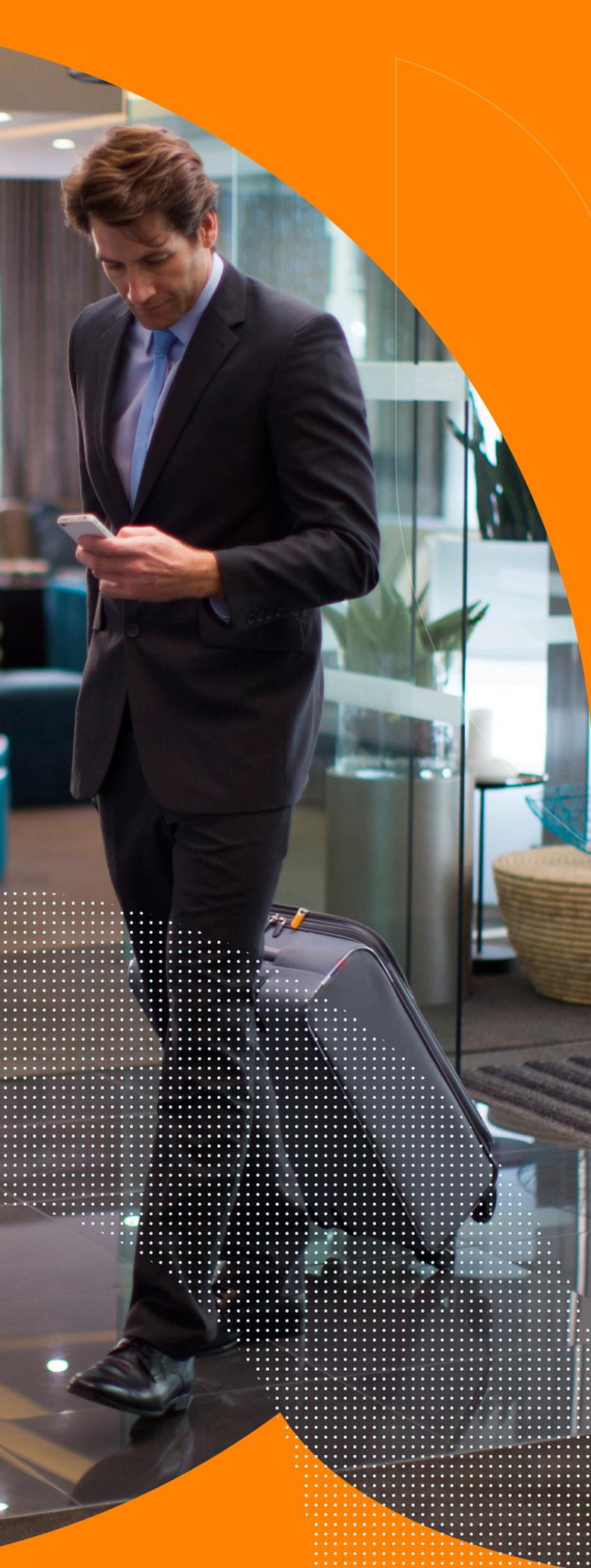


aruba

a Hewlett Packard
Enterprise company



SOLUTION OVERVIEW

Accelerating Hospitality Transformation

ARUBA ESP (EDGE SERVICES PLATFORM) IS THE NETWORK FOUNDATION FOR EVERY STEP OF THE JOURNEY.

 **EDGE7**
Networks



In the past few decades, technology has shifted how we live, work, travel and interact with others. This mobile era has changed everyday things like banking and shopping to how we design and configure the smart digital hotel. So, it's no surprise that technology will be a key factor in enabling business and pleasure travelers as they return to hotels. And while human behaviors (wearing masks, taking care to socially distance, etc.) will be the most important short-term elements in minimizing a new surge in COVID-19 infections, technology will again be the great enabler of what's possible for the guest and staff new normal— supporting things like density planning and behavioral goals—all in a seamless and secure manner to keep the workplace safe and guests connected.

