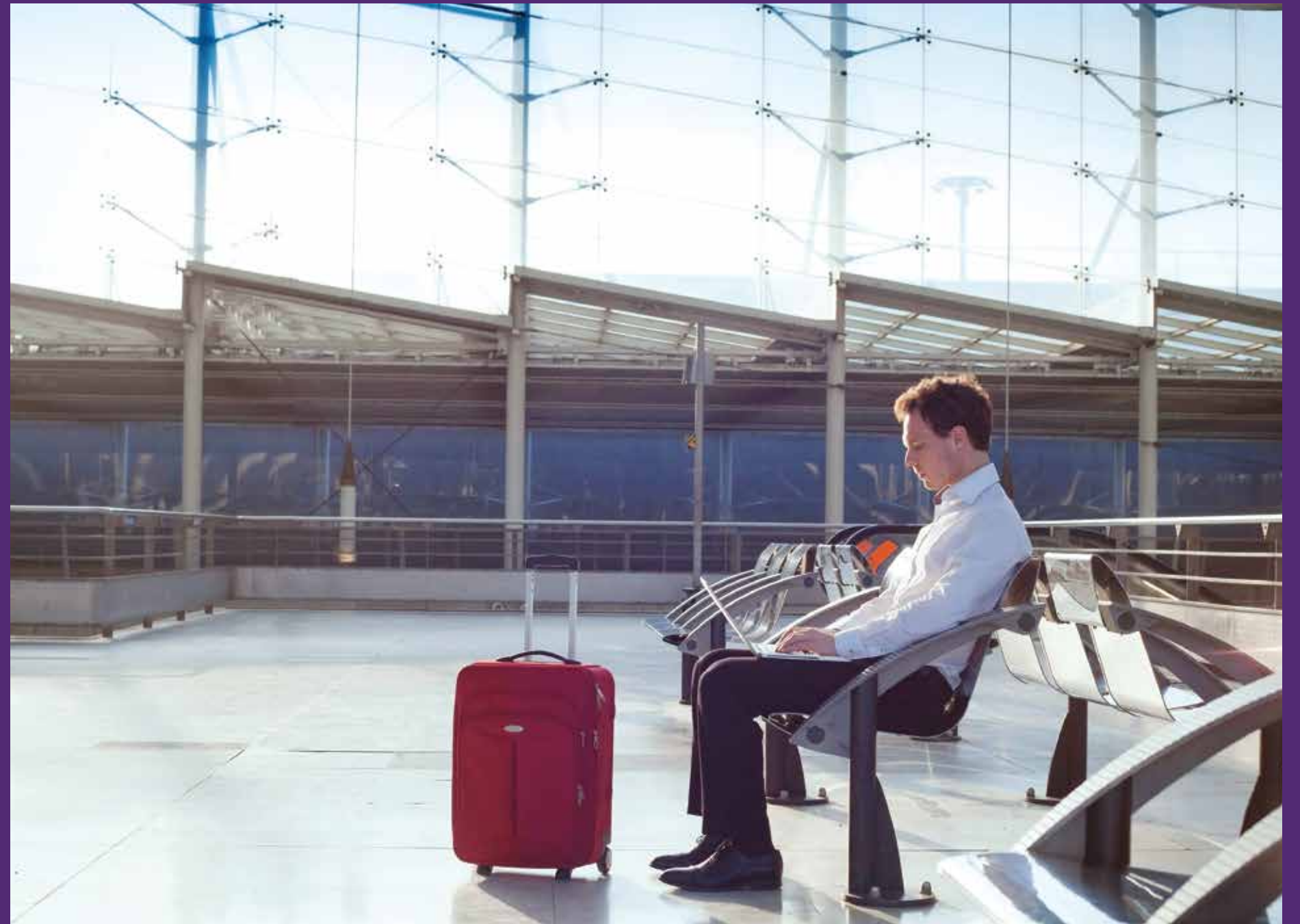


Network Innovation

Stay Connected: Anywhere | Everywhere

Seamless Connectivity Reimagined
with OpenRoaming



Background

The pervasive reach of the internet in linking billions of individuals worldwide remains a foundational element of the contemporary information-driven society. As more people are on the move and rely on Wi-Fi for work, communication, and entertainment, a pressing need arises for a global Wi-Fi network. This escalating growth underscores the necessity for a comprehensive and interconnected Wi-Fi infrastructure that ensures seamless connectivity and prioritizes safety. This is where OpenRoaming steps in. It addresses the complexities of Wi-Fi connectivity by enhancing the user experience, improving security, and promoting collaboration among stakeholders.

