

Meeting the Challenge for Great Hospitality Wi-Fi

Reliable, High-Performance Wi-Fi Makes Meetings and Conferences More Profitable for Hotel



Executive Summary	1
The Four Challenges of Delivering Wi-Fi for Meetings and Conferences	2
Meet Your Wi-Fi Challenges with Meru	3
Deploy a seamless virtualized wireless LAN across the hotel property	3
Simplify guest and staff access	4
Optimize Wi-Fi capacity and coverage with channel layering	5
Rev up your meetings business with Meru	5

With the crush of mobile devices onto hotel networks, meeting spaces and conference centers are challenged like never before to provide reliable, consistent Wi-Fi service. The basics of great meetings go beyond coffee, tea and pastries – reliable Wi-Fi is on the agenda of nearly every group meeting and convention. Most attendees bring multiple wireless devices with them and expect to be able to work, use social media, surf the web, stream content, and more.

Hotels with meeting and conference facilities are seeing bookings rise, as organizations embrace local options, rather than destinations farther afield, for their events. Hotels are being selected for more than their location, food, and amenities. Technology plays an increasingly important role in the success of meetings or conventions. For many events, success includes providing reliable Wi-Fi to hundreds or even thousands of attendees using mobile devices. Success also means supporting the mobilization of back-of-house operations, including guest registration, food and beverage, and physical security.

For hotels that want to grow their events business, the stakes are high:

- A Wi-Fi connection is the most important amenity for travelers, followed by free breakfast.¹
- Meetings and tradeshow represent 40 percent of the \$273 billion that will be spent on business travel in the U.S. in 2013.
- Eighty-five percent of meetings are conducted at venues with lodging.²

Meeting and conference attendees may expect the same quality of Wi-Fi service that they enjoy at home, at work, or at their local coffee shop, but delivering that experience is a lot more challenging for hotels. To keep event attendees happy, a hotel's Wi-Fi must service hundreds or thousands of people, each with multiple mobile devices in a crowded space. Disappoint, and attendees will be quick to air their grievances, in person or on social media, hurting your reputation. And if attendees' complaints are loud enough, the event organizers are likely to rethink their meeting venue for next year.

¹ "Hotels.com Amenities Survey," Hotels.com, April 5, 2012, <http://press.hotels.com/en-us/more-infographics/hotels-com-amenities-survey/>

² "The Economic Significance of Meetings to the U.S. Economy," Pricewaterhouse Coopers, February 2011

The Four Challenges of Delivering Wi-Fi for Meetings and Conferences

Delivering Wi-Fi at meetings and conferences is challenging for four key reasons:

1. Wi-Fi clients are “sticky”.

The so-called “sticky client” issue is one of the most common problems in hotel meeting rooms. When dozens or even hundreds of people enter a meeting room, their wireless devices tend to associate with the wireless access point (AP) that has the strongest radio-frequency (RF) signal—and that is usually the nearest AP. But as people move around the room, their mobile devices tend to stay connected, or stick, to the original AP, slowing Wi-Fi performance and creating connectivity problems for everyone. This eliminates channel planning and manages co-channel interference.

The sticky client problem is rooted in the traditional microcell architectures used by most wireless LAN solutions. The RF signal is shared among all client devices, which decide to which AP to connect, and when to roam from one AP to another. But because the clients don't have a picture of the entire wireless LAN and all of the interference sources, they usually do not pick the best AP; accordingly, the user experience suffers.



2. Having to log on multiple times in different parts of the hotel is inconvenient.

Attendees should have a seamless experience using the Wi-Fi, wherever they are on the hotel property. However, guests' mobile devices tend to associate with one SSID while they are in their rooms or in the lobby, but when they walk over to the meeting rooms or convention area, their connection may drop and they will have to re-enter their username and password to use the Wi-Fi with a different SSID in that area. Requiring attendees to authenticate multiple times to use the wireless LAN in different parts of the hotel property is often very confusing and annoying.

3. Demand for WLAN capacity is rising fast.

When hundreds of people at the same time use Wi-Fi to connect their mobile devices, there is a capacity crunch. Delivering enough Wi-Fi capacity at meetings and conventions to meet escalating demands has been at the heart of the challenge.

Most wireless LANs were designed to maximize RF coverage, but as the density of mobile devices increases, it's important to shift to a WLAN design that is also optimized for capacity. And that usually means deploying more APs. However, in traditional microcell architecture, when large numbers of APs are used to deliver the much-needed capacity, it creates the potential for greater RF interference. Solving the capacity problem without creating more interference is the key to user satisfaction and easier network management.

4. Hotels need the ability to separate traffic by application or service.

To ensure both a good experience for conference attendees as well as ensure smooth business operations, hotels need the ability to separate the application traffic over the same wireless LAN infrastructure. That way, attendees who are live-streaming the event won't be able to impact the keynote presentation, lunch orders at the pool, mobile check-in or any other use case.

Hotels should be able to separate application and other traffic by different user groups or departments, such as conference attendees, presenters, back-of-house operations such as food and beverage, as well as mission-critical operations such as safety and security systems.

Meet Your Wi-Fi Challenges with Meru

With the Meru Virtualized Wireless LAN, hotels can address the need for higher bandwidth and higher client densities and deliver an exceptional experience for their meeting and conference attendees. Meru delivers the reliable wireless LAN service that guests, staff, and other users expect, while giving hotel management the control and flexibility it needs to meet the mobility demand.