But what happens when we look longer term—as hotel staff return to work and people travel whether for work, vacation or visiting family? How do we enable a hybrid environment where some employees work from home, but also go to the hotel or venue to support guests or attend meetings? The role of the network infrastructure can play a part as workplace and hotel design evolves to accommodate this new normal. One thing is clear—connectivity, and the technologies that support it, will be even more important in setting the foundation for reimagined hotels.

The consensus seems to be that the return to the hotel and beyond will be a three-phase journey.

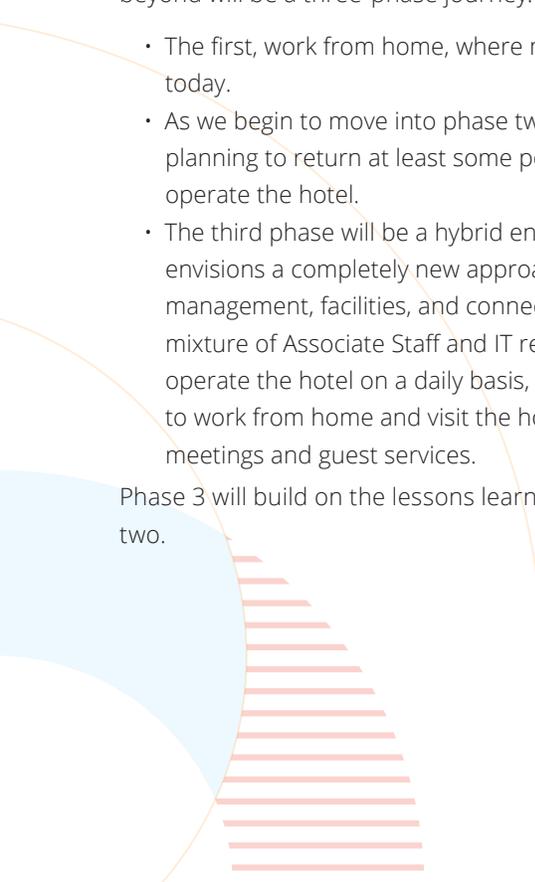
- The first, work from home, where many companies are today.
- As we begin to move into phase two, many hotels are now planning to return at least some portion of the staff to operate the hotel.
- The third phase will be a hybrid environment, which envisions a completely new approach to workforce management, facilities, and connectivity – where there's a mixture of Associate Staff and IT resources that come to operate the hotel on a daily basis, and those that continue to work from home and visit the hotel on occasion for meetings and guest services.

Phase 3 will build on the lessons learned in phases one and two.

THE NETWORK AS THE FOUNDATION

Each phase of the journey has a common set of challenges associated with connectivity, management, and security. Aruba ESP—a cloud-native and AI-driven platform—is specifically designed to address these challenges and serves as the foundation for the workplace reimagined. With Aruba Central at the heart of the solution, Aruba ESP provides a cloud experience that can be consumed either as a service in the cloud or on-premises. It can be delivered as a managed service through Aruba partners or new consumption models via network as a service with **HPE GreenLake**.

This is important because by delivering Aruba ESP through a cloud model, hoteliers can quickly scale up when the situation calls for it – like enabling a distributed workforce for business continuity – while enabling centralized management and AI-powered automation to lower operating cost, essentially 'doing more with less'. Aruba ESP provides a single pane of glass for wireless, wired, and WAN infrastructure across campus, branch, remote worker, data centers, edge and cloud for a unified operational model. This becomes increasingly important as the workplace is dispersed, because it simplifies central network operations and management across all locations. And built-in Zero Trust Security means the network remains secure, regardless of where staff, guest, IT resources or devices connect.





PHASE 1.

