



Cambium Networks

**Jean-François “JF”**

**FONTAINE-BOULLÉ**

**Director of Hospitality Sales - EMEA**

WIFI  
CONNECTIVITY  
FOR THE HOSPITALITY INDUSTRY

Exceptional Wi-Fi for your hotel guest to feel at home - cnPilot Hospitality Solutions

# My background



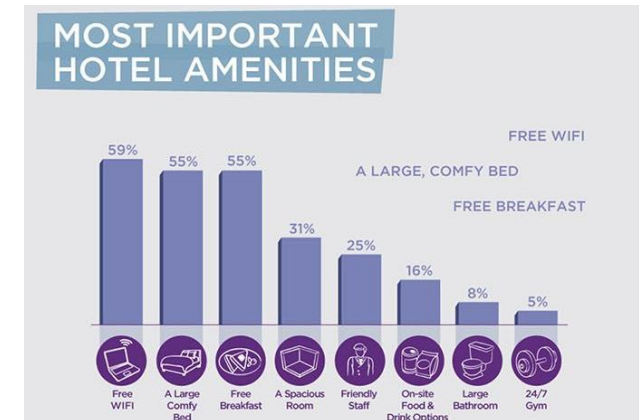
- 25 years experience in Hospitality with similar academic background than many GMs in the industry
- 18 years involved in Sales roles
- 12 years pushing Wi-Fi, from Hotspots in Healthcare to Managed Networks in Hospitality
- Last 7 years with a global System Integrator selling to major Hotel Chains worldwide
- Former owner of a family B&B Guest House
- Since July 2018 Director of Hospitality Sales – EMEA at Cambium Networks

**LinkedIn**  [linkedin.com/in/jffb2web](https://www.linkedin.com/in/jffb2web)

**twitter**  [jf\\_fb](https://twitter.com/jf_fb)

# What is Hospitality about for Cambium Networks?

- A services focused industry where public **Wi-Fi is #1** amenity



Any Tourism related activity :  
accommodations, hotels,  
resorts, lodging units, home(s)  
away from home, camp  
grounds, cruise ships...



# The markets served within Hospitality

Hotels & Resorts



Hospitals



Camp Sites



Stadiums & Events



Residences



Food Chains



# Who is our Hospitality Partners Program for ?

Existing or new Wi-Fi partners, VARs with a foot print in Hospitality:

- Hotels
- Resorts
- Camp sites
- Residences
- Healthcare
- Cruise ships
- Stadium
- Events
- Food chains



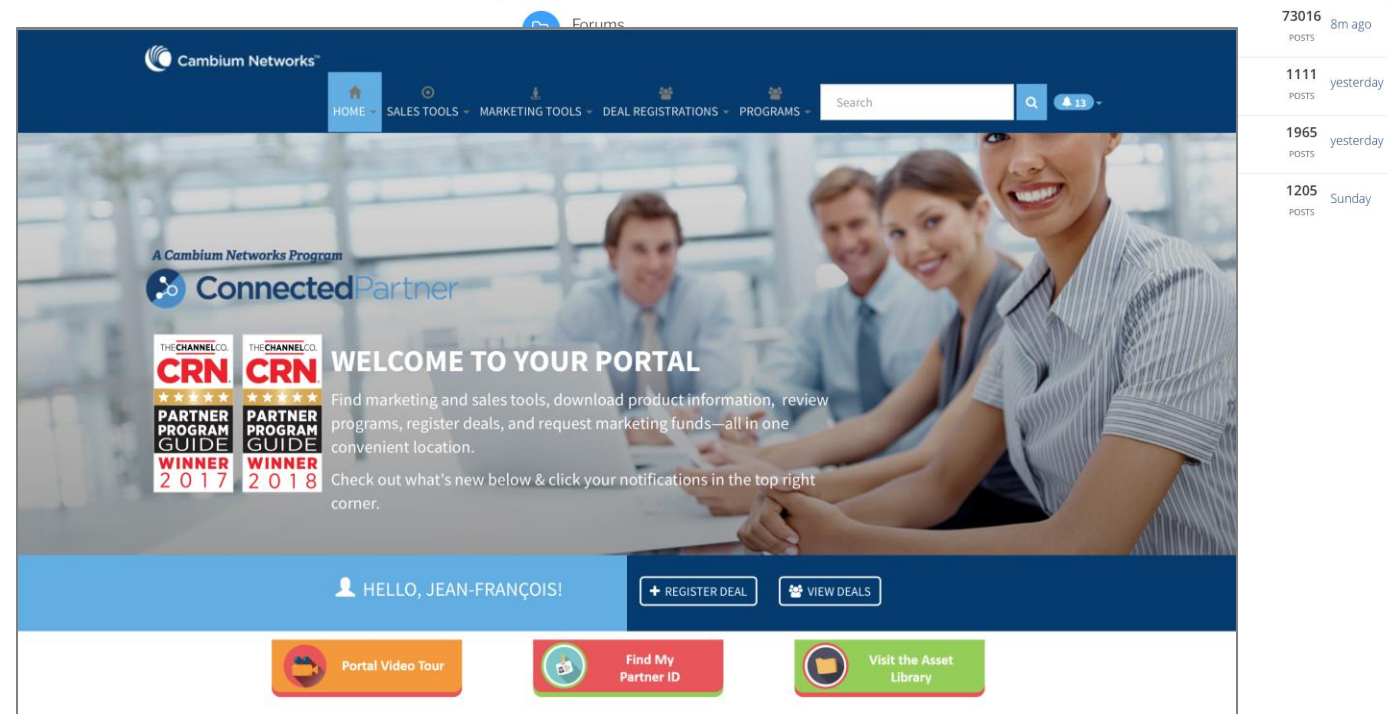
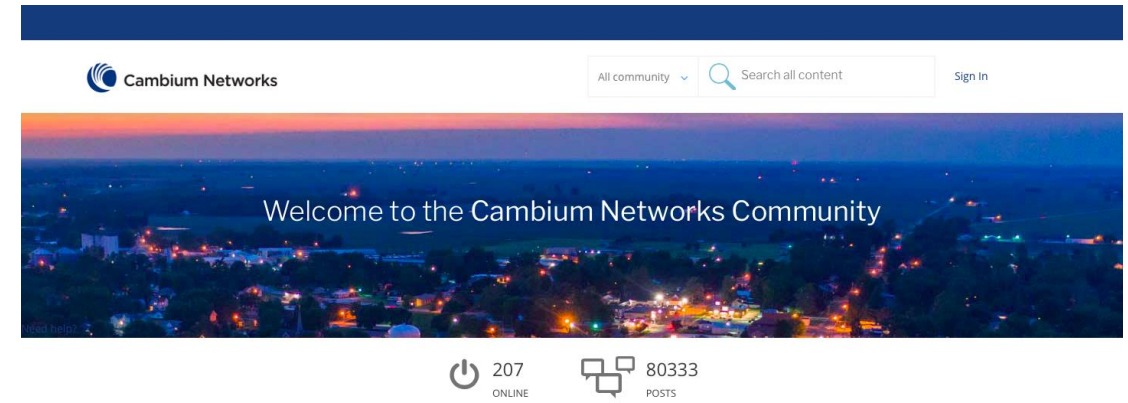
Wishing to connect the Un(or bad)connected

**H** | Hospitality  
Partners  
Program



# Why joining our Hospitality Partners Program ?

- Cambium Networks Community
  - Forum / Best practices
- Partner Portal
  - Collaterals / Case studies
- Hospitality events
  - Yours/Ours
- Ecosystem partners
- 24/7 Technical Help line
- Sales Leads and support







# Requirements & Benefits of the Hospitality Partners Program

- **Hospitality Partner Program**
  - Officially launched on the 18<sup>th</sup> October
  - Open to existing and not yet partners
  - Connect to <https://channel.cambiumnetworks.com/>
  - Requirements:
    - Show evidence of existing foot print
    - Purchase a demo kit
    - Follow the cnPilot trainings
    - Obtain the certification
  - Benefits:
    - Discount on cnPilot MSRP
    - Additional discount with Deal Registration (mandatory)
  - Process:
    - The price list on the portal (master distributor version) in the Hospitality Program section of the asset library shows the discount structure.
    - The partner must do a Deal Reg and get approved.
    - Then the partner provides the Deal Reg ID to the distributor who must report it on POS.

**Is Your Company Involved in HOSPITALITY?**  
**How Would You Like All of the Following?**

- Reliable, scalable & affordable WiFi products
- Indoor/wall plates/high-density/outdoor access points
- Free Cloud-Based or On-Premises Controller
- License-free management of up to 10,000 APs
- Sales support with generated leads
- Dedicated 24/7 Hospitality support

**Join the Hospitality Specialty ConnectedPartner Program for Value-Added Resellers!**

If you are a current ConnectedPartner with current references in hospitality, email [hospitality@cambiumnetworks.com](mailto:hospitality@cambiumnetworks.com) for more information.

