

The Five Ws of OpenRoaming



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What?



A Wi-Fi access architecture that simplifies onboarding and roaming between cellular networks.



Built on top of Wi-Fi passpoint/802.11u.



A new, humane way to raise livestock.

You know, like "free range"

Who?



Wireless
Broadband
Alliance

- The Wireless Broadband Alliance manages the technology.
- They manage adoption and identity provider onboarding to support the service.
- WBA also publishes studies on wireless technologies and has several other working groups.

Why?



- Public Wi-Fi is a pain point for security.
- Wi-Fi alleviates load on mobile networks and reaches areas not serviced by cellular.
- Roaming from cellular to Wi-Fi is often clunky and awkward.

When?



- Cisco originally developed OpenRoaming.
- Ownership was transferred to the Wireless Broadband Alliance.
- This was done to ensure neutral ownership and scalability with its global use.

Where?



- Well, anywhere really: hotels, whole cities, offices.
- OpenRoaming is supported on devices that can install and activate the device profile.
- Infrastructure to deploy the SSID and install profiles on devices is still needed.

How?

- The OpenRoaming federation works with identity (IDP) and access providers (ANP) to manage authentication and encryption.
- Access providers host the SSIDs and provide a termination point for TLS tunnels to IDPs.
- EAP/ANQP are used over the access segment.
- Identity providers host device profiles to install for TLS and manage authentication through RADSec.
- This also involves mobile providers to verify devices for cellular handoff.

Sources/Credits

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