OpenRoaming stands as the Wireless Broadband Alliance's (WBA) Federated Roaming framework designed for Wi-Fi. It facilitates the interconnection of Wi-Fi Access Network Providers (ANP) and Identity Providers (IDP), forming a unified global Wi-Fi network that allows mobile devices to connect seamlessly and securely across the globe.

OpenRoaming eliminates the need for multiple logins, the sharing of email addresses, the acceptance of numerous terms and conditions, security concerns, and the use of VPNs. With OpenRoaming, you can effortlessly and securely connect to OpenRoaming networks worldwide.

By April 2023, the global count of internet users had reached 5.18 billion, encompassing approximately 64.6% of the world's population.¹

The previous year saw the global Wi-Fi hotspot market valued at \$4.7 billion, projected to grow at 17.2% CAGR between 2023 to 2028.²

Overview

The event received praise from industry titans. Mrs. Aruna Sundarajan, Chairperson of BIF, commended HFCL's technological foresight. Mr. VJ Christopher (WA, DOT) and Mr. Vivek Dua (GM FWA, BSNL) also expressed their appreciation for HFCL's transformative initiative. The flawless demonstration highlighted HFCL's dedication to delivering seamless digital experiences, positioning the company at the forefront of next-gen wireless technology innovations.

Bhuvnesh Sachdeva
Senior Vice President, HFCL

OpenRoaming has emerged as the vital solution to the growing reliance on Wi-Fi connectivity in our interconnected world. With the increasing number of Wi-Fi-enabled devices and the constant demand for online access escalating, the traditional methods of connecting to Wi-Fi networks have become cumbersome and inefficient. OpenRoaming steps in to streamline this process, giving top priority to providing a seamless and secure user experience.

OpenRoaming eliminates the need for multiple logins and authentication procedures across various networks. The advancement in connectivity technology allows users to roam seamlessly between different Wi-Fi networks without the hassle of repeated logins or navigating splash screens. This frictionless experience is crucial for personal convenience and businesses and industries striving to deliver efficient services and maintain customer loyalty. Furthermore, OpenRoaming's global reach underscores its significance. In a world where travel and mobility are integral, the ability to access Wi-Fi networks across different cities, countries, and regions without barriers is a game-changer.

In this context, HFCL has emerged as a game-changer, becoming India's first enterprise to fully deploy the innovative OpenRoaming standard across its io brand's Wi-Fi product suite.

In collaboration with the esteemed Wireless Broadband Alliance (WBA) - a global organization that innovates and enhances Wi-Fi initiatives such as NextGen Wi-Fi, OpenRoaming, 5G, IoT, Testing, and Interoperability, this pioneering move was showcased in an extensive seminar attended by over 250 delegates. More than 100 visitors had the opportunity to experience the transformative OpenRoaming-enabled Wi-Fi network. The essence of this transformation was vividly displayed during the "Wi-Fi and Delicensing of 6GHz" event in Delhi, where attendees effortlessly underwent a three-step process, resulting in instant high-speed Wi-Fi connectivity. The event also provided a platform for industry thought leaders, including BIF's Chairperson, Mrs. Aruna Sundarajan, to applaud HFCL's innovative approach.

On May 28, 2020, the Wireless Broadband Alliance (WBA) announced the launch of OpenRoaming.³