ConnectedPartner  
Hospitality Partner

Cambium Networks

**Hospitality Specialty ConnectedPartner Program**

- Become part of the Cambium Networks Hospitality Community
- Learn best practices
- Protect your opportunity with Deal Registration
- Access special pricing to enable competitive bids
- Learn about new products and services
- Access hospitality marketing resources including slide decks, case studies, and more
- Find out about hospitality events near you
- Get introduced to service-layer ecosystem partners
- 24x7 dedicated support plus field engineering & online community

Includes cnMaestro™ – Cloud-based or on-premises software platform for secure, end-to-end network control.

**INDOOR**

- cnPilot™ Indoor APs: Ideal for room floors, corridors, lobbies
- cnPilot Wall Plates: The perfect solution for in-room WiFi
- cnPilot High Density: Perfect for lobbies and conference areas
- cnPilot Outdoor APs: For poolside, golf courses, & other outdoor areas

**OUTDOOR**

Cambium Networks

# What are our Assets for Hospitality ?



Extended Portfolio  
with a complete  
Solution Set



World Class  
Enterprise Wi-Fi  
active equipment



No Platform  
nor Software  
License fees



Management  
platform



Hospitality  
Partner  
Program



Captive Portal  
& API



# Travel & Hospitality are booming!

## World over!

**\$1.6  
Trillion**

**Bookings**

**6.1% ↑**

**Corp Travel**

**\$170  
Billion**

**Hospitality Bookings**

# And meanwhile ... Internet usage and expectations are changing as well!

58%  
video!

2,2  
Mobile devices  
per person

90%  
of guest devices  
are smartphones

Bleisure  
trend

By early 2019,  
Internet will exceed  
TV watching during  
prime time hours

At the speed of  
Social media!

Bad news  
travels fast!



the best  
So how are / hotels reacting?





A close-up photograph of a hand operating a modern, silver-colored smart door lock on a light-colored wooden door. The lock features a small display screen and a circular sensor. The background is a blurred hotel room with a bed and a table, suggesting a smart hotel environment.

# Top technology trends

# Top technology trends

1

## Service Automation

**Tech: Analytics and Machine Learning  
Artificial Intelligence, & Wireless Fabric**

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### Guests

1. App based check-in
2. Facial recognition to unlock doors or floors!

### Staff & Service

1. Staff schedule optimization
2. Matching staff to guest levels
3. Robotic servers (Japan)



# Top technology trends

2

## Seamless Guest Experience

**Tech: Analytics and Machine Learning  
Artificial Intelligence, & Wireless Fabric**

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1. App based login (Hilton)
2. Automated Internet bandwidth settings
3. Auto-setting the thermostat in the room
4. Stocking the fridge to the guests most likely preference
5. Post check-out targeted engagement



# What's common to great technology?

\*

**Great Wi-Fi Everywhere!**

- Variety - Indoor & Outdoor
- High speed 802.11ac Wi-Fi for:  
Rooms, Corridors, Lobby,  
Conference rooms, Restaurants,  
Pools, Golf courses, ...
- Seamless guest roaming
- Multiple VLANs, Multiple SSIDs



# Typical Wi-Fi installation and expectations

- Standard BOM with Cloud based Wi-Fi
  - Firewall / Router
  - Controller / Gateway
  - Switches / Access Points
- 100% coverage with -65dB minimum
  - Room floors
  - Lobby and Conference areas
  - Outdoor areas (roof top, garden, pool)
- Indoor Wi-Fi ratio :
  - 1:6 to 1:4 rooms per AP ratio in Budget Hotels
  - 1:4 to 1:2 rooms per AP ratio in Midscale Hotels
  - 1:2 to 1:1 rooms per AP in Upscale/Luxury

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Indoor APs  
room floors/corridors/lobby



High density  
lobby/conference areas

Wall plates  
In-room Wi-Fi



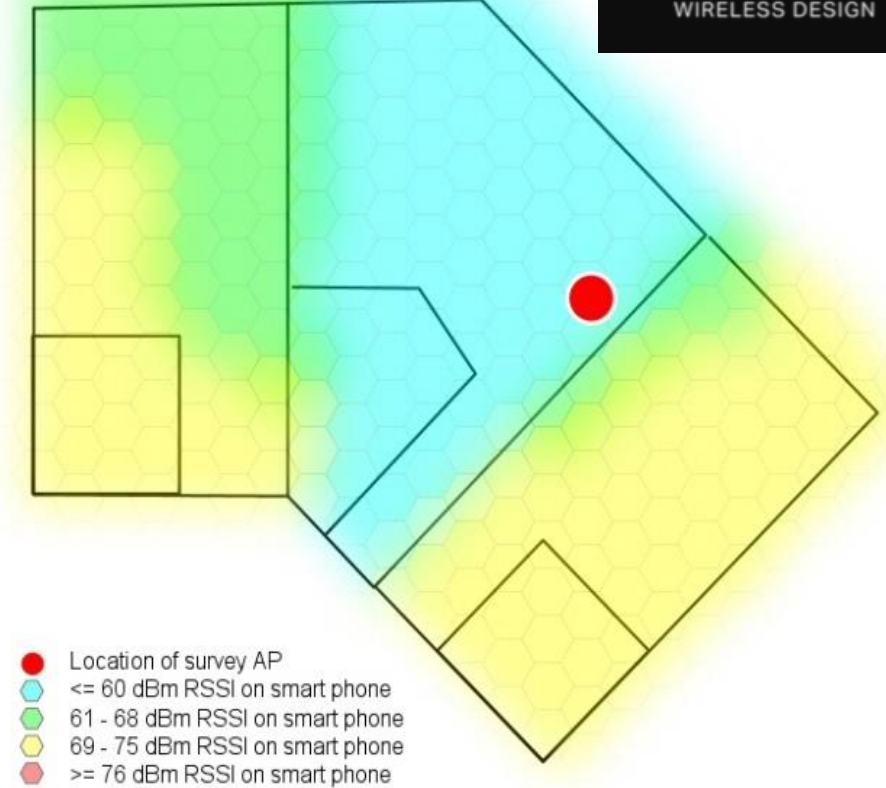
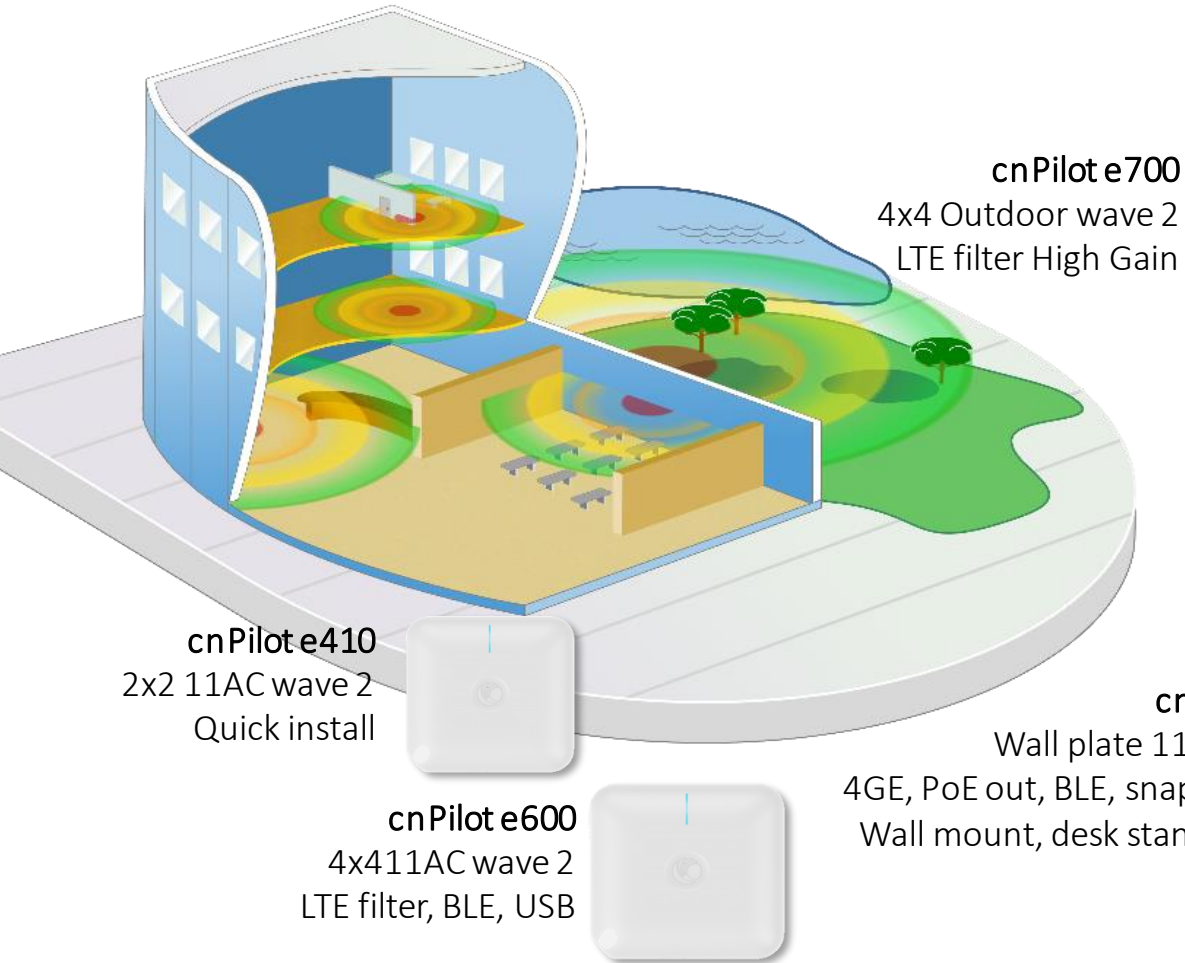
Outdoor APs  
outdoor gathering areas



