

Connecting the world's largest party!



Challenge

THE CARNIVAL IN SALVADOR, BAHIA, BRAZIL, WITH 2.5 MILLION PEOPLE IN ATTENDANCE, is one of the largest street festivals in the world! The event organizers were looking to replace their legacy Zebra (Motorola) AP7181 access points with a next generation WiFi access point that can handle today's high density demands, while offering broad and reliable coverage.

The goal was to provide reliable WiFi connectivity all across two pavilions, with no “shadow zones” anywhere.

Dashboard: Camarote Planeta Band

AP Name	Frequency	Channel	Power	Critical Alarms	Major Alarms	Throughput	Capacity
PB-R01-REST...	5GHz	48	25 dBm	12	0	1.9 Mbps	622.65 Kbps
PB-R12-LOB...	2.4GHz	1	30 dBm	15	0	211.77 Kbps	215.13 Kbps
	5GHz	48	25 dBm	7	0	5.82 Mbps	318.65 Kbps
PB-R09-MIRA...	2.4GHz	11	30 dBm	25	0	42.25 Kbps	59.54 Kbps
	5GHz	153	25 dBm	8	0	4.65 Mbps	810.99 Kbps

Name	IP Address	MAC	Manufacturer	WLAN	RSSI
Usuario-PC	172.16.11.230	00-26-C6-A8-76-06	Intel	PLANETABAND	-66 dBm
android-74fe0fc	172.16.4.164	64-6C-B2-64-69-E8	Samsung	PLANETABAND	-83 dBm
android-df9aeb3	172.16.253.161	14-1A-A3-2F-92-86	Motorola	PLANETABAND	-73 dBm
android-8ccd41a	172.16.6.91	78-A8-73-86-F5-41	Samsung	PLANETABAND	-63 dBm
	172.16.18.27	AC-FD-EC-41-E9-73	Apple	PLANETABAND...	-71 dBm
iPhonedFabricia	172.16.15.161	8C-00-6D-01-00-F0	Apple	PLANETABAND	-67 dBm
android-a87147c	172.16.244.97	5C-F8-A1-16-ED-C6	Murata	PLANETABAND	-65 dBm
	172.16.7.101	F0-25-B7-99-42-CF	Samsung	PLANETABAND...	-75 dBm
	172.16.18.169	F0-C1-F1-B0-E3-92	Apple	PLANETABAND...	-83 dBm
iPhonedMariana	172.16.13.220	10-41-7F-84-81-24	Apple	PLANETABAND	-67 dBm

Supporting 450 clients at one stage

The goal was to provide reliable WiFi connectivity all across two pavilions, with no “shadow zones” anywhere. The “Camarote Planeta Band” in Othon Palace hotel handles up to 5,000 people spread across 8,000 square meters, while the “Camarote Salvador” hosts another 6,000. Both facilities were to be fully covered, and given the nature of the event, high client density per AP was expected.



Solution

THE SOLUTION WAS TO USE CAMBIUM'S *cnPilot™* E400 access points indoors, ePMP 1000 Hotspots outdoors, and to manage all the APs using Cambium's cutting edge management solution, *cnMaestro*. The event managers were initially concerned because the *cnPilot* E400 is physically smaller than the older equipment it was replacing, but by the end of the first day when the install was completed and the coverage and client density tested, they realized the *cnPilot* E400 packs quite a punch in a small box.

They had excellent coverage and more throughput than before, and the APs blended in well with the ceilings and support stanchions.

Results

THE REAL TEST CAME DURING THE event when the system was loaded with users. At the Camarote Planeta Band pavilion, the system supported more than 450 simultaneous users, and at the Camarote Salvador there were 380 simultaneous users. The entire WiFi network ran flawlessly, delivering video streaming traffic and ensuring all those selfies made their way upstream to social media posts. The event managers were pleased with the reliable service, the high throughputs, the small form factor, and low power consumption module, and now plan to continue to use the E400 in the hotel and for future events as well!



A satisfied WiFi user



The crowd at Carnival