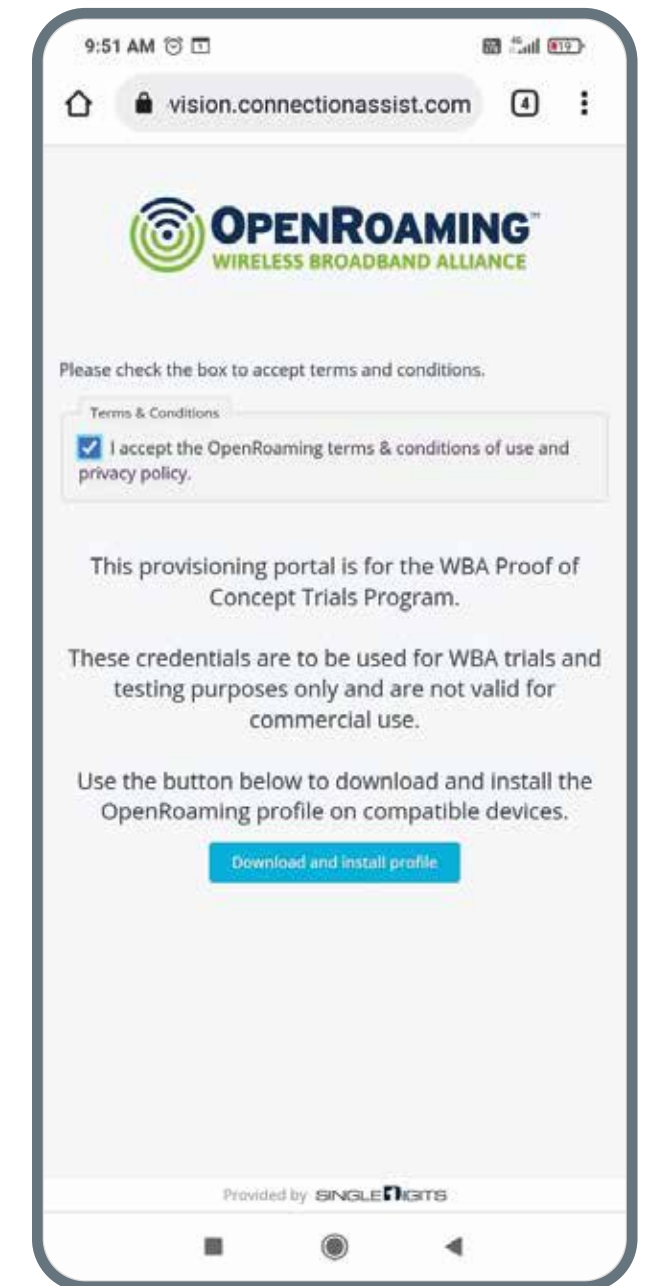
OpenRoaming Surpasses 1 Million Global Hotspots as WBA Launches OpenRoaming Release 3.³

Challenge

Getting Wi-Fi can sometimes be hard in a world where staying connected is important. Dealing with lengthy sign-up forms, worrying about the safety of the network, and experiencing interruptions while moving between locations can make using Wi-Fi frustrating and confusing. It is evident that there's an issue that needs a solution – something that can make connecting to Wi-Fi hotspots everywhere easy, smooth, and secure.

Solution

HFCL demonstrated the capabilities of the OpenRoaming standard with the help of a live demo at the event. For this, highly advanced Wi-Fi 6 indoor Access Points- 2x2 Dual Band Wall Plate Access Point (ion4xi_WP), designed especially for the Hospitality sector, and 2x2 indoor Access Point with Integrated Antenna (ion4xi) were deployed. The visitors were asked to scan a QR code from their mobile phones, download & and install the OpenRoaming certificate, and then turn on their Wi-Fi Networks. In three easy steps and within seconds, the visitors automatically connected to a high-speed Wi-Fi network without entering their credentials. Moreover, they can connect to any OpenRoaming-enabled Wi-Fi Network globally with the certificate without reauthenticating their credentials. OpenRoaming's reliance on secure authentication and encryption protocols guarantees that only authorized users access the network, and all transmitted data remains encrypted.



Result

- 01** HFCL made history by implementing OpenRoaming standards across its entire range of Wi-Fi products, marking a significant milestone in India's enterprise technology landscape.
- 02** At the "Wi-Fi and Delicensing of 6GHz" event, more than 100 attendees connected to HFCL's high-speed Wi-Fi Network, powered by the OpenRoaming framework.
- 03** HFCL showcased its advanced Wi-Fi 6 indoor Access Points, highlighting their capabilities to industry experts, policymakers, and stakeholders. These demonstrations not only underscored HFCL's technical expertise but also demonstrated the practicality of their solutions.
- 04** Following the event and demonstration, HFCL's collaborative efforts with ISPs and telecom operators worldwide are garnering increased interest in OpenRoaming-enabled Wi-Fi products. This development holds the potential for broader market reach and more expanded global partnerships.

Conclusion

With OpenRoaming, HFCL enables hassle-free, fully secure, seamless, and automatic Wi-Fi onboarding and roaming services to users spanning different markets and geographies. The idea is to create a world where users can access Wi-Fi anywhere without searching for available Wi-Fi networks, without worrying about connecting to an open-security Wi-Fi and going through complex authentication processes.



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