Cambium Networks™

WSP Telecom: Connectivity Needs are Paramount

"We can not only maintain our customer base, but also increase our coverage and customers, always satisfying users and meeting their requirements for capacity and stability."

- JOEL PRATA, WSP WIRELESS TECHNICAL SPECIALIST

Overview

WSP TELECOM OF SANTARÉM, BRAZIL specializes in the deployment of local and long distance networks using wireless solutions and fiber optic technologies, providing telecommunications services to companies of all sizes. When increasing demand began to impact service to several cities in their network, WSP implemented Cambium Networks solutions to both upgrade their existing system and establish a more powerful platform for expansion in the states of Pará, Rondônia and Mato Grosso.

Challenge

WSP TELECOM'S NETWORK WAS RAPIDLY APPROACHING ITS SCALABILITY LIMITS, and users were noticing. According to WSP Wireless Technical Specialist Joel Prata, "Our network is huge; we were losing customers because we couldn't provide stable service without interruptions."

With their existing towers at capacity for CPE (customer-premises equipment) due to interference between APs (access points), and unable to add more towers due to both the cost of maintenance and the risk of spectrum congestion, WSP desperately needed to find a higher performance alternative. Attempts with other vendors hadn't yielded the desired results. "We had some experience with other suppliers," said Prata. "In theory, they guaranteed good performance, but in the real world it didn't work like that. Other brands don't support high CPE number per AP, reducing our network capacity, generating high indices for our technical support team, and preventing us from delivering large bandwidth plans - frustrating users and us."

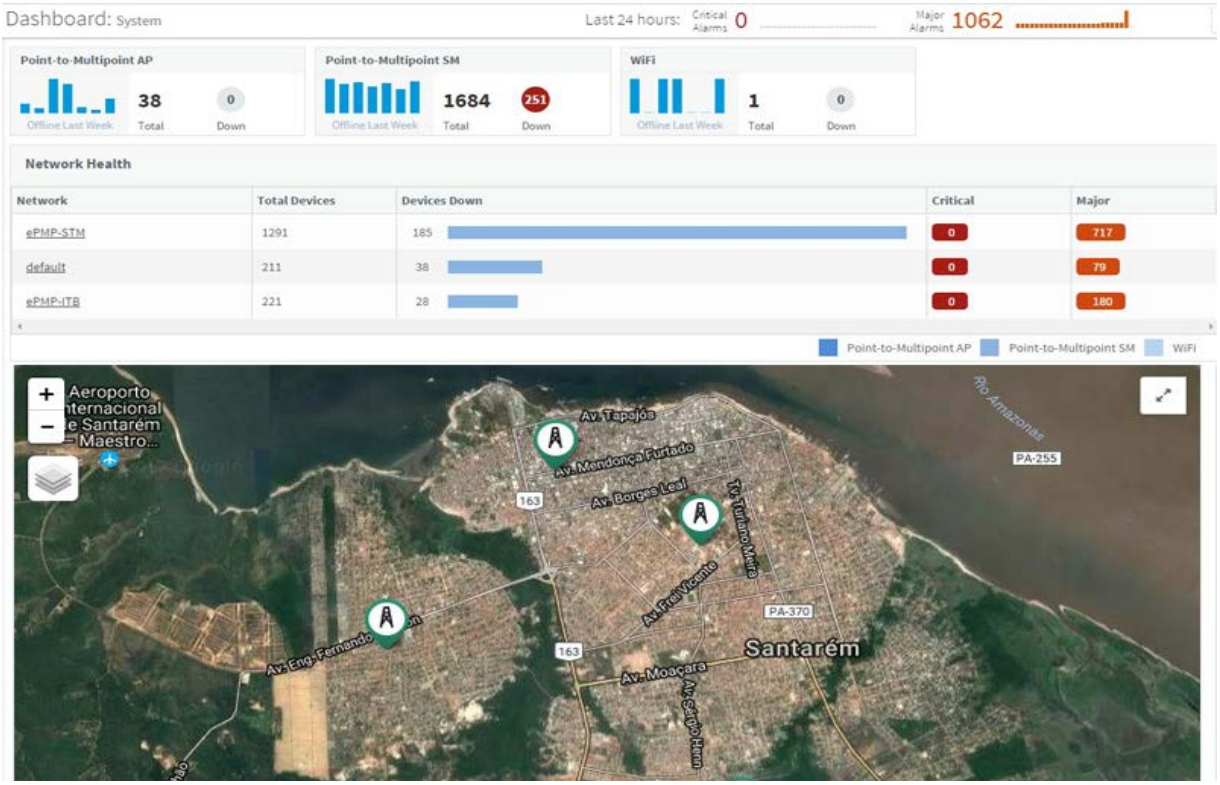
Requirements

WSP'S IDEAL NETWORK WOULD SURPASS THE ABOVE CHALLENGES, RETURNING reliability and offering increased bandwidth plans to all markets, including residential customers with limited purchasing power. Interoperability of the new solution with the previous deployment

was essential to avoid sacrificing WSP's investment in their existing hardware. Additionally, centralized network management would enable WSP to better control their still-growing network, ensuring quality service with minimal technical support for users, reduced maintenance costs for operators, and streamlined administration of devices and data.

Solution

WSP INTEGRATED CAMBIUM NETWORKS' ePMP™ 5 GHZ WIRELESS broadband technology and PTP 800 6 GHz licensed microwave solutions in five cities in the states of Pará, Rondônia and Mato Grosso, with 36 APs supporting over 3,000 Subscriber Modules (SM) - numbers that are still growing rapidly - all managed by Cambium Networks Wireless Manager™ and *cn*Maestro™ cloud-based network management software. Their installation team received certification for operation of the equipment, guaranteeing the best installation and configuration results.



PTP 800 Licensed Microwave Backhaul	
Frequency	6 to 38 GHz
Throughput	Up to 368 Mbps

*e*PMP 1000 Distribution Network Solution	
Frequency	2.4 and 5 GHz
Throughput	100 Mbps in a 20 MHz channel

Results

THE AUGMENTATION OF CAMBIUM SOLUTIONS NOT ONLY PROTECTED but also actually improved return on WSP's initial investment by interoperating with and optimizing the function of previous vendors' products.

Prata reports widespread satisfaction amongst both his company and customers, "We can not only maintain our customer base, but also increase our coverage and customers, always satisfying users and meeting their requirements for capacity and stability. We also reached another level of users, implementing more SMs per AP, reducing number of towers and increasing number of users. With ePMP we reduced our operational and maintenance costs and increased our revenue."

Next Steps

WSP INTENDS TO CONTINUE MIGRATING THEIR ENTIRE NETWORK onto Cambium Networks solutions and expanding the services their network can now support, such as VOIP, data, and soon IPTV - keeping their customers connected and up to date with exciting technology into the future.