High density  
Pool / terrace / roof top

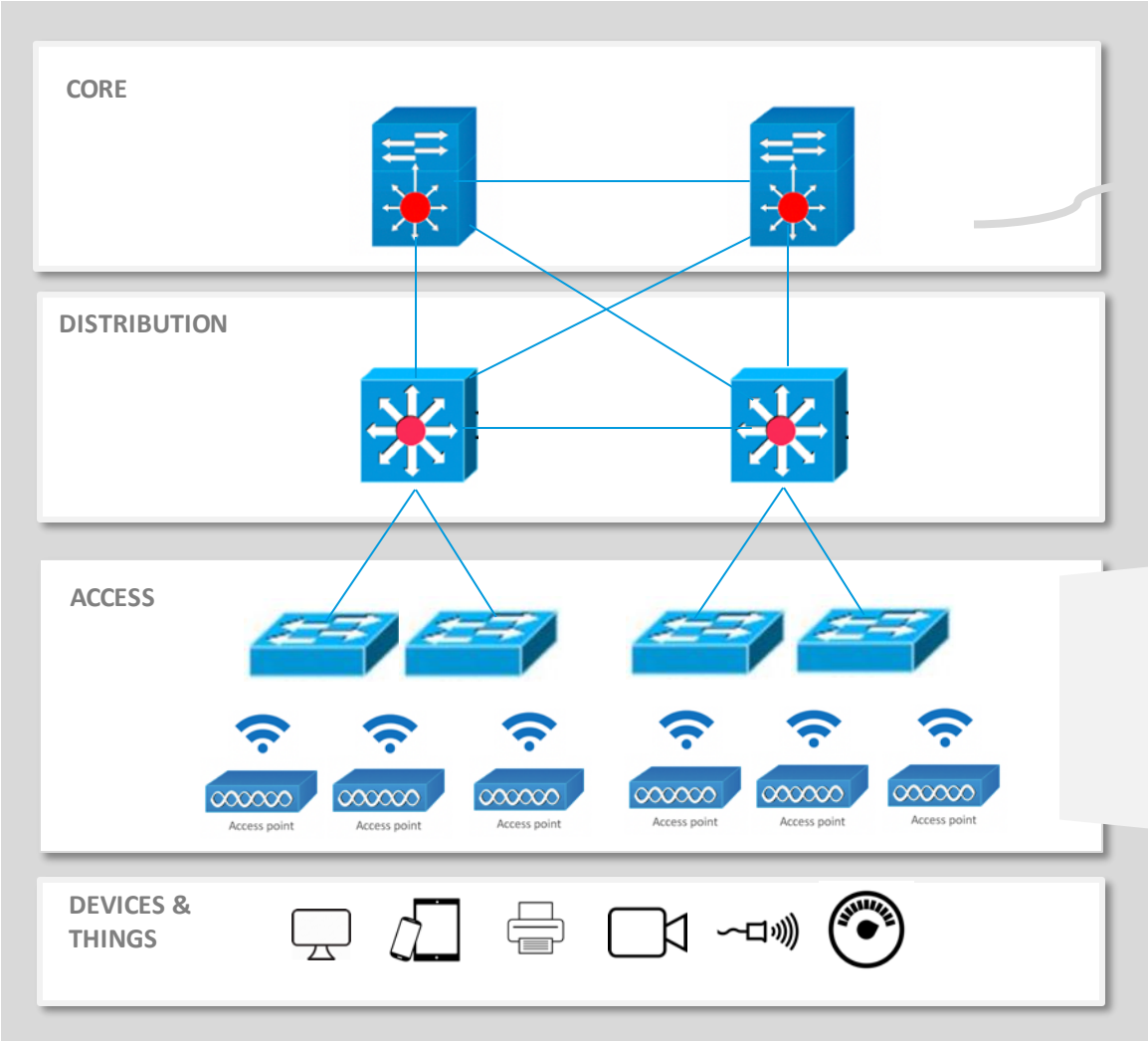
# From corridor APs to In-room APs

- Personal Wi-Fi, just like at home





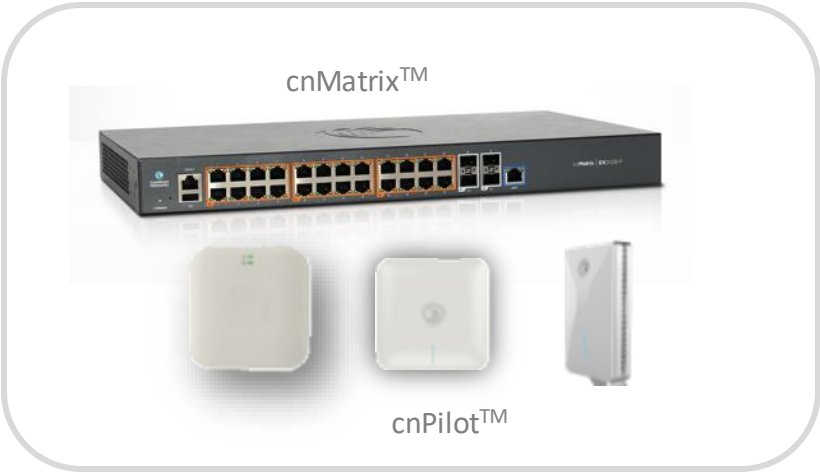
# 3 tier enterprise network



Cloud Management



Access Portfolio



# Cambium Networks Wi-Fi



**cnMaestro**  
Cloud Controller

**cnMaestro**  
On-Premises



