Volvo Ocean Race Uses Live Streaming Configured by Sling Broadband

Held every three years, the Volvo Ocean Race is an extreme sailing race testing the limits of its racing boats and crews. The Volvo Ocean Race 2011-2012 began in Alicante, Spain, and had ten stopovers worldwide, with its only North American stopover in Miami, Florida, USA. With international competitors striving to sail an arduous race of over 39,000 nautical miles, the Volvo Ocean Race has a worldwide audience that demands multimedia content in real time.

CHALLENGES

The Volvo Ocean Race hired Logistics Management Group to handle the logistical and production components of its Miami stopover. These were the connectivity goals:

- Wireless capabilities for the local venue that featured live streaming, multimedia, and interactive exhibits
- Reliable voice and data for the entire sailing port and two offsite locations in downtown Miami
- Wireless coverage of the racing, including live streaming to Fox Sports for live broadcasts
- Race telemetry and rich media content for an offshore MPLS service, which transmitted all content worldwide

With only two months to prepare, Logistics Management Group faced formidable challenges and brought onboard Sling Broadband, one of the largest wireless Internet service providers in North America, to achieve the connectivity goals.

"The network was incredibly reliable, and the client expressed that they were very satisfied."

Maria Dominguez, Logistics & Production Manager, Logistics Management Group

Through pre-production, network installation, and live coverage of the in-port race, Logistics Management Group and Sling Broadband worked together to fulfill the demands set forth by the Volvo Ocean Race.

Monitors display multimedia and live streaming
MPLS SERVICE IMPLEMENTATION

Despite Volvo Ocean Race’s request for live streaming, previous ports were not able to provide real-time streaming of the in-port races; they had to record the races and stream hours later. Miami would be a different story.

Sling Broadband used a variety of Ubiquiti products to support the Volvo Ocean Race:

- Rocket radios paired with RocketDish™ or Sector Antennas
- NanoBridge® and NanoStation® devices
- PowerBridge® devices
- PicoStation® devices

Racing coverage required a Point-to-Point (PtP) link with two segments:

- A helicopter flying over the ocean to the top of a building (the building was set up to auto-track the helicopter)
- The building top to a central location, where the video was encoded and then streamed live

To live stream the entire in-port race, Sling Broadband set up an MPLS circuit on top of two Rockets. One challenge of Ethernet over MPLS (EoMPLS) was that the MTU was not large enough; there were problems with packet fragmentation. Sling Broadband used Ubiquiti’s airOS to increase the MTU size, preventing packet fragmentation, latency, and jitter. The end result of this complex, technically challenging endeavor was success: Sling Broadband pushed more than 60 megabits per second of multicast traffic with 802.1Q encapsulation over an EoMPLS circuit.

“Using Sling Broadband and Ubiquiti gear, we were able to allow the Volvo Race to be seen live around the world without any issues.”

Gadi Hus, CTO and Co-Founder, Sling Broadband

POTENTIAL FOR FUTURE COLLABORATION

Amongst various large-scale events, Logistics Management Group produces the South Beach Wine & Food Festival and is eager to work with Sling Broadband again. Meanwhile, in addition to special events, Sling Broadband uses Ubiquiti products to provide service to over 9,000 customers in over 30 regional markets, encompassing over 5,000 square miles of wireless metropolitan coverage.