



Wi-Fi Offload for Hospitality

Better Indoor Mobile Experience Without the Cost and Complexity of DAS

Executive Summary

Connectivity in hospitality is part of the overall guest and staff experience and a prerequisite for modern hotel operations. Guests expect their phones, laptops, apps, digital keys, messaging, work calls, and in-property services to work wherever they are on the property.

At the same time, indoor cellular coverage often degrades in guestrooms, corridors, meeting spaces, basements, restaurants, and parking structures. Hotels can address indoor cellular coverage with Distributed Antenna Systems (DAS) or boosters, but these options often introduce significant cost, carrier coordination, construction complexity, and timeline risk.

Wi-Fi offload offers a more practical alternative. It uses trusted hotel Wi-Fi infrastructure to support mobile-first users who may never intentionally join the hotel Wi-Fi network, while preserving the voluntary guest Wi-Fi experience for branded services, loyalty engagement, and hotel digital touchpoints.

WHAT IS WI-FI OFFLOAD?

Wi-Fi offload enables continual, secure connectivity for mobile devices using both cellular and Wi-Fi networks. Transitions are automatic between the networks using technologies such as Passpoint™ and OpenRoaming®.

For users, the experience is seamless. Devices can connect automatically to the trusted Wi-Fi network without manual login, helping mobile connectivity feel more consistent in places where indoor cellular coverage is weak or congested and difficult to improve economically or logistically.

For hotels, Wi-Fi offload should be viewed as a complement to the guest Wi-Fi strategy, which remains the primary lane for guest engagement, digital services, loyalty, casting, and app-driven experiences. Offload adds a second lane for mobile-first users who expect their phones to just work indoors.

WHY HOTELS SHOULD CARE

- **Guest experience and reviews:** When indoor cellular performance is poor, guests often blame the property regardless of whether the root cause is the carrier signal. Offload provides another high-capacity path using trusted Wi-Fi and one less friction point with visitors.
- **Staff and operations:** Reliable connectivity supports staff coordination, work orders, mobile point-of-sale, messaging, service recovery, and day-to-day operations for both corporate and personal devices.
- **Mobile-first guest services:** Mobile check-in, digital keys, messaging, service ordering, and app-based journeys all depend on reliable connectivity in guestrooms and common areas.
- **Meeting and event satisfaction:** Conference spaces, ballrooms, restaurants, rooftop venues, and lobbies create dense mobile usage patterns where seamless connectivity matters even for non-guest users.
- **Revenue or cost-offset potential:** High-quality venue Wi-Fi can become an asset for carrier offload or partner programs where available, depending on geography, eligibility, and ecosystem participation.



WI-FI OFFLOAD VS. DAS

Hotels evaluating indoor mobile improvement often start with a cellular-centric lens: DAS, small cells, or signal boosters. These technologies can be effective, but they are usually construction and coordination projects, not simple IT projects. Wi-Fi offload starts with the network that hotels already have in place for guest satisfaction, staff operations, and digital services.

DAS Challenges	Wi-Fi Offload Benefits
High capital cost	Leverages managed Wi-Fi infrastructure already being deployed or refreshed, no dedicated CapEx requirement.
Long carrier coordination and approvals process	Carrier involvement is a standards-based roaming agreement, not a per-site RF build.
Complex cellular RF design, construction, and deployment	Deployed with familiar Wi-Fi skills IT, MSP, and property teams already have
Long timelines and multi-party dependencies	Deploys on the existing network using Passpoint or OpenRoaming (no multi-party rollout) in weeks not months.
Added operational burden and refresh complexity	One network to manage, no separate system to maintain.
Limited coverage flexibility/hard to re-tune after install	Coverage and capacity scale on the existing Wi-Fi platform; tune radios or add APs and cabling as demand grows.
Carrier/technology lock-in	Operator-neutral and standards-based supporting any participating carrier and evolves with Wi-Fi standards; no per-carrier rework.

PRACTICAL DEPLOYMENT APPROACH

1. **Build the Wi-Fi foundation.** Ensure strong coverage and capacity across guestrooms, corridors, lobbies, meeting spaces, restaurants, bars, outdoor amenities, parking areas, back-of-house spaces, and staff zones.
2. **Enable secure offload.** Use Passpoint or OpenRoaming to support automatic, secure connectivity for eligible mobile devices and trusted identities.
3. **Operate with policy and segmentation.** Use centralized management, traffic separation, and consistent policy control to protect security, performance, and operational simplicity.

MARKET-SPECIFIC LENS: TWO CONNECTIVITY JOURNEYS IN HOSPITALITY

Hotels serve two different connectivity journeys and confusing them can lead to poor design decisions.

- **Voluntary guest Wi-Fi journey:** Guests intentionally join the hotel Wi-Fi network for streaming, work bandwidth, casting, loyalty recognition, hotel app experiences, dining/spa bookings, service ordering, or digital concierge services.
- **Mobile-first offload journey:** Guests, visitors, or event attendees do not want to join hotel Wi-Fi. They simply expect their phone to work for messages, ride share, social apps, work notifications, and calls where Wi-Fi calling is supported.

The best hospitality architecture supports both journeys: An engagement lane for branded guest services and an offload lane for seamless, cellular-like connectivity without captive portal friction.



Cambium's ONE Network Approach

Cambium enables Wi-Fi offload through a unified ONE Network architecture that integrates Wi-Fi, switching, security, WAN/backhaul options, and centralized management through cnMaestro™ Network Management. This gives organizations centralized visibility, policy enforcement, segmentation, and operational consistency across sites.

For hospitality, this unified approach supports guest Wi-Fi, staff operations, and mobile-first offload in one managed architecture. Hotels can improve the indoor mobile experience while still preserving the branded guest Wi-Fi path for digital engagement and loyalty-driven services.

KEY ADVANTAGES

- Centralized management through cnMaestro
- Secure, onboarding using standards-based offload capabilities
- Policy enforcement and traffic segmentation
- Scalable performance across simple and complex environments
- Simplified deployment and provisioning
- Reduced operational complexity compared to multi-vendor or cellular-centric approaches

THE BOTTOM LINE

For hotels, Wi-Fi offload is a practical way to improve mobile connectivity without the cost and complexity of DAS or dedicated cellular infrastructure.

It improves the indoor mobile experience, supports digital guest journeys, strengthens staff operations, and helps hotels avoid making DAS the default answer to every cellular coverage issue. For properties modernizing Wi-Fi anyway, offload turns that investment into a broader mobility platform.

Cambium makes that possible through our unified ONE Network approach that simplifies deployment, centralizes operations, and extends the value of existing Wi-Fi investments.

FIND OUT MORE

See how Wi-Fi offload works in our guided demo:

<https://www.cambiumnetworks.com/guided-demos/wi-fi-offload-with-passpoint-cnmaestro/>

About Cambium Networks

Cambium Networks enables service providers, enterprises, industrial organizations, and governments to deliver exceptional digital experiences and device connectivity with compelling economics. Our ONE Network platform simplifies management of Cambium Networks' wired and wireless broadband and network edge technologies. Our customers can focus more resources on managing their business rather than the network. We make connectivity that just works.

