ARUBA AIR PASS CELLULAR ROAMING FEATURE

Deliver the 5G Experience Today with Wi-Fi Calling and Passpoint®

Aruba Air Pass is the industry's first seamless cellular roaming solution designed to unify enterprise and mobile network experiences. Delivered by Aruba wireless infrastructure and managed via Aruba Central, Aruba Air Pass uses pre-negotiated agreements with mobile network operators (MNOs) that support the widely approved Wi-Fi CERTIFIED Passpoint standard to leverage cellular SIM credentials for automated Wi-Fi roaming – no captive portals, usernames, or passwords are required. Currently, Aruba Air Pass is available to US customers only.

EVOLUTION OF INDOOR CELLULAR COVERAGE

Transitioning from outdoor cellular networks to indoor wireless coverage has become challenging due to the prevalence of low-emission glass, energy-efficient construction materials, as well as evolving building codes. This leads to inconsistent experiences for mobile users who may lose signal when they roam in and out of corporate offices, hotels, conference centers, and other indoor locations.

These problems are compounded with 5G that operates at higher frequencies and does not penetrate indoors as far as 4G or 3G. For decades, Distributed Antenna Systems (DAS) have been used in large public venues like airports, hospitals, stadiums and shopping malls. More recently, indoor femtocell networks are being deployed by individual MNOs but unlike DAS a separate layer of equipment is required for each MNO. DAS and small cells are complex and inefficient for facilities smaller than 500,000 ft^2 (50,000 m^2) which constitutes the bulk of commercial properties worldwide. As a result, over 162 MNOs in nearly 80 countries have embraced Wi-Fi Calling. With 5G including support for integrating Wi-Fi 6 as a Radio Access Network (RAN), enterprises no longer need to choose any unprofitable solutions. Wireless LANs instantly become the popular and most economical choice to onramp indoor cellular devices.

KEY FEATURES

- Enable 5G experiences with Wi-Fi 6/6E
- Automatically enable cellular devices to connect to Aruba WLAN
- Provides role-based control and onboarding using enterprise security
- Powered by Wi-Fi CERTIFIED Passpoint®, enabled in the vast majority of mobile devices
- Works with Aruba Air Slice for carrier-grade application Quality of Service
- Uses WPA2/3-Enterprise wireless security
- Compatible with existing Aruba Wi-Fi 4/5 WLANs to enable cellular roaming today without hardware upgrades

With the Aruba Air Pass roaming feature, Wi-Fi 6 and 6E become important in accelerating enterprise 5G initiatives – automating mobile onboarding and roaming with the added benefit of enterprise-grade security.

Aruba Air Pass cellular roaming feature delivers the 5G experience today with Wi-Fi Calling and Passpoint® network access control so that public and private resources remain secure and separate. Mobile subscribers (as well as Passpoint capable IoT devices) are then able to roam seamlessly between cellular and Wi-Fi networks, while enterprise IT maintains policy compliance.

Aruba Air Pass marks an end to indoor cellular coverage gaps and insecure open guest networks. The hassle of manually hunting for Wi-Fi networks and jumping through the hoops of captive portals is eliminated, thereby marking the beginning of a new relationship between private enterprises and MNOs.

PRODUCT COMPONENTS

Aruba Air Pass is delivered by Aruba access points and runs within Aruba Central, powered by HPE's Greenlake cloud with secure links to major global MNOs that support Passpoint with SIM credentials on their subscriber devices. It also requires Aruba User Experience Insight (UXI) to provide monitoring information for participating MNOs.
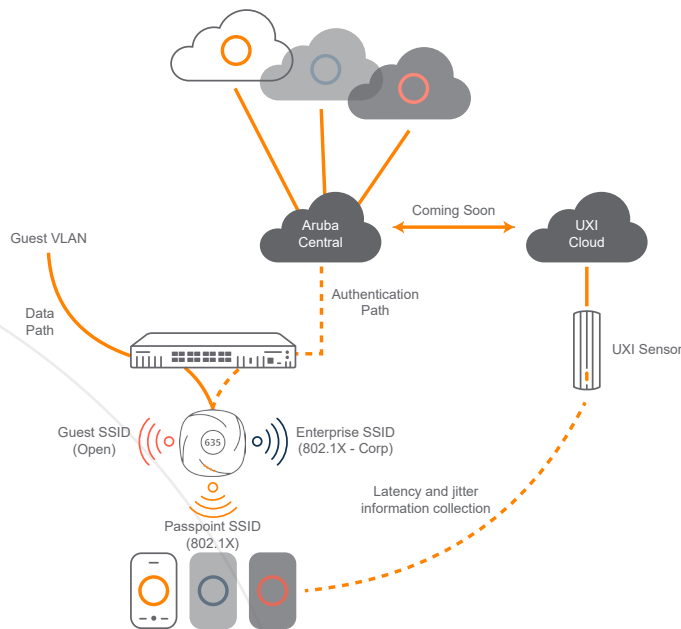
Aruba Central for Unified Network Management

Aruba Central is a cloud-based unified network operations, assurance, and security platform that simplifies the deployment, management, and orchestration of wireless, wired, and SD-WAN environments. Aruba Air Pass is available to Aruba Central customers, and it uses services from supported MNOs and on-premises access points to deliver transparent connectivity to mobile users.

