



# The Smart Digital Hotel

## Deliver a Simple and Secure VIP Experience for Every Guest

Consistency is the watchword of the hospitality industry. Just as exceptional home-like experiences strengthen guest loyalty, failure to honor your marketing promises is a recipe for disappointment, abandonment and damaging social media posts that can take years to unravel. More than ever, hotels need to keep up with customer expectations to retain loyalty and attract new business and leisure travelers.

“ With Aruba, we will create more insightful profiles of guest, and therefore deliver more relevant personalized services and offerings. This is at the heart of what a great hotel should be. A home from home experience. ”

Katarina Lilic, Executive Director,  
Amadria Park Sibenik

Transient opportunities to influence brand loyalty, sentiment and satisfaction, for better or for worse, happen throughout a guest's journey. Taken together they form the overall guest experience, and the objective of the brand or property is to ensure it meet or exceed expectations of what that experience should be. Whether it is app-enabled property navigation, frictionless mobile check-in/check-out options, mobile-enabled in-room media connectivity, preferences-based dining suggestions, proximity-enabled housekeeping or lost child location services, skillfully blending digital capabilities and physical processes are critical for making or breaking the guest experience and affinity for your brand.

The need for consistent experiences also applies to facility operations that may impact productivity, profitability, and staff safety. Examples include the ability to speedily locate luggage carts or dining trays, improving well-being of staff with location-based panic buttons, and delivering robust mobile voice options to smooth communications across the facility. Additionally, technology solutions can improve operations for security teams who are tasked with keeping guests safe.

### INTERESTING FACT:

In 2019, more U.S. households subscribed to a streaming service (69%) than to a traditional satellite or cable TV provider (65%) for the first time. With the popularity of both smartphone and content streaming services at home, guests now want the same dynamic experience in their hotel room.

Driving consistent and personalized guest experience requires making sense of collected data quickly and responding accordingly. That's why simply deploying Wi-Fi solutions for connectivity alone is no longer enough. Hoteliers need to evaluate Wi-Fi solutions that can enable proven technology innovations through ecosystems partnerships that help turn networking infrastructure into a powerful personalization platform. To meet this demand, the hospitality industry needs to evolve constantly and be ready for coming innovations – such as facial recognition, service automation, robots and VR to name just a few. The Aruba Edge Services Platform can help hoteliers to get ahead of guest expectations and enable smart digital hotel initiatives.



## NETWORK CONNECTIVITY MUST BE ALWAYS-ON AND AUTOMATED

Performance of the network must always deliver an exceptional guest experience. When hoteliers unify all network operations, it increases their ability to focus on guests, not on whether devices are connecting.

### Seamlessly connect guests to Wi-Fi

The first step to knowing your guest is ensuring they are on your network. Airpass enables your loyalty guests to transition automatically from their provider's cellular network to your wireless network. Guests will appreciate the ease of connecting and you'll gain immediate capabilities. With data gathered at the point of entry, rather than after a guest initiates a connection, new insights on traffic patterns and network usage can be delivered. Hospitality operators can position digital or other signage to promote offers or discounts. Additionally, network insights and usage can help IT understand where there might be connectivity issues so that alterations in the network can be deployed to deliver the best experiences.

### High-performance wireless networks

**Automation can help alleviate the high percentage of unplanned network downtime that is caused by human error (Gartner, 2019).**

Aruba's Wi-Fi 6 infrastructure is designed to support hundreds of guests and associate devices simultaneously without impacting Wi-Fi quality. Guests and staff can roam the hotel property or venue with consistently great performance. Aruba optimizes the connection from the device to the best available access point regardless of where the device is carried. Critical applications can be prioritized so they can perform at their peak, not impacting the guest or staff experience.

Hitless updates and hitless failover ensure that the wireless network can stay current with the latest security updates, tolerate faults, and be available whenever needed. No test interruptions, no lost experimental data, no dropped connections or transactions.

The infrastructure leverages industry-leading tools to auto-adapt to changing environments and applications: ClientMatch to optimize roaming performance; AppRF to optimize the performance of critical applications; Adaptive Radio Management to enhance radio performance; and AirSlice to manage bandwidth allocation.

### Smart switches from edge to core

Mobility in hospitality is a priority, but so too is the wired network. Each AP that connects to a switch port has to be reliable and deliver the best performance possible. Multi-gigabit switches support high density APs while easily segmenting traffic for wired devices, delivering enhanced performance and improved security. In addition to Smart Rate PoE, Aruba provides auto-negotiation between switch and access point to determine the needed throughput at the edge.