**autoPilot**  
AP controller



# Cambium Networks Access Switches



## cnMatrix EX 2K



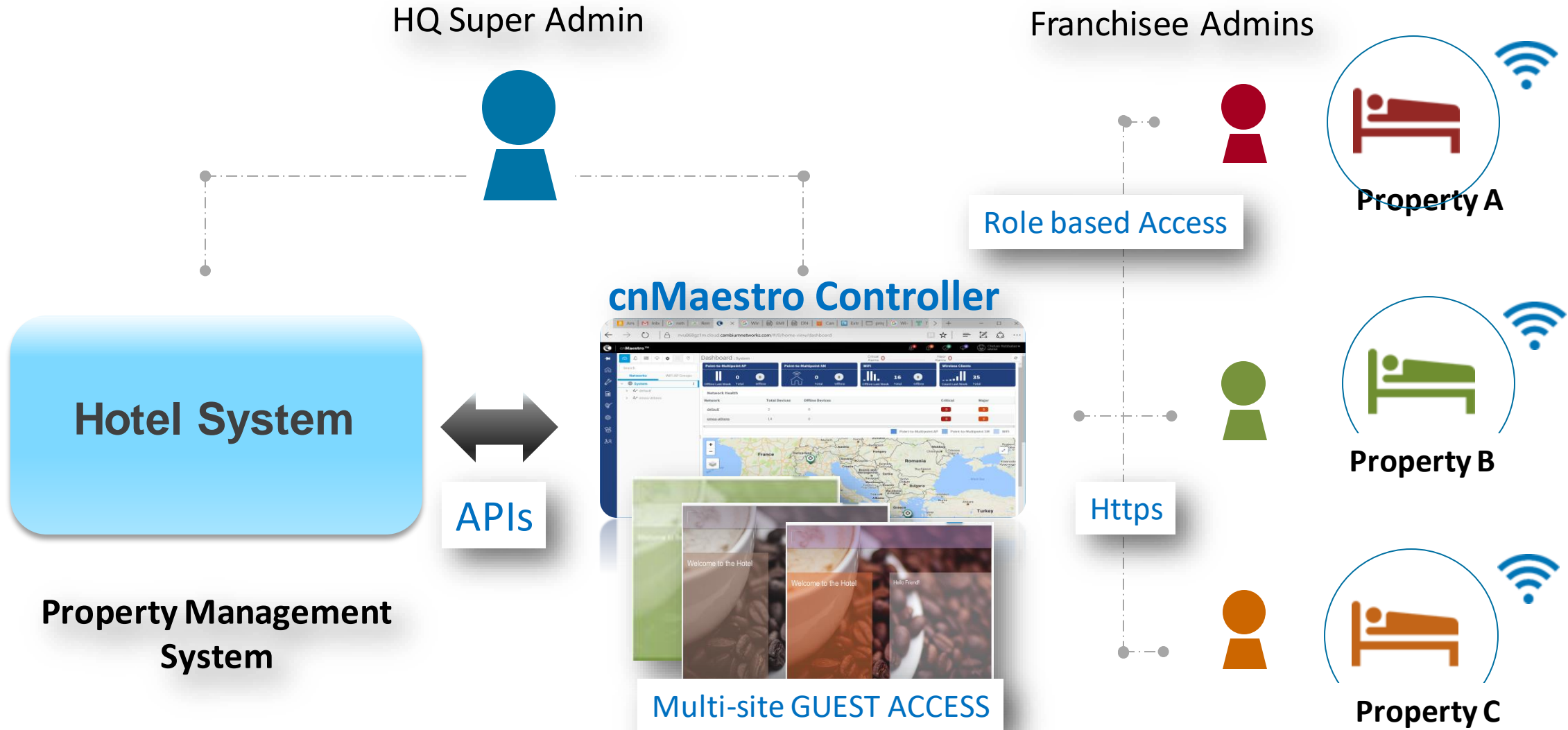


# CnMaestro Cloud based management platform

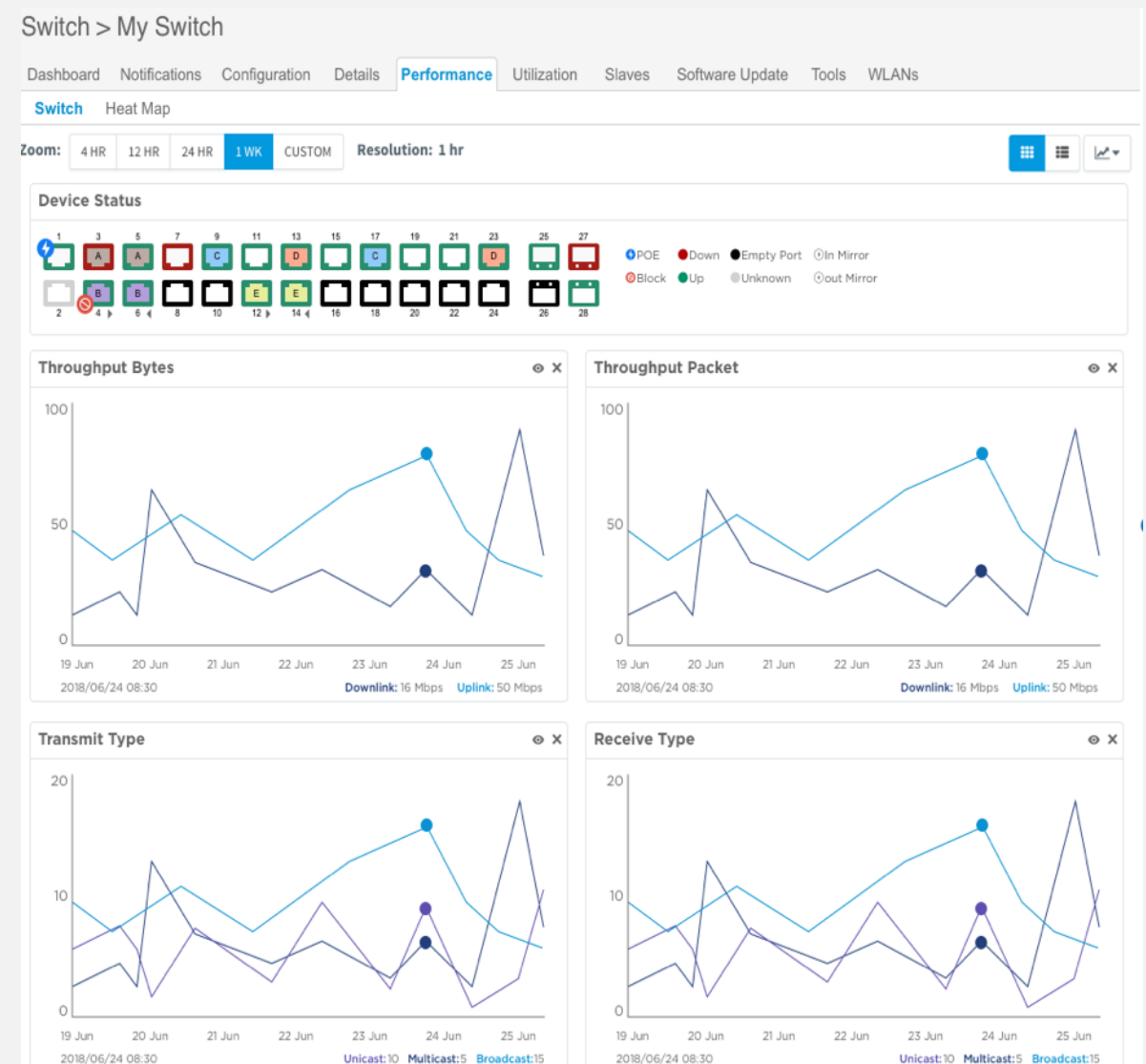
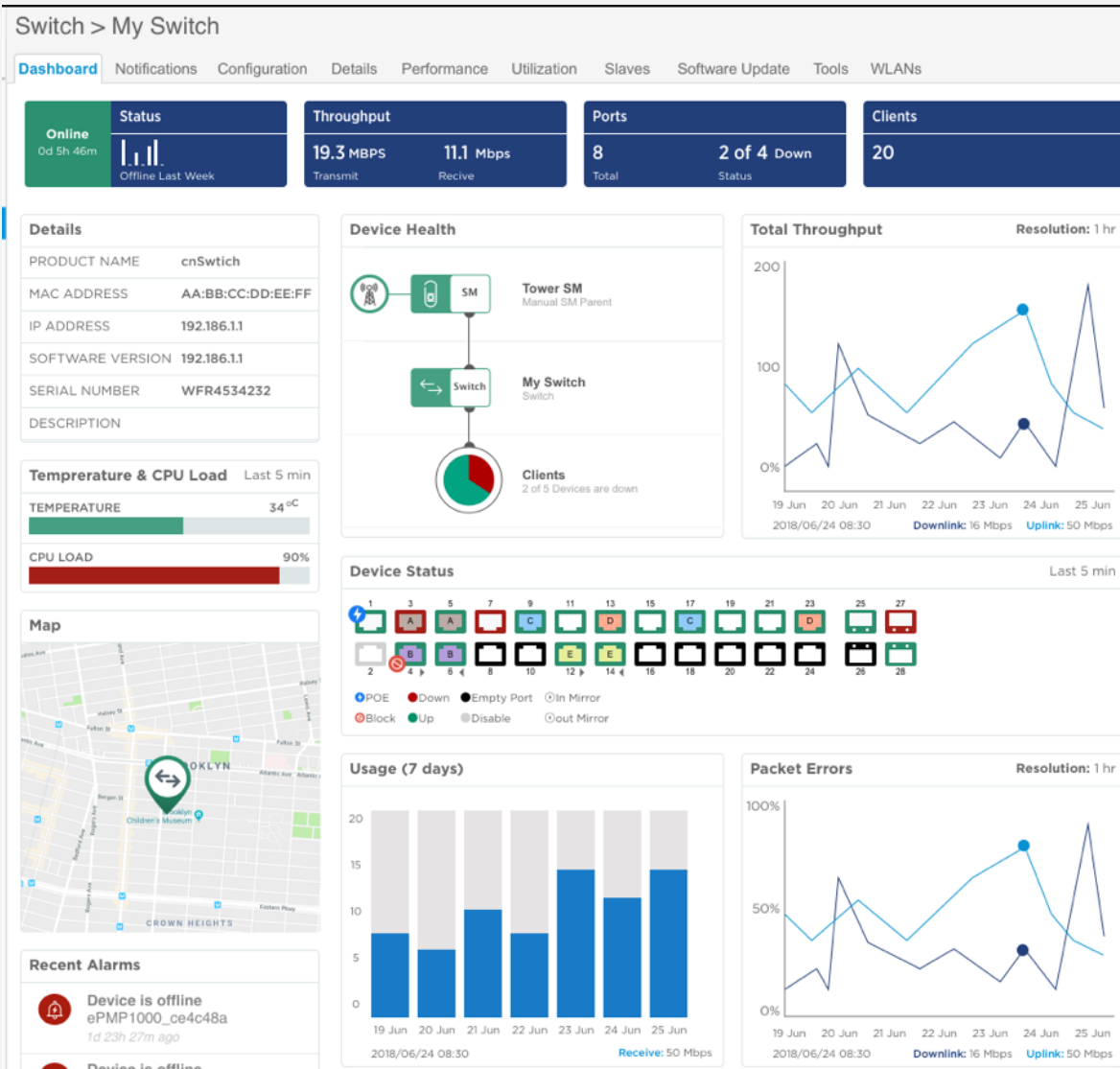
CnMaestro is a true single pane-of-glass management for the entire network:

- Unlimited scalability. From 1 to 100s of thousands of APs
- Seamless roaming from guest room, to poolside, to conference room
- Firmware updates; manual or scheduled
- Multi-user access so that property IT staff can provide coverage if needed
- Network diagnostics tools including packet capture, throughput testing and built-In Wi-Fi scanning to locate all access points that could be interfering with the network
- Built in Guest – configure globally using the integrated design tool, push it out to the edge access points
- API for integration into OSS/BSS systems for 3rd party management entities

# Designed for Managed services Operations



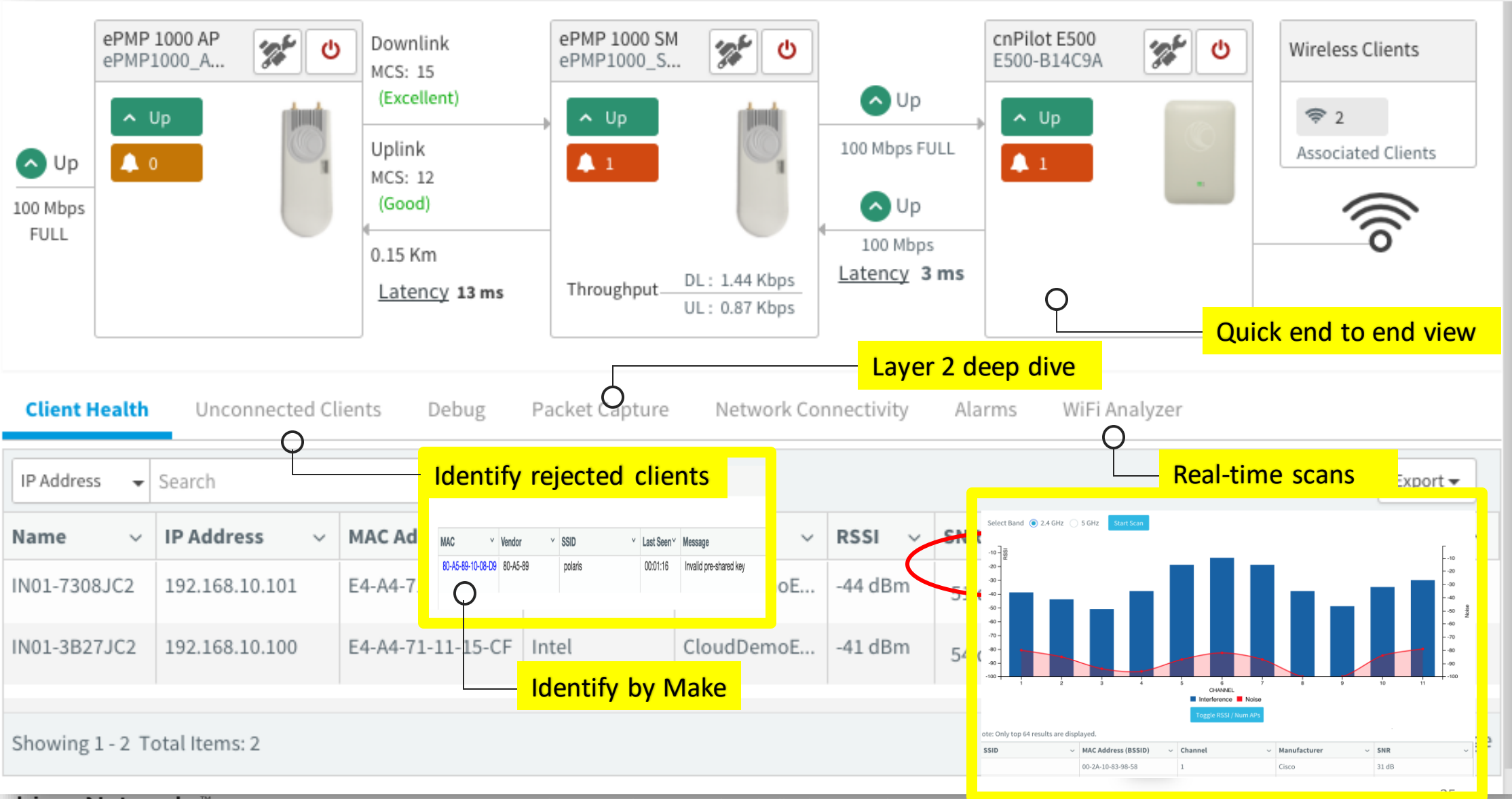
# cnMaestro switch management







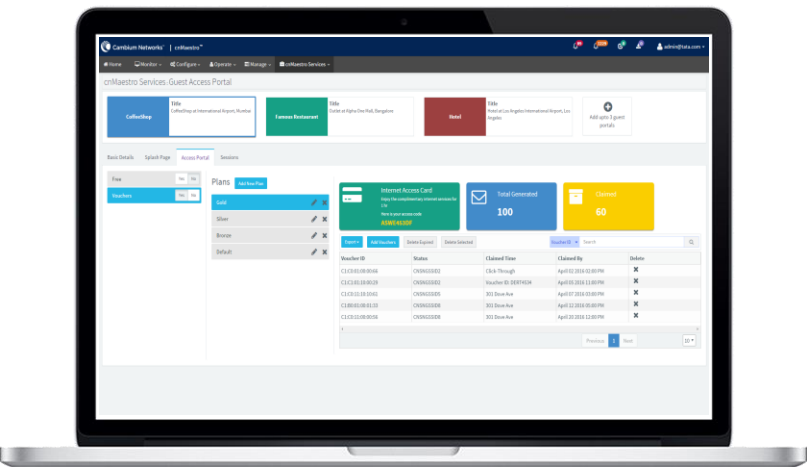
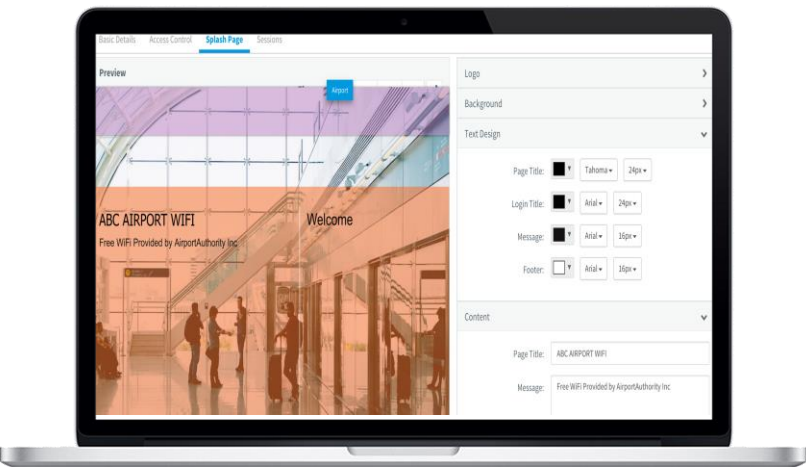
# Trouble shooting the Wireless fabric