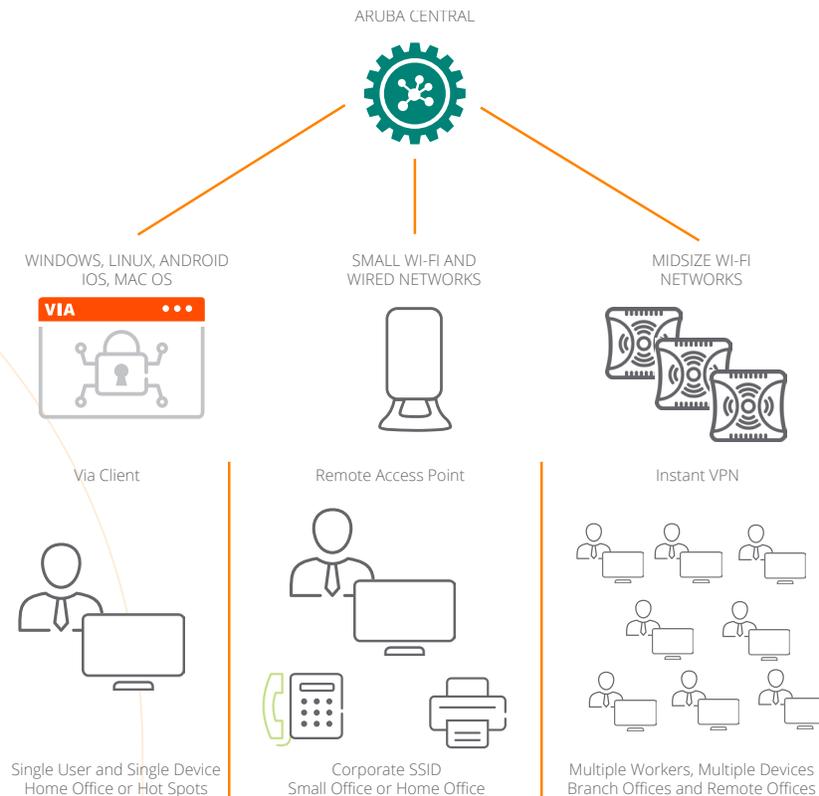
Work from Home – Secure Connectivity Takes Center Stage

The global pandemic threw the world into a crisis situation where the hospitality industry had to quickly enable some workers who are not typically remote workers to maintain business continuity. Aruba was able to use our expertise in remote connectivity solutions to extend hoteliers securely and seamlessly to the home office – managed by Aruba Central. **Aruba Remote Access Points (RAPs)** not only supply home wireless connectivity that is identical to an in-office experience (down to the SSID), they also support Zero Touch Provisioning (ZTP), ideal for the non-technical remote worker. Aruba RAPs also support identity based Zero Trust Security and cloud management designed from the ground up to enable IT to manage and troubleshoot an employee’s network from a remote location.

The **Aruba VPN soft client, VIA**, for mobile devices such as phones and tablets, offers a secure solution that enables access and security from anywhere to provide a complete remote workforce portfolio. These solutions were a much needed foundation for quickly maintaining business continuity in the face of the crisis.

ARUBA ESP ZERO TRUST SECURITY AND PRIVACY

Security and privacy go hand-in-hand. Aruba’s Zero Trust Security framework ensures that the data being collected for proximity solutions is always protected. It starts with military-grade encryption that moves sensitive information securely and efficiently throughout your network. User and device access are controlled using Aruba’s embedded Policy Enforcement Firewall (PEF) to dynamically micro-segment traffic based on centralized hotel brand policies defined in Aruba ClearPass Policy Manager. It all adds up to advanced protection that is native to Aruba’s wireless, wired and WAN infrastructure.



- Figure 1: Aruba Cloud-native, Remote and Teleworker Solutions



PHASE 2.

Return to the Location-aware Hotel – Ensuring Guest and Staff Employee Wellness and Safety

As organizations plan for the safe return to hotels, solutions that support density planning and behavioral goals are essential. This makes things like contact tracing possible and means technology can also encourage social distancing. Aruba's 500,000 customers already have the network foundation in place to easily deploy these solutions. No need to rip and replace, no forklift upgrades required.