The Aruba AOS-CX operating system features a time-series data base that provides deep visibility into data traversing the switching fabric. Intuitive software-defined management tools, built-in analytics, and programmable scripting offer unparalleled insights into network and device activity, fault isolation, and system performance. Upgrades and updates can be easily enabled, reversed, and changed without impacting the network or the people who rely on it.

A similar capability to wireless hitless failover occurs in the core of a hotel network. Redundant Aruba AOS-CX switches operating in Active-Active mode will deliver non-stop operation in the event of a fault. Virtual Switching Extension (VSX) ensures that traffic loads are validated before returning balanced traffic loads to the Active-Active pair. Once the first core switch completes the transfer, the process repeats for the remaining core infrastructure.

The Network Analytics Engine (NAE), included with AOS-CX, provides a built-in framework for monitoring and troubleshooting networks. NAE detects problems in real-time and analyzes trends so hotel IT can see and fix problems before they impact guests, staff, or other properties.



AOS-CX, coupled with high-performance switches, delivers the throughput, performance, and actionable insights IT administrators need to handle the massive amounts of data now being generated at the network edge.

### ZERO TRUST SECURITY FROM END-TO-END

Hospitality organizations are investing in cybersecurity but they must stay diligent to stay ahead of threats. Most traditional security solutions focus on securing the perimeter by detecting known attacks and malware by their patterns or signatures. Yet, never before seen threats, mutated threats, and advanced targeted attacks can often bypass these types of traditional solutions.

**Fifty-nine percent of customers believe their data is vulnerable to a security breach according to a recent report by Salesforce.**

### Know what is on the network

IoT devices can have many standard OS platforms and it can be challenging to know what is on the hotel IT network especially with guests connecting. ClearPass Device Insight simplifies device onboarding using machine learning discovery methods to identify and profile a wider range of device types (guest devices, associate devices, security devices, etc.). Machine learning will also understand behavior and other contextual factors over time to help profile new devices as they come on to the network. Visibility is the first step toward security.

### “Zero Trust” network access

Once devices are identified, ClearPass Policy Manager profiles, authenticates, authorizes, and tightly manages network access using granular, policy-based access controls. Users and devices have restricted access to only those network, IT, and application resources for which they have been approved.

### Separate guest, associate and corporate traffic

Aruba's Dynamic Segmentation delivers the micro-segmentation needed for traffic on wired, wireless and the WAN using granular user/device/connectivity information. Policies are carried across the network end-to-end, ensuring that guest traffic is easily kept separate from associate or corporate traffic, regardless of the location of the user or device or the switch port carrying the traffic.

### Marsh Cyber-Catalyst Designation

One of the leading vendors of Cybersecurity Insurance has recognized Aruba's Policy Enforcement Firewall (PEF) as a leading component to a Zero-Trust security environment, designating it as a “Cyber-Catalyst”. For hospitality organizations that leverage Aruba PEF, they can receive a better rate on their insurance, as well as be more secure through automated policy enforcement.

### ACT QUICKLY WITH AIOPS

The incredible amount of data generated throughout a hotel property is challenging the very fabric of network operations. Aruba's edge platform includes assurance and orchestration features to maximize up-time, optimize user experiences, and reduce the time to troubleshoot issues to root cause. Automated network assurance delivers AIOps insights from a single pane of glass, while edge-to-cloud experience monitoring generates automated AI-based alerts that proactively pinpoint critical application and network issues.

### Optimize remote site visibility and management

Remote properties may not have full-time IT staff available. Aruba Central provides a single pane of glass giving complete visibility of remote sites to those at corporate headquarters. IT can remotely monitor, manage, and troubleshoot the wired, wireless, and SD-WAN infrastructure from anywhere. Aruba's SD-Branch solution offers integration capabilities across the WLAN and LAN optimized for SD-WAN, MPLS and cellular connectivity that is destined for the Internet or a data center.

### Simplified deployment at remote properties

Non-technical staff can participate in the deployment of a hotel properties network. This helps reduce IT headaches and gets hotel properties operational in the fraction of the time it would take to send a dedicated person to each site. A mobile app allows employees to barcode scan Aruba infrastructure and plug them in with configuration happening automatically to get devices working.