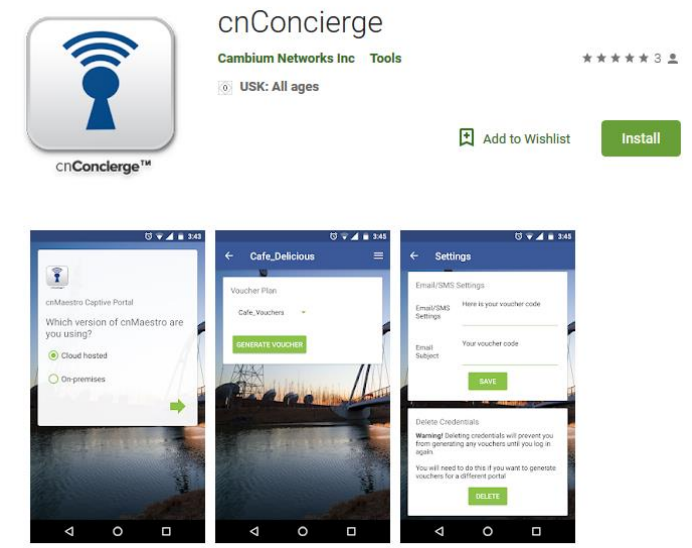
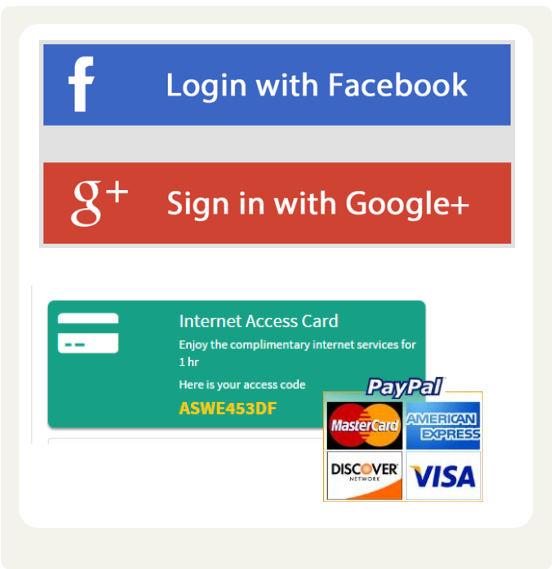
- Available
- Cloud
  - NOC



# cnMaestro™ end to end network management platform



Easy Onboarding  
Rich Visualization  
Monitoring  
Troubleshooting  
Data and Reporting  
API'S



# Monetizing Hotel Wi-Fi is key for the properties



- Turning an amenity into a powerful marketing features tool for a quick ROI with :
  - Bespoke and interactive Captive portal
  - Guest data capture
  - Property facilities display
  - Post booking Guest survey
  - Guest express reviews
  - Cross services selling
  - Advertising
- Enabling the hotelier to increase :
  - Hotel guest reviews and ratings, and therefore
  - Hotel revenues
    - From Premium Wi-Fi voucher,
    - Higher room rate, Higher occupancy rate,
    - Higher number of booked tables, ...

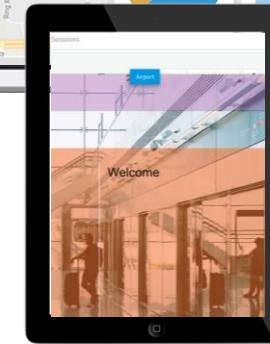
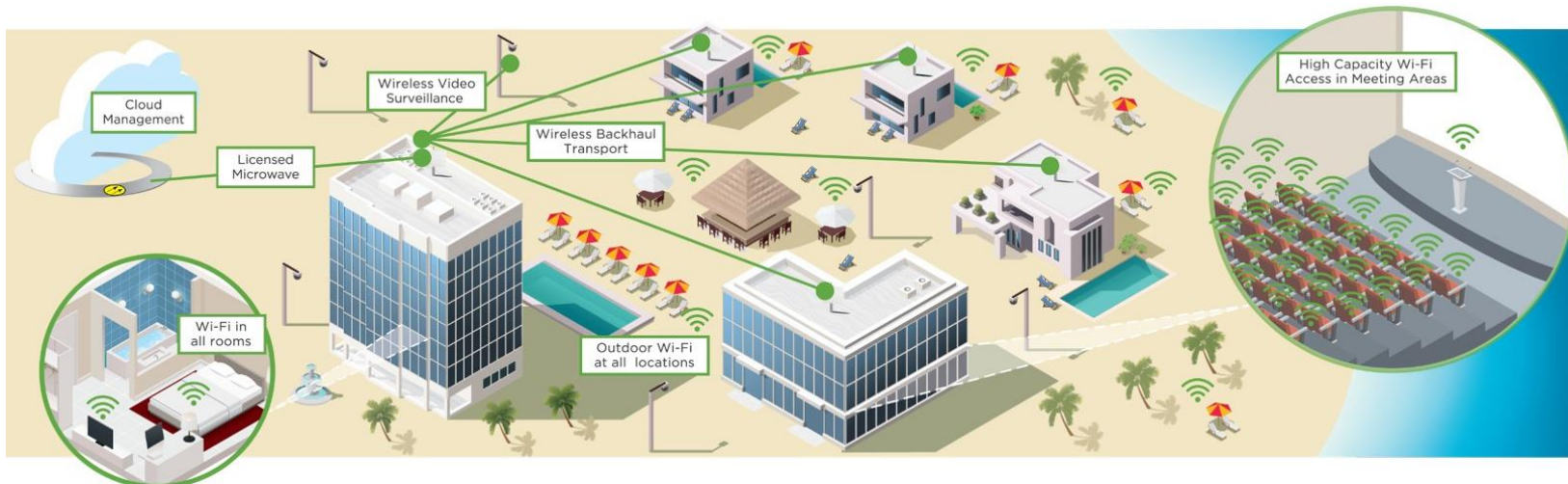
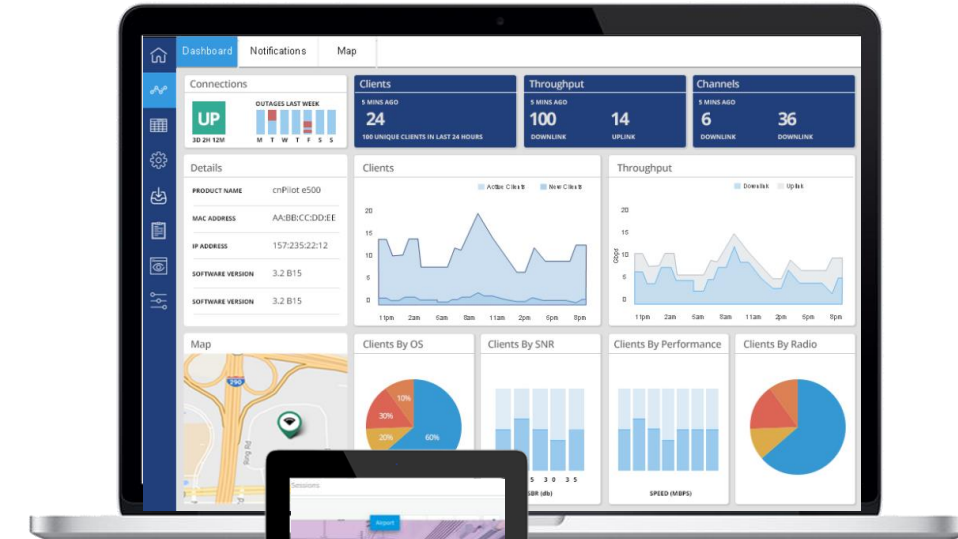




# Hoteliers Expectations vs. Cambium Networks offering

100% Hotels' expectations and needs:

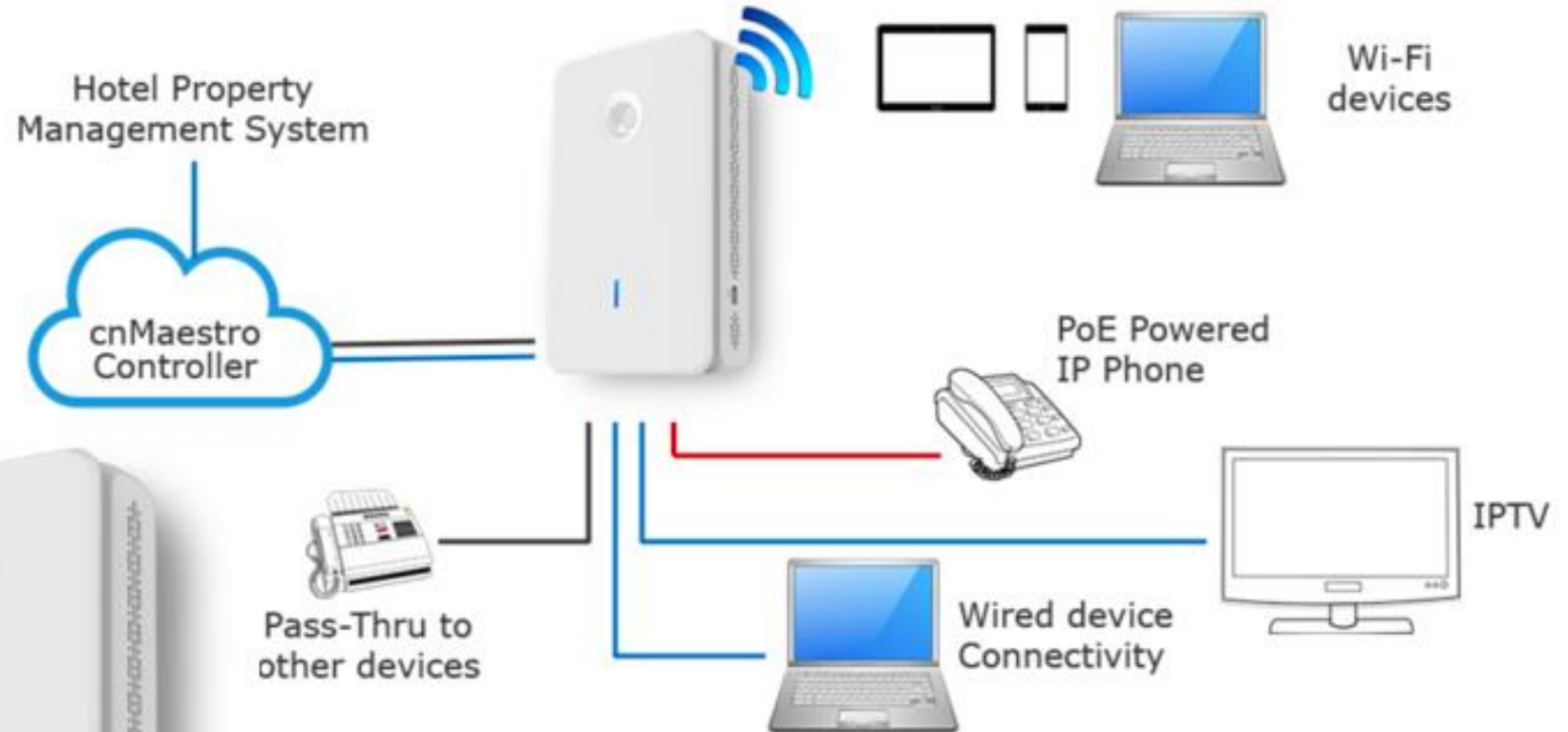
- Seamless connectivity ✓
- Turnkey solution for guest and staff ✓
- Shared management tool ✓
- Full service contract 24/7 ✓
- Affordable TCO ✓