Aruba access points are IoT enabled platforms that include Wi-Fi, Zigbee and Bluetooth radios, delivering Smart Telemetry – precision indoor and outdoor location data necessary for these new applications, and true infrastructure convergence which can substantially reduce hotel IT and OT operating cost and capital investments. And to help with this phase of recovery, Aruba is providing AI-powered, cloud-based proximity solutions that will operate seamlessly on existing Aruba networks. These include:

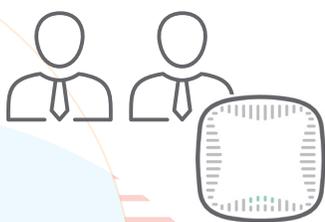
- **Contact tracing** using Wi-Fi and Bluetooth to minimize virus spread by quickly identifying guests, staff, or other visitors who may have come into contact with an infected person
- **Hotspot or heat mapping of locations** carefully pinpoint physical locations that require quarantining and special cleaning schedules
- Purpose-built **dashboards and reports** in Aruba Central to accelerate discovery and investigation
- AI-based **data enhancement** to relieve IT from
- Time-consuming collection and analysis to enable hotel management to quickly respond and take the necessary action in real time

- Point and click views and filters that provide **precision site, building, floor and access point granularity** across a wide range of user and device attributes
- **Rapid set up** on any existing Aruba infrastructure

Aruba's cloud-delivered services are complemented by a broad range of solutions delivered through our extensive partner ecosystem. Using Aruba APIs, connectivity, and telemetry data, these partners are able to provide robust return-to-work solutions, with the controls necessary for maintaining privacy and confidentiality.

LOCATION DATA OR AIOPS FOR CONTACT SOLUTIONS?

You will hear a lot about using location data, but how do you turn that into useful contact information? Many wireless vendors will supply a large amount of raw data—which is table stakes, but then it's left up to you to interpret how to use this data for guest and staff health and safety solutions. How do you distinguish between contacts that are separated by walls from true personal interactions? Given that we all use multiple devices, how do you build a comprehensive contact profile that correlates devices to users? Will the data provide a proximity "risk score" to prioritize action? Aruba offers location solutions with precision location data processed by AI-based Machine Learning and are visualized by graphically-rich applications to solve these challenges. You are provided with accurate contact and location information without the guesswork. This relieves hoteliers from the overhead and delays associated with correlating data and manual analysis, so they can focus on protecting guests and staff.



Aruba Access Points collect smart telemetry location data



Data streamed to visualization and AI/ML proximity models



HR queries contact tracing software

- Figure 2: Aruba AIOPS Uses Smart Telemetry and AI Modeling to Power Location Solutions



PHASE 3.

The Hybrid Hotel and Office – A Long-term Blended Approach for Hoteliers

As we learn what the new normal really means and the blend of home and physical hotel property spaces becomes better understood, hybrid hospitality will come into focus. We expect this to consist of a new generation of home office products and form factors that build on current work-from-home solutions like RAP's, while new larger campus guidelines for density and space management will require flexibility, fluidly optimized intelligence, and seamless connectivity with remote locations for a consistent experience—no matter where employees connect from.

Reimagined hospitality will increasingly rely on Wi-Fi, Bluetooth, IoT sensors, and other capabilities that build on what we've learned in phases 1 and 2 of the business recovery journey. Where can touchless solutions be used more effectively? How does the network play a bigger role in security and crisis management, should any health or other type of emergency arise? What about automatically adjusting physical and environmental factors for each individual based on their learned preferences?

With a rich set of open APIs and high quality AI-curated data, Aruba is actively mapping out what the new hotel workplace and experience may look like and the benefits it will provide. Long established partnerships with key leaders in the field of smart spaces will address building and long-term health and safety challenges, regardless of where guests, staff, and IT resources connect.

WIRELESS ACCESS POINTS AS APPLICATION PLATFORMS

Aruba wireless access points provide the foundation for the new hospitality workplace. With built-in Wi-Fi, Bluetooth, and Zigbee radios supplemented by a simple USB extension, Aruba APs allow you to accommodate any device protocol from a wide range of sensors, cameras, and similar IoT devices. 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).

THE REIMAGINED HOTEL STARTS WITH THE NETWORK YOU HAVE

With 14 straight years in the Gartner Wired/Wireless Leader's Quadrant, Aruba's leadership and innovation in secure connectivity is proven and is the foundation for all three phases of the reimagined Hotel. Aruba's portfolio and solutions are designed to work in every hotel environment—from franchised to managed, owned or leased hotels, including, remote, branch, campus, data center, edge, and cloud. No matter where the journey may lead, Aruba customers can count on having a network that offers the connectivity, security, management, AI, and data insights necessary for the future.