Deploy a seamless virtualized wireless LAN across the hotel property

With Meru, hotels can deploy a virtualized wireless LAN. Meru creates a single, seamless Virtual Cell, in which client devices see one virtualized access point instead of many APs. And unlike traditional microcell deployments, the network—not the client—makes the roaming decision, based on what's best for the device and the network. This solves the sticky client problem and enables transparent load balancing. And most importantly, it keeps the attendees and staff happy. Users can move about freely without disruptions to their phone calls, applications, and video streams.

In addition, Meru's single-channel architecture eliminates the need for complex planning for wireless LAN coverage, which reduces the total cost of operation for the hotel.

Simplify guest and staff access

Hotels can use Meru Identity Manager software to quickly onboard guests' and employees' mobile devices. With self-service provisioning, hundreds or thousands of people can get access to the network quickly without requiring the assistance of administrative or IT staff. Identity Manager works with any client device, from any vendor, and on any network, so the user experience is trouble-free. Role- and policy-based provisioning gives hotels tight control over who and what devices have access to the Wi-Fi, and where they can go on the network.



Figure 1: Take the pain out of providing network access to hotels guests and event attendees with Meru Identity Manager Software for self-service on-boarding.

Optimize Wi-Fi capacity and coverage with channel layering

Attendees' appetite for Wi-Fi bandwidth at meetings and conventions is seemingly insatiable, and Meru can help you meet the spiraling demand, as well as assure the user experience for different user groups and applications.

With Meru, you can easily deploy multiple, independent RF channel layers to increase capacity and automatically balance the traffic load for consistent availability, no matter where meeting attendees are on the property. Channel layering enables Meru to deliver some of the best RF capacity in the industry.

Meru's Channel Layering technology allows several virtual cells using different channels to coexist in the same space. Different channels can be dedicated to different applications, devices, and usage scenarios. Conference attendees, for example, can be accommodated on one channel layer, while back-of-house operations are accommodated on another channel layer, and physical security systems on yet another layer.

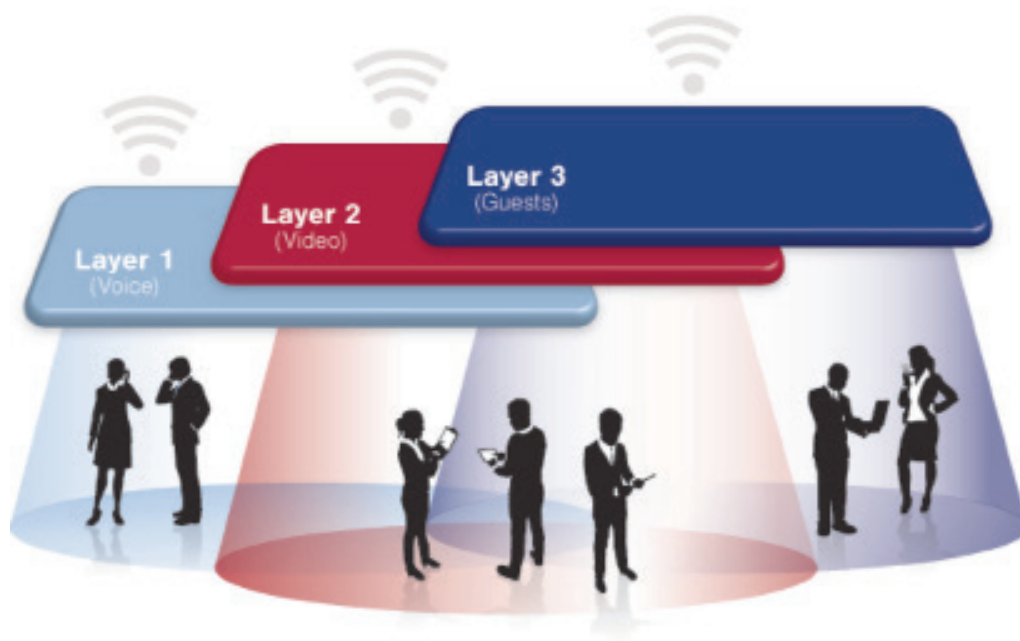


Figure 2: Meru's Virtual Cell and Channel Layering enable hotels to increase their wireless LAN coverage and capacity to meet high-density client environments such as meetings and conventions.

Rev up your meetings business with Meru

The competition for meetings and conventions is fierce. Having a desirable location with gourmet food isn't enough anymore. Technology—including Wi-Fi—is playing an increasingly important role in site selection, as mobility has become pervasive in our lives. With Meru's Virtualized Wireless LAN, hotels can deliver on guests' expectation for first-class Wi-Fi for their meetings and events. Read case studies of how leading hotels around the world are using Meru Virtualized Wireless LAN to support their events and other operations:

www.merunetworks.com/industries/hospitality.html

Meru delivers an all-wireless network that fully supports the enterprise, delivering a consistent, interactive experience for all users. No matter what applications they are running. No matter how many other users are on the network. For more information, visit www.merunetworks.com or email your questions to: meruinfo@merunetworks.com.

Copyright © 2014 Meru Networks, Inc. All rights reserved worldwide. Meru Networks, Meru, Air Traffic Control and Airtime Fairness are registered trademarks of Meru Networks, Inc. All other trademarks, trade names, or service marks mentioned in this document are the property of their respective owners. Meru Networks assumes no responsibility for any inaccuracies in this document. Meru Networks reserves the right to change, modify, transfer, or otherwise revise this publication without notice. 11/14 DS1072.4 US

MERU[®]

Corporate Headquarters
894 Ross Drive
Sunnyvale, CA 94089

T +1 (408) 215-5300
F +1 (408) 215-5301

E meruinfo@merunetworks.com