Aruba Central is licensed on a per-AP or per-switch basis, and subscriptions are available in two tiers – Foundation and Advanced. More details on supported Aruba Air Pass features and ordering information can be found in the Tables 1 and 2 below.

For additional information on Aruba Central, please refer to the data sheet.

Aruba Access Points

Ideal for enterprises of any size, Aruba APs deliver secure and reliable connectivity to mobile users, IoT devices, and latency-sensitive applications – even in crowded areas.

These APs are in a class of their own with a purpose-built design and unmatched technical capabilities that bring 5G experiences to life in the most demanding enterprise environments.

Aruba Air Pass is supported on AP-6XX, AP-5XX, AP-3XX and AP-2XX series. 5G experience is enabled with Wi-Fi 6/6E APs (AP-5XX and AP-6XX). Please refer to the respective wireless ordering guides for more details.

Aruba User Experience Insight (UXI)

In some scenarios, MNOs that have partnered with Aruba require ongoing quality monitoring from at least one location in each facility served by Aruba Air Pass. Ideal for monitoring the latency and jitter between your location and the MNO providers, UXI ensures that only the best experience is offered to users.

For additional information on Aruba UXI, please refer to the data sheet.

DEPLOYMENT OPTIONS

Aruba Air Pass can be deployed using cloud versions of Aruba Central for service management and orchestration.

Cloud-based deployments support Aruba access points that run Instant OS (version 8.x or later), as well as the ArubaOS 10 operating system.

GIVE GUESTS A BETTER WI-FI EXPERIENCE

Air Pass is mainly useful for schools, universities, hotels, retail stores, hospitals, and other indoor venues that provide public Wi-Fi hotspots – giving guests an uninterrupted Wi-Fi experience and maintaining SLA-grade assurance with the benefits of Aruba AI and RF enhancements.

INCREASE THE ROI FOR ENTERPRISE WIRELESS

IoT and Unified Communication and Collaboration (UCC) services are accelerating cloud adoption due to which the role of WLAN has become increasingly mission-critical in the workplace. With Air Pass, WLAN can now deliver 5G experiences for mobile subscribers while increasing business value.

CARRIER-GRADE APPLICATION ASSURANCE

In the ~30 billion ft² of real estate served by Aruba Air Pass-ready infrastructure worldwide, mobile users and IoT devices are increasingly accessing cloud services and other bandwidth-intensive applications like AR/VR, video conferencing, and gaming. To address this burgeoning demand for connectivity, Aruba Air Pass is optimized for Aruba Wi-Fi 6/6E and delivers enhancements like Air Slice for SLA-grade application assurance.

By dynamically allocating radio resources such as time, frequency, and spatial streams, Air Slice enables connectivity for specified users, devices, and applications. See the Air Slice technical brief for more information.

TABLE 1: ARUBA AIR PASS FEATURE INFORMATION FOR CLOUD-BASED DEPLOYMENTS

Air Pass Feature	AP Foundation License	AP Advanced License[1]
Domestic Mobile Operator Support	Choose any one	All participating providers
Domestic Mobile Operator Cash-back	No	No
International Cellular Roaming	No	No
Radius Accounting	Enabled	Enabled
Policy Configuration	Yes[2]	Yes[2]
Number of Authentications	Unlimited[3]	Unlimited[3]

[1] **For additional information on features offered in AP advanced licenses beyond Aruba Air Pass, please refer to the overview**
[2] **Policy controls vary based on the configurations**
[3] **Could be limited by mobile operator or can change to limit number of Authentications in future**

TABLE 2: ORDERING INFORMATION FOR ARUBA CENTRAL AP SUBSCRIPTION SKUs[4]

