STARLINK / 4G FAILOVER & BONDED / POINT TO POINT WIRELESS

PREPARED BY
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PROBLEM

Estrella had 2 sites, roughly 1km from each other that both required data connectivity and communications. They are in the middle of nowhere with the closest Telstra tower just over 40km away. At the time they were using a dongle attached to a 20m cable and Yagi antenna to get the bare minimum of connectivity at 1 site. Estrella's aim was to improve efficiency and safety at both sites with a reliable and fast solution.

It was clear from the start that Qbit knew their stuff, taking the time to research all the options we had available, and presenting us with the pros and cons of each solution. We approved their recommendation of Starlink Satellite, bonded with 4G, and they were also able to beam that connection to a 2nd site 1km down the road from the office. It was installed on site within a couple of weeks, and we couldn't be happier with the incredible speed and reliability of the solution. It's dramatically improved working conditions and safety onsite. I wouldn't hesitate to recommend John and the Qbit team, they were highly professional, and a pleasure to deal with.

Steve Warriner
Exploration Manager
Estrella Resources Ltd

SOLUTION

Qbit researched several options for Estrella's specific location. These options included 4G, Satellite NBN, Starlink, Oneweb & Skymuster. We presented all viable options to Estrella, but they went with our recommendation for Starlink Satellite in a bonded and failover configuration with 4G.

Starlink would give the maximum throughput at the best price. However, there are still gaps in the Starlink network, and as we saw earlier this year, a solar flare can take out 40 satellites in a matter of minutes, and it's a lengthy process to redeploy. Thus, we used 2 x 12dbi high gain mimo antennas pointed at 2 separate Telstra towers, both approximately 40km's away to fill in the gaps in service. Although the speeds drop significantly in the limited times the service fails over to only using 4G. There is enough speed and reliability to continue working online, video conference on teams, and have a reliable communication channel to the outside world.

On top of this we then used a point to point wireless system to beam this internet connection to the 2nd site 1km away. At both sites we installed a wireless access point to create a Wi-Fi network around the site.

A cloud firewall was deployed to protect Estrella's assets, and remove the requirement for a physical firewall onsite.

BENEFITS

The Estrella system is pulling up to 120Mbps through Starlink which has dramatically increased efficiency and employee satisfaction on site. The high gain 4G antennas are also pulling down enough bandwidth (despite the distance) to ensure continuity of service, which in turn ensures safety. The addition of the point to point wireless system and access points has given them coverage and a Wi-Fi network at both locations, once again increasing efficiency and safety at both sites.

The total investment for this solutions was under $15K fully installed.