

SOLUTION OVERVIEW

# THE HYBRID WORKPLACE

aruba

ADAPTING TO WHAT COMES NEXT WITH ARUBA ESP (EDGE SERVICES PLATFORM)

#### SOLUTION OVERVIEW THE HYBRID WORKPLACE



The COVID-19 pandemic dramatically changed how workplaces operate. These changes have prompted many organizations to adopt hybrid work models that blend remote and mobile work with periodic visits to corporate offices.

New models of work can unlock organizational productivity but can also create strain and complexity for IT teams charged with supporting new remote and on-campus technology services. An increase in remote work means a proliferation of geographically dispersed locations to connect, support, and secure reliably and efficiently. Greater numbers of employees returning to campus can stress aging network infrastructure maintained at status quo since the outset of the pandemic. And new space-aware services often rely on sensor- and IoT-driven applications, which can be costly and complex to set up, manage, and secure.

## THE NETWORK AS THE FOUNDATION

Underlying new hybrid workplace technology and services is the network. With a modern networking approach that addresses challenges associated with connectivity, management, and security, the network can advance hybrid work initiatives and enable organizations to thrive in a rapidly evolving environment.

Cloud-native and Al-powered Aruba ESP is perfectly suited to serve as the foundation for enabling the hybrid workplace. Aruba Central is at the heart of the solution and can be implemented by the IT team or delivered as a managed service through Aruba partners or via network as a service (NaaS) with HPE GreenLake for Aruba. Aruba ESP utilizes a cloud architecture to ensure ultimate flexibility and scalability while enabling centralized management and AI-powered automation. Its EdgeConnect SD-WAN fabric enables organizations to benefit from a unified hybrid workplace network operations model, simplifying network management, support, and security from single point of visibility and control for wireless, wired, and WAN infrastructure across campus, branch, remote, and data center locations. Extending traditionally on-campus Zero Trust Security and SASE frameworks also means that the network remains secure, regardless of where workers or devices are connecting from.

# EDGE TO CLOUD SECURITY FOR THE HYBRID WORKPLACE

Aruba ESP Zero Trust Security and SASE frameworks ensure that controls applied to campus or branch networks also extend to the home or remote worker. With Aruba ESP, IT teams can see what's connected to the network from any work location, use consistent identity and roles to enable access to IT resources across network domains, and dynamically change access privileges based on real-time threat data.



## WORK FROM ANYWHERE

Successfully enabling hybrid work means providing remote workers consistent, friction-free access to tools, applications, and functionality as they move fluidly between the small office/home office (SOHO), ad-hoc locations, and campus. With increasingly sophisticated services available on campus and a growing, decentralized workforce, providing parity of reliability, security, and support experience between campus and remote workers is imperative.

EdgeConnect Microbranch provides organizations with a modern, massively scalable way to power remote work in home and small offices, as well as temporary locations, while providing a consistent experience—whether remote or on campus—from a performance, reliability, management, and operations perspective. EdgeConnect Microbranch extends SD-WAN services and the SASE framework to the edge, via cloud-native Aruba Central for management and any Aruba Wi-Fi access point—no additional gateway, agent or appliance required at the remote site. Built on existing cloud-managed Wi-Fi capabilities like Zero Touch Provisioning and role-based access control, EdgeConnect Microbranch powers modern hybrid work—including business-critical operations that rely on demanding applications like video conferencing and unified communications and collaborations and secure access to corporate resources—with services such as intelligent policybased routing, dynamic tunnel and route orchestration, enhanced WAN troubleshooting tools, and SASE integration. These services give IT teams greater control and visibility into the remote network, without the additional overhead of onpremises hardware or appliances.

For workers on the go, the EdgeConnect Mobile solution offers convenient, secure access to the corporate network from any location.





Figure 1. The EdgeConnect Microbranch solution includes Aruba Central for management and control and an AP located in the small office/home to support VPN capabilities, SD-WAN orchestration, and SASE. LTE backup can be added via an AP dongle.

#### **BOOSTING ON-CAMPUS EXPERIENCE**

In a hybrid work model, corporate campus and branch spaces facilitate safe, productive in-person collaboration, with flexible seating, enhanced video conferencing capabilities, and outdoor space for work in the open air. As workers return to campus locations en masse and rely more on bandwidth-hungry video conferencing, the need for highperformance enterprise connectivity becomes even greater.

Wi-Fi 6 and Wi-Fi 6E help accommodate the influx of mobile and connected devices by increasing network efficiency and speed. With Aruba wireless solutions, organizations can provide better performance for every client in a dense network with enhanced multi-user capabilities that enable scalability for future demands. In addition, Aruba offers the broadest portfolio of intelligent APs on the market today, to support a variety of indoor, ruggedized, and outdoor uses, include new Wi-Fi 6E indoor APs that take advantage of up to 1200 MHz of additional capacity in the 6 GHz band.

# ACCESS POINTS AS IOT PLATFORMS

New services in the hybrid workplace like hoteling, occupancy monitoring, and space analytics are often enabled by sensors, tags, and similar IoT devices. With the widespread proliferation of IoT devices on IT infrastructure, many companies no longer differentiate between IT and IoT devices. Yet this proliferation of IoT devices at the edge creates a new set of challenges for IT, as IoT devices often leverage a variety of different physical layer connectivity types and communication protocols. This often necessitates the addition of a separate, device-specific network, which increases complexity, or creates a costly rip-and-replace scenario.

Aruba wireless APs address this challenge. From their unique vantage as ceiling furniture, APs have an unobstructed, bird's-eye view of all nearby devices that is ideal for radio (RF) and infrared (IR) communications. Aruba APs can be used as an IoT platform, with built-in support for BLE and Zigbee connectivity. In addition, APs are extensible via USB dongle, enabling organizations to connect IoT devices leveraging common protocols, such as EnOcean, as well as proprietary protocols.





Furthermore, Aruba APs can be used without IoT gateways by communicating directly with IoT devices and bi-directionally tunneling the data to target applications. Eliminating these gateways reduces system complexity and cost, increases overall system reliability, and removes a typically vulnerable attack surface. To ease implementation of new services, the ArubaEdge technology partner program ensures interoperability between Aruba infrastructure and technology partners' solutions, giving you easier installations and operations. These certified solutions help you embrace digital transformation and extend the capabilities of your Aruba infrastructure.

#### 802.11ax Wi-Fi Radios 802.15.4 Zigbee Radio 802.11ax network access Food safety sensors Asset tracking tags Cooking and refrigeration sensors Personnel location badges Heating, air quality, presence, security, Sensors, actuators and smart lighting systems Duress alarm, call button, lighting, leak sensors Bar code scanners and mobile printers Door locking and access systems aruba **Bluetooth 5 Radio USB** Port Wayfinding and geofencing Cellular interfaces Energy harvesting heating air quality, presence, Electronic shelf labels Security, panic, call, button, lighting, leak sensors Retrofit Zigbee interface for existing deployments Door locking and access systems Custom interfaces

#### Figure 2. Arubs Wi-Fi 6 access point as an IoT platform

#### **SUMMARY**

Aruba has been named a Leader in the Gartner® Magic Quadrant<sup>™</sup> for the Wired and Wireless LAN Access Infrastructure 16 times in a row. This proven leadership and innovation serve as the foundation for the hybrid workplace, with solutions designed to work in every workplace environment—from remote locations to branches, campus, data center, and cloud. No matter where the journey may lead, Aruba ESP offers the connectivity, security, management, AI, and data insights necessary for hybrid work.

For more information, please visit: arubanetworks.com/hybridworkplace.



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