

HPE Aruba Networking Air Pass Cellular Roaming Feature

Deliver the 5G experience with Wi-Fi calling and Passpoint®

Key features

- Enable 5G experiences with Wi-Fi 6/6E/7
- Automatically enables cellular devices to connect to HPE Aruba Networking WLAN
- Provides role-based control and onboarding using enterprise security
- Powered by Wi-Fi CERTIFIED Passpoint®, enabled in the vast majority of mobile device
- Uses WPA2/3-Enterprise wireless security

HPE Aruba Networking Air Pass is the industry's first seamless cellular roaming solution designed to unify enterprise and mobile network experiences. Delivered by wireless infrastructure and managed via HPE Aruba Networking Central, HPE Aruba Networking 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, HPE Aruba Networking Air Pass is available to U.S. 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 ft² (50,000 m²) 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.

With the HPE Aruba Networking Air Pass roaming feature, Wi-Fi 6, 6E, and 7 become important in accelerating enterprise 5G initiatives, such as automating mobile on-boarding and roaming with the added benefit of enterprise-grade security.

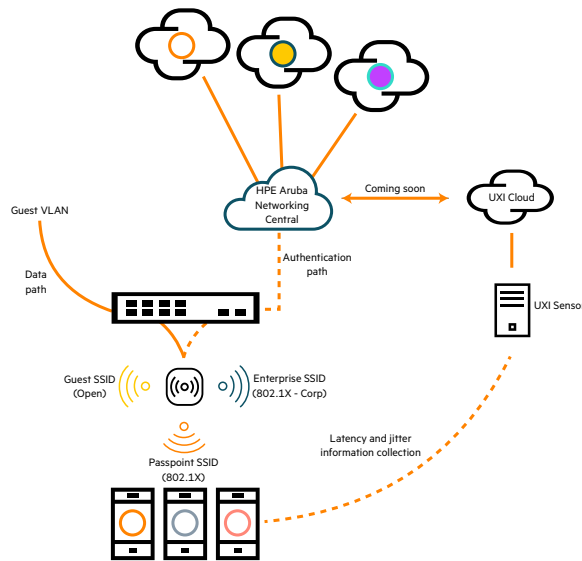


Figure 1. HPE Aruba Networking Air Pass workflow

The 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.

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

HPE Aruba Networking Air Pass is delivered by HPE Aruba Networking access points and runs within HPE Aruba Networking 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 HPE Aruba Networking User Experience Insight (UXI) to provide monitoring information for participating MNOs.

HPE Aruba Networking Central for unified network management

HPE Aruba Networking 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. HPE Aruba Networking Air Pass is available to Central customers, and it uses services from supported MNOs and on-premises access points to deliver transparent connectivity to mobile users.

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

For additional information on HPE Aruba Networking Central, [please refer to the data sheet](#)

HPE Aruba Networking Access Points

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

These APs have a purpose-built design and unmatched technical capabilities that bring 5G experiences to life in the most demanding enterprise environments.

HPE Aruba Networking Air Pass is supported on HPE Aruba Networking AP-7xx, AP-6xx, AP-5xx, and AP-3xx series. 5G experience is enabled with HPE Aruba Networking AP-7xx, AP-6xx, and AP-5xx series. Please refer to the respective product ordering guides for support and details.



HPE Aruba Networking User Experience Insight (UXI)

To ensure that MNOs receive ongoing quality monitoring, UXI sensors need to be deployed at a point of presence (PoP) level i.e. facility served by HPE Aruba Networking Air Pass. Only one UXI sensor per PoP is required, regardless of the number of APs involved at that location. UXI is ideal for monitoring the latency and jitter between user location and the MNO providers. Users would be connected to the Air Pass network in situations where the experience is determined to be better than maintaining a connection with the mobile network operator.

For additional information on HPE Aruba Networking UXI, [please refer to the data sheet](#).

MNO requirements

Mobile Network Operators may require pre-approval of locations and all locations using Air Pass with their information must be located within the US or its territories exclusively. Some MNO's may require specific AP/controller versions be used.

Air Pass does not prohibit the use of additional MNO contracts with the customer and is offered without service level agreement (SLA) or service level objective (SLO).

To ensure equivalent 5G experiences, a minimum of 10 Mbps available bandwidth must be available to accept new connection requests and if internet connectivity is lost from the local AP, the AP will disable broadcasting the Air Pass SSID until the connection is restored.

Deployment options

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

Cloud-based deployments support HPE Aruba Networking access points that run Instant OS (version 8.x or later), as well as the HPE Aruba Networking Operating System AOS-10.

Give guests a better Wi-Fi experience

HPE Aruba Networking 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 HPE Aruba Networking 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 HPE Aruba Networking Air Pass, WLAN can now deliver 5G experiences for mobile subscribers while increasing business value.



Table 1: HPE Aruba Networking Air Pass feature information for cloud-based deployments

Air Pass feature	AP foundational license	AP advanced license ¹
Domestic mobile operator support	All participating providers	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

All features are accessible with Foundation licenses

¹ For additional information on features offered in AP advanced licenses beyond HPE Aruba Networking 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 HPE Aruba Networking Central AP subscription SKUs

Foundational AP subscription SKUs	
Q9Y58AAE	HPE Aruba Networking Central AP Foundational 1-Year Subscription E-STU
Q9Y59AAE	HPE Aruba Networking Central AP Foundational 3-Year Subscription E-STU
Q9Y60AAE	HPE Aruba Networking Central AP Foundational 5-Year Subscription E-STU
Q9Y61AAE	HPE Aruba Networking Central AP Foundational 7-Year Subscription E-STU
Q9Y62AAE	HPE Aruba Networking Central AP Foundational 10-Year Subscription E-STU
Advanced AP subscription SKUs	
Q9Y63AAE	HPE Aruba Networking Central AP Advanced 1-Year Subscription E-STU
Q9Y64AAE	HPE Aruba Networking Central AP Advanced 3-Year Subscription E-STU
Q9Y65AAE	HPE Aruba Networking Central AP Advanced 5-Year Subscription E-STU
Q9Y66AAE	HPE Aruba Networking Central AP Advanced 7-Year Subscription E-STU
Q9Y67AAE	HPE Aruba Networking Central AP Advanced 10-Year Subscription E-STU

Table 3: Ordering information for HPE Aruba Networking User Experience Insights (UXI) subscriptions

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



Table 4: Ordering information for HPE Aruba Networking User Experience Insights (UXI) sensors

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

HPE Aruba Networking 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 HPE Aruba Networking or the mobile network operator to terminate the service.

Individual carriers that have partnered with HPE Aruba Networking may require specific bandwidth, latency, and jitter information collected via HPE Aruba Networking User Experience Insight (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 HPE Aruba Networking Central Terms and Conditions, but by the following terms — which shall be deemed accepted if you use the HPE Aruba Networking Air Pass feature (“Agreement”):

1. HPE Aruba Networking 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 HPE Aruba Networking 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 the Air Pass feature will stop running.
3. HPE Aruba Networking retains all rights to Air Pass not specifically granted herein. HPE Aruba Networking 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. HPE Aruba Networking makes no express or implied warranty of any kind with respect to Air Pass, and to the extent permitted by law, HPE Aruba Networking disclaims all other warranties. HPE Aruba Networking 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 HPE Aruba Networking in the applicable data sheet.
5. To the extent permitted by applicable laws, HPE Aruba Networking 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 [HPE Aruba Networking Central Terms and Conditions](#) sections shall apply to this Agreement: 5, 8, 11 and 22.

Make the right purchase decision. Contact our presales specialists.