# cnPilot™ E430W – Hospitality Wall Plate



- 802.11ac wave 2
- MIMO 2x2
- 2.4 + / 5 GHz, omni antenna
- Up to 256 clients, 16 SSID
- PoE-out for VoIP ph
- 4x Ethernet ports



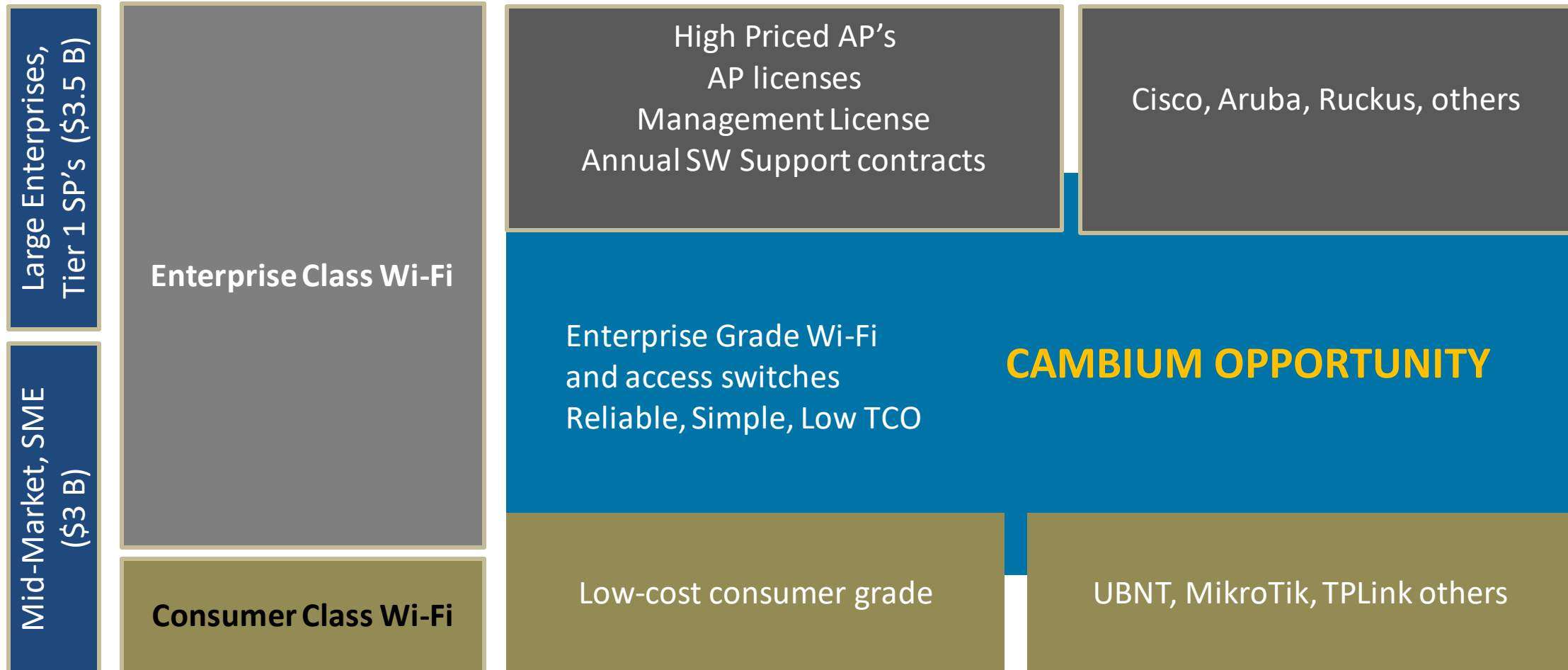


# Who benefits from a Cambium Networks installation with wall plate?

- The Hotel
  - Future-proof installation with one AP per room.
    - In 2010 : hotels used to deploy 1 AP per 7 rooms, in 2014 a 1:4 ratio, today it's 1:3 or 1:2 ratio.
    - Cambium enables a 1:1 ratio
- The Guest
  - Deliver the “home experience” of the guest, thanks to one AP per room : this is personal Wi-Fi
  - 100% coverage in the room, no issues getting connected when sitting 4m from the AP
  - Supports all devices, streams all personal media
- The Service Provider
  - Better performance, less trouble calls
  - Lower installation cost by consistent and simplified installation.
  - Market proven outdoor PTP/PMP technology extend coverage across resorts
  - cnMaestro in cloud or on-premises – same product : one management platform for all networks



# Unique positioning in Wi-Fi market



# The cnPilot advantage – No hidden charges



Cambium Economics	Comparable AP's from Competition: Ruckus, Aruba, Cisco, Meraki
Wall Plate AP : e430H: \$295	<b>HW Price : \$395 - \$695</b>
No AP Licenses: \$0	<b>3 YR AP Licenses: \$100 - 300</b>
Free Cloud / On-prem Mgmt: \$0	<b>Management License : \$50-150</b>
Free SW Maintenance: \$0	<b>SW Maintenance: \$20-\$50</b>
<b>Total per AP: \$295</b>	<b>TOTAL: \$575 - \$895</b>

**Cambium Solution TCO is one-half to one-third that of enterprise competitors**



# Hospitality Case Studies



# Wireless Fabric for Hospitality in North America



- Clubhouse, Restaurant, Bars, Beach Common Areas, and the Outdoor Concert Area.
- 400 to 600 Devices Peak Times
- Omnidirectional Outdoor APs, Sectorized Outdoor AP
- E600 4x4 Wave 2 Indoor APs
- Expanding with e430 APs
- Replacing existing Wi-Fi due to Unreliable Performance
- cnPilot
  - Reliable and Consistent Connections
  - Better Coverage and Capacity
  - Cambium Support



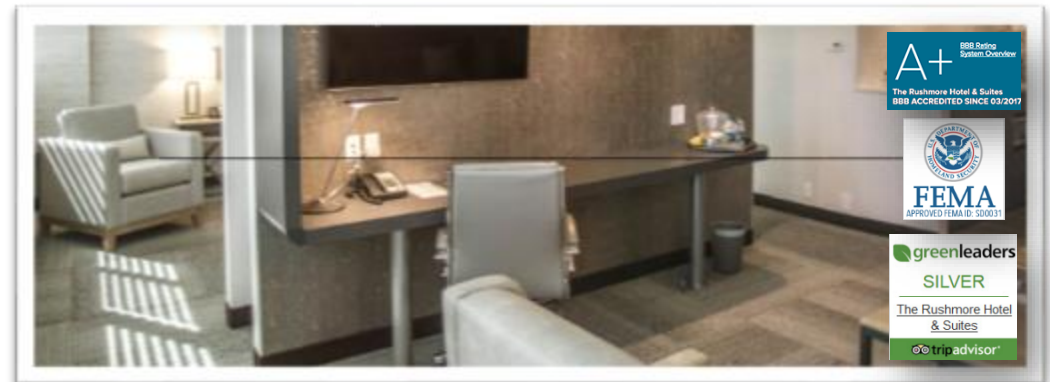
# Making the Preferred Choice to 802.11ac Wave 2