### IT OPERATOR EXPERIENCES MATTER:

Often forgotten is the way that IT experiences the network, in light of the constant demands for performance and pressure to deliver. Aruba's Edge Services Platform provides solutions that unify wired, wireless, and WAN operations so that operators can simplify their day-to-day operations and feel confident that they can deliver an always-on and secure network for their hospitality properties.

### Converge network and security operations at a lower cost

The convergence of network and security services utilizing Aruba's gateway helps to reduce your total cost of ownership. These Aruba Central cloud-managed gateways are optimized for SD-WAN using MPLS, Internet and LTE cellular connectivity to help ensure always-on performance and also include role-based access and firewall features.

### AIOps for optimized performance

Aruba delivers customized recommendations through AI-based machine learning to improve network and application performance based on anonymized comparison with peer environments. If a change could increase performance by 10%, it is recommended to the Network Admin who can then authorize the settings change. Aruba User Experience Insight provides IT a real-time view of the end-user experience and clear action steps to resolve any issues before a service ticket is opened. These powerful tools bring much-needed help to enable already overwhelmed IT staff to take necessary action and stay ahead of issues.

### LEVERAGE ANALYTICS AND LOCATION FOR IMPROVED EXPERIENCES AND OPERATIONS

High-performing networks leverage additional solutions to meet guest expectations. Ecosystem partner solutions can automatically gather data from multiple sources – access points, people counters and POS systems – and turn them into insights about guest preferences. These solutions allow hotelier the opportunity to renew the focus on how guests, associates and IT experience the network.

### Improve guest and associate guest experiences with location services

Using the power of location, Aruba can improve the guest experience and help raise guest satisfaction scores. Aruba APs are location ready and when supplemented with Aruba Beacons, can make an entire hospitality venue location smart. Aruba Meridian is an integral part of a holistic app strategy by using location services to enable blue-dot wayfinding, push notifications, and implement specific campaigns. Utilizing analytics from the network, facilities can ensure guests are helped the moment they enter a facility with automated check-in or enable them to use their smartphone to find a location (hotel room, conference center, on-site restaurants, mobile concierge or workout room) without frustration or lost time.

“Wi-Fi is a necessary for any hotel to stay competitive, particularly in Las Vegas. With Aruba, we have the added benefits of using access points that are location-ready, and include built-in BLE beacons, and extra ports that allow us to plug in other IoT devices in the rooms without running additional cabling. Location-based services are very important for us, as they can be used to enhance our staff's and guests' physical security, as well as deliver a wealth of new guest services options.”

Gavilanes, Director of IT of  
Downtown Grand Hotel & Casino



### Find and track expensive assets

Aruba's asset tracking solution helps associates track assets by leveraging location-ready Aruba WLAN infrastructure and Bluetooth-based Aruba Tags. Hotel property, luggage, safety devices and other expensive assets can be monitored and found when needed, freeing up hotel staff to focus on guest experience and not on finding a high-value item. This capability increases staff efficiency, reduces equipment costs, and improves guest experience.

### Access Points as IoT Platforms

We are accustomed to thinking about Wi-Fi access points in the context of secure wireless network access, and for many years that was their primary function. Not so today. Aruba Wi-Fi 6 access points include radios for wayfinding, geofencing, location tracking, sensor monitoring, door locking, and actuator control. These capabilities transform Aruba access points into secure, multi-purpose communication systems that are both network access on-ramps and full-fledged IoT platforms.

With some of the industry's best technology partners and app developers, Aruba is helping to deliver innovative solutions that connect the dots between today's business and IT priorities. These solutions provide hotelier tested and proven integrations to support associates devices (employee safety devices and asset tracking) IoT innovations (keyless entry), and analytic driven decision making (location services). To learn more, visit our list of [hospitality partners](#).

### A PARTNER YOU CAN TRUST AS YOU DELIVER A VIP GUEST EXPERIENCE

The most dynamic and transformative experiences happen at the edge. Aruba Edge Services Platform enables networks that use telemetry data, analyze that data and then execute actions that drive the desired business outcomes. Aruba's mission is to harness and secure data at the edge, and, in partnership with our customers, enable the most meaningful education digitalization initiatives. Start the smart digital hotel journey by contacting your local Aruba salesperson or reseller today.

#### GUEST EXPERIENCES MATTER:

Guest experience can will-make or break not just the stay but whether or not you get the business at all. Eighty-two percent (82%) of U.S. customers said they stopped doing business with a company due to poor customer experience (MarTech). It is has never been more critical to leverage technology to interact with guests.