satellite capacity to support the transmission of SNG, entertainment and other programming for broadcasters and DTH platforms
- **Government Services** – Space segment & mission-critical communication solutions for government sector
- **Turnkey Services** – Consultancy, design, integration & provisioning of the space segment, hardware and software for comprehensive solutions for corporate networks, governments and defense contractors

## WAN Performance

As HorizonSat continues to expand offerings to customers in their service regions, they remain committed to delivering quality end-to-end solutions. Their customers require reliable and economical satellite connectivity for network, media, broadcast and government services. As such, HorizonSat needed to address some key considerations that could impact overall service levels when employing satellite-based transmission:

- Latency – can be challenging for the transmission of web traffic, resulting in poor performance, slow browsing sessions, and dissatisfied users
- Bandwidth utilization – given the cost and availability of bandwidth, it is imperative to reduce unnecessary traffic to deliver more data over satellite links

After evaluating other application delivery and network optimization solutions, HorizonSat selected Comtech EF Data's Stampede FX Series WAN optimization to enhance their satellite availability and performance.



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## WAN Optimization

The Stampede FX Series combines both application delivery controller (HTTP outbound optimization) and WAN optimization controller (TCP bi-directional optimization) capabilities. The FX Series manages application interactions and applies coordinated acceleration and optimization techniques within satellite networks.



Traditional WAN optimization solutions require hardware at both ends of the network, which can be difficult to deploy and financially unfeasible. The Stampede FX Series combines one-sided application delivery and two-sided WAN optimization into a single platform with the added flexibility of unparalleled remote side WAN optimization options.

HorizonSat deployed the one-sided solution, the FX Series ADC, at their teleport in Germany to optimize outbound traffic for their customers. Residing at the hub, the FX Series ADC provides connection management to offload web and application servers, outbound JPEG image optimization, outbound GZIP compression, caching and URL access control.

Transparent to their customers, HorizonSat is utilizing several of the FX Series ADC's key WAN optimization features to address latency and bandwidth utilization considerations:

- Caching – Maintains copies of routinely accessed data to eliminate unnecessary requests to web and application servers over satellite links. It acts as an intermediary from end users requesting content (such as a file, web page or other resource) from servers. HorizonSat is utilizing less bandwidth and improving network performance with caching.
- GZIP Compression – Automatically compresses data sent to standard browsers. GZIP compression removes non-essential information from data being moved from one location to another, and then the browser reassembles the data to its original form after the transfer is complete. HorizonSat is using GZIP compression to reduce the payload size and deliver more data across the satellite link.
- Image Optimization & Smoothing – Reduces the amount of data required to represent an image without significantly altering the visual perception. Smoothing reduces the high frequency components or the sharpness of an image. A moderate amount of smoothing can significantly reduce the amount of data, while maintaining a usable image. This feature is helping HorizonSat improve network performance.
- TCP Connection Management – HorizonSat is blocking the delivery of significant amounts of unauthorized traffic based on the FX Series' unique way of handling TCP connections.



Leveraging technologies unique to the Stampede FX Series, HorizonSat is able to dynamically reduce outbound satellite traffic by over 30%. By keeping pace with technological breakthroughs and innovations, implementing new technologies and diversifying their offerings, HorizonSat is optimizing the utilization of satellite capacity and enhancing their customers' experience.

## More Information

Our WAN optimization technologies can help you address increased bandwidth requirements, rising space segment costs and capacity shortages. To learn more about how your network can benefit from our technologies, visit [www.comtechefdata.com](http://www.comtechefdata.com).



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