

# SD-WAN CONNECTIVITY CASE STUDY

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*When an exploration site for a gold producer required more bandwidth to service a camp and it's employees they engaged Qbit.*



## PROBLEM

One single 3G/4G booster was not able to produce the bandwidth required to run a site office. With few connectivity options available in the area they were looking for a solution that could increase bandwidth without the expense or latency issues associated with jumping to Satellite. They were also relying on an unreliable VPN connection to head office in Perth which was causing some major headaches for the onsite staff.



## SOLUTION

Install 4 x 12dBi Dual Wideband Log Periodic MiMo Antennas. We pointed three of these West towards Optus, Telstra and Vodafone and one East towards a second Telstra connection. As the Optus Telstra and Vodafone connections to the west were all on the one tower, we chose to point one east to another tower for redundancy. We then fine-tuned the antennas to get the best speed we could from these connections.

We brought the cables into the site office and connected them to 4 quality 4G modems and then into an SD-Wan device that bonded all four together. The SD-WAN device has 5 ports, so this allows us to attach other internet connections as they become available in the area. (For example .. Low Earth Orbit Satellite when it becomes available) These bonded connections feed into a Sophos firewall that also gave WIFI coverage in the site office and surrounds. All of this equipment was stored in a small wall mounted rack.

We also installed a small SD-WAN device in the Perth office to connect the two sites. This allowed us to decommission the unreliable VPN by replacing it with a secure SD-WAN to SD-WAN connection.

