

Frente goes the Distance with Cambium Networks

"We chose
Cambium's solution
because it allows
us to offer services
better aligned with
our client's needs,
without having
to replace their
existing equipment."

- CARLOS MENDES,
TECHNOLOGY
DIRECTOR, FRENTE

Overview

FRENTE IS AN INTERNET SERVICE

provider in the north-central region of Brazil's Goiás province, serving the city of Goianésia's business and residential customers. Frente needed a solution that expanded coverage beyond the reach of



their optical cable. Previously, their solution could only support 2Mb plans, but their clients were demanding throughputs of 5Mb or more. Popular services like Video On Demand were limited or unavailable with their existing system, and fiber optical coverage was unable to keep pace.

To deliver last mile bandwidth expansion within budget, Frente targeted solutions that could leverage existing subscriber infrastructure, reducing upgrade costs and accelerating the new solutions's deployment. The wireless expansion was expected to offer higher bandwidth and greater stability, allowing the same radios clients were already connected to deliver the services offered over optic cable.

Solution

FRENTE HAD HISTORICALLY BEEN DISAPPOINTED

with other vendors' equipment, which allowed them to connect clients wirelessly, but offered generally low customer satisfaction. According to Technology Director Mendes, "Cambium Networks Elevate™ came to solve this problem. With Elevate, we were able to deliver 5-10Mb plans in a massive way, where before we could only get that amount via optical fiber."

Around the periphery of the area covered by the fiber optic infrastructure, Frente's Cambium upgrade used exclusively ePMP 2000 radios with beamforming antennas in a very simple implementation. "We used four sectors for each site, covering 360 degrees. Each sector will allow 50 Elevate users to connect simultaneously, 75% of them with 5Mb plans and the rest of them with



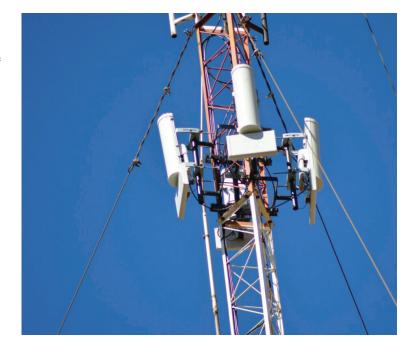
10Mb plans "Describes Mendes, "So far, we've installed 20 AP radios, and we're planning to continue expanding with one additional POP (Point of Presence - where devices from different networks form connection) per month, each supporting another 4 sectors."

Results

"THE NEW LINKS' ROBUSTNESS, EVEN AT HIGH

interference scenarios, is the defining characteristic of the upgraded network. Definitely no other equipment operates as well as it does in extreme conditions," says Mendes.

Frente has 600 users connected via Elevate today, and continues to expand. Their growing customer base enjoys uninterrupted service that supports desirable apps such as Netflix and other streaming multimedia platforms. They plan to continue installing Cambium solutions throughout the rest of their coverage area unreached by fiber, gaining customers they couldn't convert from ADSL with the fiber network that offered no competitive advantage.



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