Situation

Ramos Arizpe is a growing city in the state of Coahuila, Mexico. As the seat of the municipality of the same name, Ramos Arizpe is the epicenter of local government, education, and public works, and boasts a robust manufacturing sector. Servitron, a Mexico City-based Internet service provider that handles voice, video, data, and mobile communications country-wide, was hired by Ramos Arizpe Municipality to find a new solution for the municipality’s networking demands.

Servitron faced the challenge of finding a new high-capacity wireless network solution to offer Ramos Arizpe’s hospitals, schools, parks and businesses, which lie within a coverage area of about 15 square kilometers. According to Cesar Fajardo, Servitron’s Chief Technical Officer, “The county received several commercial offers that did not comply with the needs of the project.

Objective:

City wide wireless broadband connectivity with free Public WiFi.

Strategy:

Rapid deployment of wireless broadband backhaul and distribution network as an infrastructure to deliver free Public WiFi.

Customers:

City-wide connectivity for 20,000 users in hospitals, schools, parks and businesses in a 15 square kilometer area.

Challenges:

- Previous attempt at the project was not a success
- Customer satisfaction was key. Initial impressions were critically important

With a service level agreement that guarantees response to alerts of malfunction within 24 hours, Servitron has confidence that Ramos Arizpe’s hospitals will always have access to their patients’ charts, schools to the Internet’s information resources, and friends and families to one another as they chat and surf online from mobile devices.
(20,000 users connected via WiFi in public areas), and based on failed experiences with another vendor and integrator, they did not believe that the solution could be a Wireless Backbone and WiFi access.”

**Solution**

**SERVITRON SELECTED CAMBIUM NETWORKS PRODUCTS**

“because they have a complete portfolio including the backhauls links (PTP and PMP) and the WiFi Access Points (AP)”, needed to satisfy the requirements of the new deployment. Three ePMP 1000 APs were installed on Ramos Arizpe’s main municipal building, fifty-one ePMP Force 180 subscriber units extend the ePMP systems’ reach, and fifty-five cnPilot™ E500 Access Points provide WiFi to individual users of smartphones and tablets in parks and schools.

**Distribution**

<table>
<thead>
<tr>
<th align="left"><strong>ePMP 1000 Distribution Network Solution</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td align="left">Frequency</td>
</tr>
<tr>
<td align="left">Throughput</td>
</tr>
</tbody>
</table>

**WiFi Access**

<table>
<thead>
<tr>
<th align="left"><strong>cnPilot™ E500 Indoor Outdoor WiFi Access Point</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td align="left">802.11ac dual band access point with MIMO</td>
</tr>
<tr>
<td align="left">16 SSIDs supporting 256 concurrent users</td>
</tr>
<tr>
<td align="left">Cloud-managed via cnMaestro. On-site controller option available</td>
</tr>
</tbody>
</table>
Results

INSTALLATION AND CONFIGURATION OF THE NEW NETWORK

took less than one month, and together with Cambium Networks’ cnMaestro™ cloud-based network management system, the configuration has streamlined Servitron’s service to Ramos Arizpe. “The network is a modular solution with easy and fast installation times, centralized administration, and constant monitoring of the operation” says Fajardo, “that makes it easy to maintain and operate the network and detect and resolve failures.”

With a service level agreement that guarantees response to alerts of malfunction within 24 hours, Servitron has confidence that Ramos Arizpe’s hospitals will always have access to their patients’ charts, schools to the Internet’s information resources, and friends and families to one another as they chat and surf online from mobile devices. Servitron and his local authorized representative in the region are happy to report that Ramos Arizpe municipality plans to grow the network from the existing 55 WiFi Hotspots to 200, ensuring strong, reliable connections for the city and its residents for years to come.