

# Infinet Wireless solutions are integrated by a major international telecommunications company



**Gtd Colombia** has invested in an Infinet radio-based wireless technology system to improve the Internet experience of its customers. End users will benefit from improved capacity and latency by connecting through Point-to-Point (PTP) and Point-to-MultiPoint (PTMP) radio systems for Internet and Cloud services.

The company has its own communications network with more than 600 installed links and fiber optics to offer corporate services to more than 300 clients from different sectors, including banking, food industry, IT services, the cloud and apps for Android and Apple.

Gtd Colombia offers IT services throughout the country, providing high availability of Internet, data

transmission, DataCenter, IP telephony, and WiFi networks for public access, business and Telepresence.

# **Enabling growing operations**

Gtd Colombia was searching for a recognized brand of radio devices offering high stability in wireless communication channels. This was crucial to guarantee the availability and performance of their work, especially in conditions such as rain or extreme humidity which characterize the geography of the company's areas of operation. Safety was also a key issue, due to the high probability of electric shock when using unsuitable solutions in these environments.

The company was looking for a solution that can manage the often variable noise

levels of the radio spectrum, in the sense that the capacity of the service and availability is not affected.

Gtd. Colombia also needed a strategic ally that offered the best wireless solution for their needs so as not to create difficulties for customers during the challenge of continued growth in its radio infrastructure.

Therefore, the company worked on an approval strategy to demonstrate that Infinet Wireless' solutions are the best option to achieve lower latency and continuity according to needs. An Infinet-designed network was adopted that would respond under the critical latency conditions that were occurring, as well as displaying good connectivity, reliability, and resistant technology that works in extreme locations.

### Solution

Gtd Colombia already had installed links based on Infinet Wireless' XG1000 and Quanta 5 solutions in various projects in the country. Following this, it started the official approval process with point-to-multipoint solutions with the idea of expanding its capacity to deliver greater bandwidth with minimum latency.

Following an approval process to ratify Infinet Wireless PTP solutions, clients were able to use the solutions to deliver speeds ranging from 200 to 900 Mbps, depending on the model in use. Subsequently, the PMTP approval process, enabling users to achieve capacities of more than 50 Mbps simultaneously in each connection, in a base station, as well as remote points with a high level of interference, which is extreme for a typical PTMP application.. During the test, the maximum real bandwidth in the Gtd Colombia network could reach a speed of about 150 Mbps with a noise level (-70 dB) using the base station and three connected subscribers.

The project was led by Avantec, an authorized Infinet Wireless' distributor in Colombia and Mexico, a value-added wholesaler, with more than 15 years of experience in the market. It is a company specialized in wireless communication solutions, IP video, business intelligence and infrastructure.

**Alejandro Mendez**, Coordinator of Platforms Core at Gtd Colombia said:

"We value our partnership with Infinet Wireless as a radio equipment supplier due to its reputation in the market, its experience, the maturity of its solutions, and the local support it could provide to us. It is noteworthy that our company has been a local telecommunications service provider for more than 20 years, with a long history of using other radio brands and has allowed us to compare performance in equal scenarios with a controlled OPEX. During the tests, the Infinet links have shown the best results according to our objective criteria"



### Results

With this implementation in the Gtd network, customers Colombia noticed a significant improvement in terms of service performance, in particular latency time reduction in relation to the last mile network segment. This is of utmost importance to sustain and grow the company's cloud-based ΙT offering, and to demonstrate that radio transmission is still in place, even when demands there are higher on communication channels.

"There is no doubt that the manufacturerintegrator-customer team will continue to grow under the premises of being close, agile and reliable. We thank the Avantec team for its support as an intermediary who has found a wonderful ally in that will allow us to maintain this fruitful relationship for a long time. We have technical support round the clock to complete successfully the approval process and select the Infinet brand as our solution in "point to point" and "point-tomultipoint" systems", Alejandro Mendez added.

During the approval process, the behavior of the equipment could be evaluated with an Infinet point-to-multipoint system running tests in real time, without disrupting the users. The results were favorable, achieving a latency of no more than three milliseconds for each client, unlike other rival wireless solutions.

Infinet managed to offer half of the latency thanks to which Gtd, working with its clients, strengthened its relationship and also received better service quality with measurements of technical parameters and user satisfaction.

### **About Gtd**

Grupo Gtd is a Chilean company consisting of several business units, in Chile, Colombia, Peru and Spain. For more than 35 years in the Telecommunications market, it has focused on providing technical solutions and services of high quality and reliability, standing out for the close relationship it establishes with its clients. Gtd Colombia, has a presence in several important cities in the country and has the first TIER III certified DataCenter of the Business Group in Colombia.

# **Challenges**

- Stable radio equipment capable to withstand large changes in environments.
- Improve latency and continuity of service
- Improve capacity in the face of high levels of spectrum noise
- Increased availability
- The tests were carried out with real traffic and customers did not notice and disruption.

## **Solutions**

- InfiMAN 2x2 R5000-Qmxb
- 19 dBi and 23 dBi Smn subscribers
- XG1000
- Quanta 5 Point-to-point

### **Customer benefit**

- Transverse homologation process with point-to-multipoint solutions
- Gtd connectivity network has low latency

- Covers from 2.5 km to 25 km of the urban environment with high noise level
- A reliable and future-ready network
- Cost-effective solutions, with proven scalability to meet future requirements and applications