- Complete Hotel Refurbish
- 200 Rooms Spanning 3 Floors
- 200 Wave 2 Wall Plate APs
- e410 and Omnidirectional Outdoor APs
- cnPilot
  - Reliable and Consistent
  - Better Coverage and Capacity
  - Self Registration Captive Portal
  - Secure and Separate Traffic



# The Making of a Destination Hotel and Delightful Dining Experience

- 100% Renovation in 2012 – From Radisson Franchise to Destination Themed Hotel
  - 177 Room, Double Occupancy
  - 9 Floors Spanning 5000+ Sq Ft
  - May to October Peak Occupancy
- 37 Indoor Access Points with cnMaestro Cloud Management
- Wi-Fi Signal Extends to Parking Lot
- Preferred by Secret Service and Harley Davidson Corp.
- Replaces a problematic deployment from a name brand vendor
- ZERO Wi-Fi Complaints since install





# Wireless Fabric for Hospitality in Europe

## Ferienzentrum Schloss Dankern

Haren (Ems), Germany EUROPE

Holiday resort centre – 770 cottages



Cambium Networks' partner contact : Tabatha von Koelichen

cnPilot E410	cnPilot E600	cnPilot E430w	cnPilot E500	ePMP2000
				
-	-	x335	-	x150



On Premise/ **Cloud Managed** / AP Controller

Free/**Premium Wi-Fi Guest access & Hotel operations**

✗ PTP

☑ PMP

☑ Wi-Fi



# Wireless Fabric for Hospitality in Africa

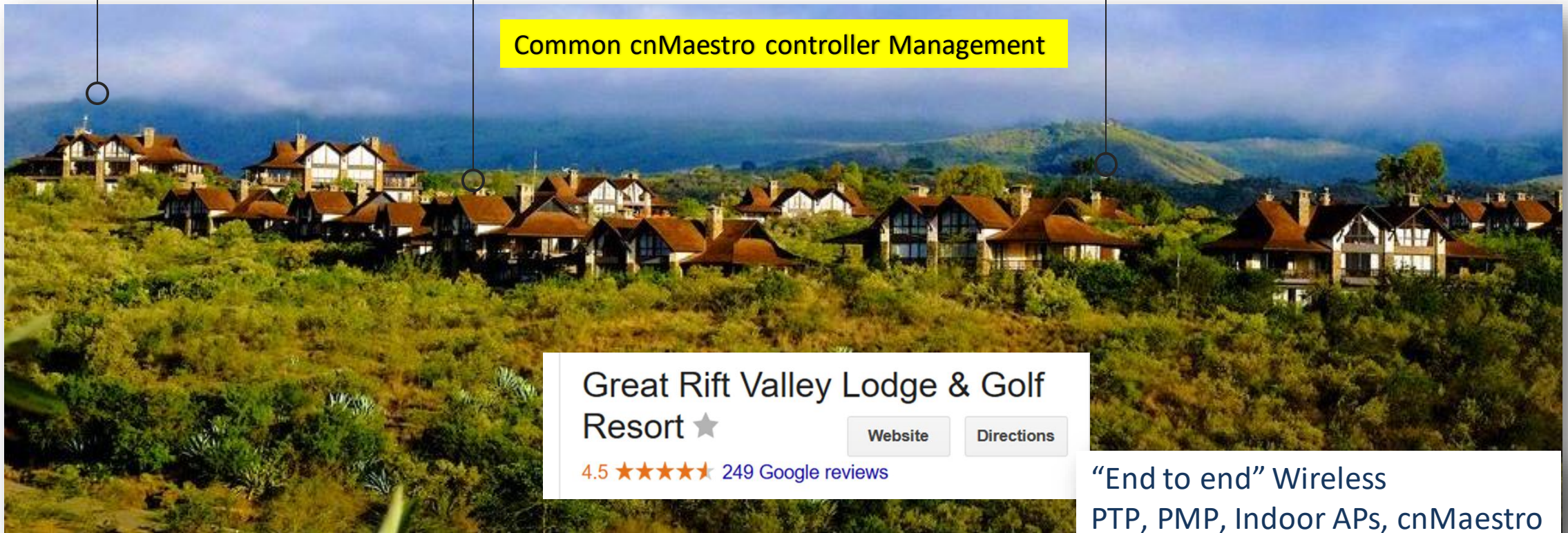


PMP450 Point-to-multiPoint links  
distribute Internet to Villas

cnPilot Indoor APs provide in-room Wi-Fi

Common cnMaestro controller Management

Long distance PTP650 point-to-  
point links bring internet to the  
site



Great Rift Valley Lodge & Golf  
Resort ★

Website

Directions

4.5 ★★★★★ 249 Google reviews

“End to end” Wireless  
PTP, PMP, Indoor APs, cnMaestro



# Wireless Fabric for Hospitality in Asia



4.5

3,232 reviews



Mumbai, India

55,000 Sq ft. Tropical lagoon

354 luxury rooms,

e430, e600 (in-progress)



# Holiday Inn - IHG



**IHG®**



AN IHG® HOTEL

## Holiday Inn Resort Baruna Bali

★★★★★ 1,593 Reviews | #1 of 23 Hotels in Tuban  
📍 Jalan Wana Segara 33, Tuban, Kuta 80361, Indonesia | ☎ +1 877-859-

Bali, Indonesia

100+ room hotel

Indoor Omni, Outdoor APs

e410, e600, (e430 in progress)

# Radisson – Radisson Group



4.5 

799 reviews



126 room hotel, Salem, India

1,000 guests Conference rooms

e430 per room, e410: common areas



# The Leela – Preferred Hotels & Resorts



THE LEELA PALACE

BANGALORE

*Preferred*<sup>™</sup>  
HOTELS & RESORTS

4.5

2,454 reviews

Bengaluru, India

357 luxury rooms,

2 Ballrooms, 12 Conference rooms

e430, e600 (in-progress)



# Stadiums



27,000 spectators. 5,000 Staff  
Nearly ~1 TB of data in 3 Hours  
e502S, e600: 30° Sector Outdoor AP  
Covered: Main Seating, Hospitality  
box, Main gate, Food stall areas



# Events

- Managed Services Play
- Outdoors Event Wi-Fi
- High capacity reliable Wi-Fi
- Winning factors
  - 802.11ac, IP67, Robustness
  - Zero touch provisioning
  - Ease of installation
  - Ease of cnMaestro management





# Events

- 6 Halls. 15,000 m<sup>2</sup>. 70,000 visitors.
- Connecting convention center, gaming areas, Common areas
- cnPilot Indoor & outdoor APs

“... **huge ... simultaneous users**

connections connected wirelessly ...

Cambium delivered spot on in every single

aspect – ***reliability, capacity and easy management***”

- Damir Durovic, the event CEO,





# National Park Safety and Education

Connectivity for Visitor Safety and Education. Expanding to Inside hospitality

- 18 Parks
- Lake Meade and Lake Powell First to Deploy/Per Park
  - Sectorized and Omnidirectional Outdoor APs
- Won Against Ruckus
  - Equivalent performance
  - No mandatory renewal fees
  - Option for High SLA purpose built wireless backhaul
  - Cambium Support

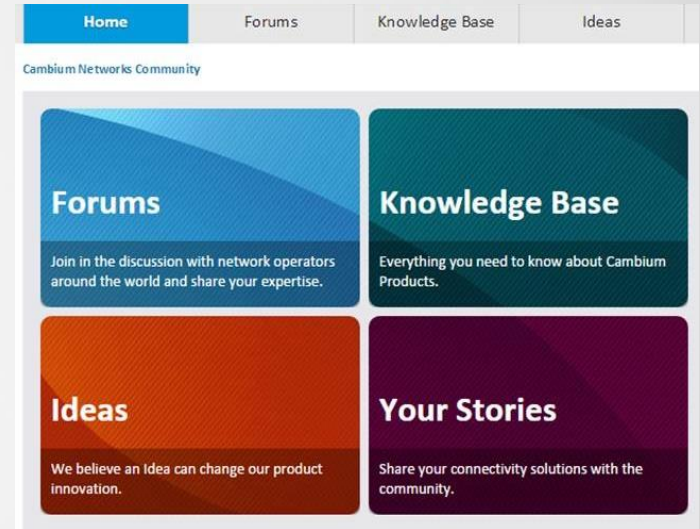


Join the growing Community – Share your thoughts!



# Time for Q&A

<http://community.cambiumnetworks.com/>





**Cambium Networks<sup>TM</sup>**

Exceptional Wi-Fi for your hotel guest to feel at home - cnPilot Hospitality Solutions