Foundation AP Subscription SKUs[4]	
Q9Y58AAE	Aruba Central AP Foundation 1 year Subscription E-STU
Q9Y59AAE	Aruba Central AP Foundation 3 year Subscription E-STU
Q9Y60AAE	Aruba Central AP Foundation 5 year Subscription E-STU
Q9Y61AAE	Aruba Central AP Foundation 7 year Subscription E-STU
Q9Y62AAE	Aruba Central AP Foundation 10 year Subscription E-STU
Advanced AP Subscription SKUs	
Q9Y63AAE	Aruba Central AP Advanced 1 year Subscription E-STU
Q9Y64AAE	Aruba Central AP Advanced 3 year Subscription E-STU
Q9Y65AAE	Aruba Central AP Advanced 5 year Subscription E-STU
Q9Y66AAE	Aruba Central AP Advanced 7 year Subscription E-STU
Q9Y67AAE	Aruba Central AP Advanced 10 year Subscription E-STU

TABLE 3: ORDERING INFORMATION FOR ARUBA USER EXPERIENCE INSIGHTS (UXI) SUBSCRIPTIONS

Subscription SKUs	
R4X00AAE	Aruba 1 Year User Experience Insight LTE Subscription E-STU
R4X01AAE	Aruba 3 Year User Experience Insight LTE Subscription E-STU
R4W97AAE	Aruba 1 Year User Experience Insight Cloud Subscription E-STU
R4W98AAE	Aruba 3 Year User Experience Insight Cloud Subscription E-STU

[4] **Aruba Central AP licenses running Instant OS supports Air Pass with 2XX, 3XX, 5XX, 6XX series APs. Aruba Central AP licenses running AOS10 supports Air Pass with 5XX, 6XX and select 3XX series APs**

TABLE 4: ORDERING INFORMATION FOR ARUBA USER EXPERIENCE INSIGHTS (UXI) SENSORS

Subscription SKUs	
R3R67A	Aruba User Experience Insight G5 sensor (Ethernet + Wi-Fi AC)
R3S69A	Aruba User Experience Insight G5C sensor (Ethernet + Wi-Fi AC + Cellular)
R7H75A	Aruba User Experience Insight G6 sensor (Ethernet + Wi-Fi AX)
R7H76A	Aruba User Experience Insight G6C sensor (Ethernet + Wi-Fi AX + Cellular)

ARUBA AIR PASS ORDERING TERMS AND CONDITIONS

Air Pass requires at least one UXI sensor per venue to collect anonymized network quality information required by participating mobile network provider(s).

Air Pass availability is subject to geographic limitations and carrier approvals. Carriers reserve the right to terminate approval at their discretion. Any use of Air Pass functionality beyond approved locations or done without accurate information is grounds for Aruba or the mobile network operator to terminate the service.

Individual carriers that have partnered with Aruba may require specific bandwidth, latency, and jitter information collected via Aruba UXI sensors. For this purpose, unrestricted access to Wi-Fi calling feature is necessary.

Air Pass functionality is offered without service level agreement (SLA) or service level objective (SLO).

Except for #6 below, Air Pass feature is not governed by the Aruba Central Terms and Conditions, but by following terms - which shall be deemed accepted if you use the Air Pass feature ("Agreement"):

1. Aruba hereby grants you a limited, revocable, nonexclusive, non-transferable, non-sublicensable and royalty free license to use the Air Pass feature, until terminated.

2. In the case of material breach of the Agreement or any technical requirement made available in a Data Sheet or similar document by Aruba either party can terminate it immediately upon written notice. Further, either party may terminate this Agreement without cause on 180 days prior written notice. Upon termination of this Agreement Air Pass feature will stop running.

3. Aruba retains all rights to the Air Pass not specifically granted herein. Aruba and its licensors own Air Pass and all copyright and other intellectual property rights therein, and this Agreement shall not transfer to you title to any proprietary or intellectual property rights in or to Air Pass, or any updates or upgrades thereto or derivative works thereof.

4. YOU ACCEPT THE AIR PASS "AS IS", WITH ANY ERRORS OR DEFECTS. ARUBA MAKES NO EXPRESS OR IMPLIED WARRANTY OF ANY KIND WITH RESPECT TO AIR PASS, AND TO THE EXTENT PERMITTED BY LAW, ARUBA DISCLAIMS ALL OTHER WARRANTIES. ARUBA DOES NOT WARRANT THAT THE OPERATION OF SOLUTION WILL BE UNINTERRUPTED OR ERROR-FREE, OR THAT SOLUTION WILL OPERATE IN HARDWARE AND SOFTWARE COMBINATIONS OTHER THAN AS AUTHORIZED BY ARUBA IN THE APPLICABLE DATA SHEET.

5. To the extent permitted by applicable laws, Aruba is not liable for any direct, indirect, special, or consequential damages or for lost revenues or profits, downtime costs, or loss or damage to data.

6. The following Aruba Central Terms and Conditions sections shall apply to this Agreement: 5, 8, 11 and 22.