Seamlessly roam beyond the private network with a combined solution by Syniverse and MS Azure



Advanced technologies including AI, extensive connectivity, and sophisticated backend systems are needed for enterprises to operationalize and modernize their organizations. To help manage these requirements, enterprises are looking at private wireless networks (PWNs) as a cost- effective way to gain the control, security, reliability, and the performance needed to operate efficiently across the digital landscape. As isolated networks, PWNs have expanded capacity, lower latency and greater security, but the trade-off is isolation from the public network. This limitation restricts their ability to maintain device connectivity beyond the border of the private network. Many IoT use cases such as industrial, manufacturing, shipping, and transportation would benefit from continued connectivity to an expanded and diverse global network.

Syniverse's PWN solution was developed to extend connectivity outside the borders of a PWN deployment. By linking three powerful solutions, IPX network, Global SIM, and Automatic Network Reselection together with Microsoft Mobile Core, RAN and UE components Syniverse can seamlessly support the roaming of wireless devices between private and public networks.

Connect to the World with IPX

When roaming, connectivity for PWN devices requires a connection to public operators. Syniverse IPX delivers connectivity to the world's operators on a private, secure, managed, and compliant network giving a roaming PWN device global connectivity.

Better Together

By combining the radio equipment components provided by vendors on the Microsoft Azure Marketplace, and Syniverse's private network solution with ANR technology, enterprises can enable roaming on public cellular networks.

Roaming Between MS Azure Private and Public Cellular Networks:

Syniverse's patented technology, Automated Network Reselection (ANR), enables wireless devices to move seamlessly between public and private networks bypassing the complexities of public to private interconnections. ANR forces a device back to the private network efficiently avoiding the typical device actions, as specified by 3GPP, that result in sub optimal behavior.

Worldwide Roaming with Global SIM:

Operator roaming agreements and network configurations must be in place to roam onto a public cellular network. Syniverse Global SIM alleviates these issues by enabling wireless devices to effortlessly roam into over 240 countries worldwide, connecting to the best network available.

Microsoft Solution Components

Syniverse Solution Components

Mobile Core: 5G SA Core

RAN: gNB Spectrum PLMN-ID

UE with Syniverse Global SIM Managed Mobile 4G & 5G NSA Core:

Hosted DEA HSS PGW PCRF/PCEF Mobile Network Operator Global Connectivity & Reach

r Global
tivity & Roaming
ch Agreements

Global SIM: Physical SIM or eSIM with

Managed IMSIs

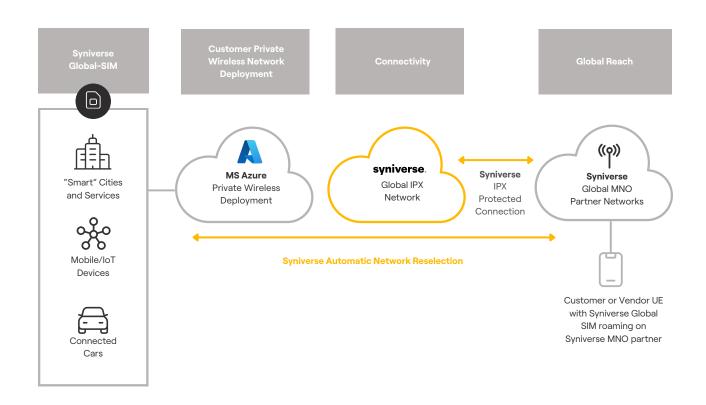
Network
Automated
Re-Selection
Engine &
Location
Database

Customer Portal:
Reporting
Billing & Device
Management

Sponsored Mobile

Delivering A Connected Vision

Syniverse's IPX, Global SIM, and ANR complete the connected vision between private networks and public networks.



syniverse.

By providing robust connectivity and high-speed data transmission, Syniverse enables wireless devices, including IoT, to effectively roam between both private and public cellular networks. Syniverse's Private Wireless Network solution with IPX, Global SIM, and ANR plays a pivotal role in harnessing the full potential of IoT, driving innovation and growth in the digital age.

Use Case

Industrial

Providing mobile connectivity to many cellular-based devices in a localized area, while also extending that connection beyond the facility. This allows for direct and secure access to cloud-based services as well as regionally and globally based locations.

Campus Connectivity

Educational and business campuses looking to provide reliable mobile coverage within a campus footprint, while allowing devices to seamlessly and securely roam off campus into the public network and back into the private network.

Utilities

Utility companies needing a localized wireless network solution that provides reliable connectivity, speed, minimal latency, and the option to increase security based on specific devices.

About Microsoft Azure Marketplace

What is Azure?

The Azure cloud platform is more than 200 products and cloud services designed to help you bring new solutions to life—to solve today's challenges and create the future. Build, run, and manage applications across multiple clouds, on-premises, and at the edge, with the tools and frameworks of your choice.

Benefits

- Enables seamless connectivity for mobile devices traveling to and from a private wireless network and public wireless network.
- Provides extensive direct connectivity to over 250 global operators.
- Allows businesses to manage physical and electronic subscriber identity modules (SIMs), ensuring complete control over device connectivity and behavior.



The world's most connected company

syniverse.