

Absa Cape Epic connects the world's premier mountain bike race to global fans



Client profile

The Absa Cape Epic is part of the Ironman Group's Epic Series — is the most televised mountain bike race in the world and the only eight-day mountain bike stage race classed as *hors catégorie* (uncategorized) by the Union Cycliste Internationale (UCI). It's a highlight on professional racers' calendars and also attracts passionate amateurs who want to test themselves against the environment and the world's best mountain bikers.

When a remote mountain bike race needed to connect to the world, Absa Cape Epic turned to NTT DATA and Cisco. Together, they built a secure, high-speed network that powered live-streaming and connected riders, officials, medical personnel and the media.

“

NTT DATA provides world-class connectivity in the middle of nowhere. Working with the same partners helps make the events grow and be a success. I don't need to ask about anything because it's just being done. As organizers, that allows us to focus on helping the partners get better returns, through social media and through marketing.”

Marc Erasmus

Partnership Manager, Absa Cape Epic

Business need

It takes a connected village to support a mountain bike race

"The Absa Cape Epic is the pinnacle of mountain bike stage racing. In March, teams of two compete in the Western Cape and cycle over roughly 600 kilometers with 16,000 meters of climbing. The teams travel between three different race villages and five different venue sites," explains Marc Erasmus, Partnership Manager at Absa Cape Epic. "Over eight days, the racers achieve something remarkable."

The race has reached its 20th year. The route changes each year, keeping the race remote, untamed and unpredictable. The weather can shift from extreme heat to pouring rain within hours. And the race goes on. The wild and untouched scenery is part of the beauty of the race, but also poses challenges. Most parts of the route lack infrastructure for communication — even basic mobile signal is unreliable.

"The event could happen without technology, but it would be in complete isolation from the outside world," remarks Marc Jessiman, Vice President of Technology Solutions at NTT DATA. "However, when you look at the logistics associated with putting on a world-class event like this, technology makes a massive difference in terms of bringing that connected experience together."

To keep the race running smoothly, the Absa Cape Epic needed a way for riders, UCI officials, the operating center, organizers, caterers, medical personnel and the media to communicate with each other in real time.

Solution

Reliable infrastructure for a one-of-a-kind race

We use a combination of wired and wireless infrastructure to connect everything from mountain bikers on the race routes to the remote race villages to the fans.

The Wi-Fi is at the heart of the village. Riders only need to log in once to remain connected for the full eight days of the race. The Wi-Fi extends from the core race village to the campervans and the tents to the media trucks. The crew all use instant messaging to communicate. "A lot fewer radios are needed because we all use the great Wi-Fi connectivity," says Jessiman. The network supports anything from IoT devices that track vehicles and riders to devices that help with live media broadcasts. This allows everyone to share the excitement of the race on social media.

The area is too remote for fans to mountaineer their way to experience the action. Instead, fans experience the action with footage from helicopters, ebikes and traditional camera footage. Ebikes let experienced riders follow the racers without getting in their way, and all the footage is streamed in real time. The network also allows riders to share their own experiences.

Any break in connectivity can endanger the racers, since the race organizers and medical personnel must know where they are to assist them. Downtime would also detract from the fan experience of being amid the action.

We therefore use Cisco ThousandEyes to give us insight into our wide area network (WAN) that connects the race area. It enables us to identify any challenges in the network fast and send technicians to resolve the problem before it affects the race. We use Cisco Catalyst Center to better manage our large area networks (LANs) and also use the tool's AI capability to help us quickly detect and respond to network challenges.

Outcomes

Experience the thrill of mountain biking with advanced connectivity

The Absa Cape Epic takes place in the untamed wilds of the Western Cape. The solution provides connectivity with 100% uptime to the outside world. "Riders have perfect Wi-Fi connectivity at the race village from the day they arrive until the last day, so they can connect to their families and friends," says Erasmus. "Broadcasters upload about 100GB data a day to get the stories out to the world. We live stream every single day."

Enhanced viewing experience

Fans can watch the race in real time and track the riders' progress along the route. They can see where riders finish and their current rankings, making the viewing experience more immersive and connected.

Improved safety

The technology enables organizers to know the exact location of racers on the route. This helps them assist riders who encounter difficulties and send medics to their location promptly. The mobile race hospital is connected to the Mediclinic hospital network, ensuring world-class field triage and aftercare treatment.

Real-time support

The NTT DATA team provides on-ground support, swiftly resolving technical issues. Additionally, experts can help from anywhere in the world if required, ensuring prompt problem-solving.

Supporting the community

"Sometimes the only space available is a school field or university campus and we often need to tap into their existing networks," says Erasmus. Once the race packs up and leaves, that infrastructure is then left there for the use and the benefit of the schools in those communities."

“ Absa Cape Epic takes place in the most secluded and remote parts of the Western Cape. To run a successful event, you need secure, reliable and high-bandwidth connectivity. When riders brave the untamed, you really need a partner who can provide you with that secure, reliable, high-bandwidth solution to connect all your users to the outside world.”

Marc Jessiman

Vice President, Technology Solutions, NTT DATA

Visit nttdata.com to learn more.

NTT DATA is a \$30+ billion business and technology services leader in AI and digital infrastructure. We accelerate client success and positively impact society through responsible innovation. As a Global Top Employer, we have experts in more than 70 countries. NTT DATA is part of NTT Group.

