



Introducing the emnify IoT SuperNetwork

Leading a new era in
cloud-native, IoT connectivity

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Maturing, scaling IoT businesses are exposing the limits in traditional IoT connectivity



As the IoT industry matures, a gap has grown between the needs of IoT businesses and traditional telecom provider connectivity capabilities.

IoT businesses have outgrown the traditional telecom connectivity infrastructure. Most businesses are now juggling 5-10 telecom providers to get the coverage they need in the markets where their devices are deployed. In many cases they're relying on single providers in each market, leaving their

businesses vulnerable to network outages without redundancy.

And despite the fact that 90% of all IoT applications are built on cloud-native services, most telecom providers aren't cloud-native, or cloud-enabled. Traditional telecom relies on an infrastructure that was built for voice, not IoT, and requires manual processes for everything from contract management, to provisioning, to technical integrations and support.

This technology gap is creating a number of challenges for IoT connectivity in the following areas:



Fragmented global coverage



Diverse, shifting, regulatory environment



Device deployment at scale



Complex techstack integrations



Device and data security

IoT connectivity challenges can be the cause of unexpected costs, delayed time to market, and reduced ROI



Constantly Changing Coverage Map and Cellular Technology

IoT businesses have to manage multiple networks, multiple operator contracts, and multiple SIMs to access coverage where and when it's needed, and a lot of this is still done manually, which slows down time-to-market.



Evolving Regulatory Requirements in Existing and New Markets

It is difficult to keep up with rapidly changing regulatory and business requirements. Traditional MNOs are finding it challenging to adapt their infrastructure and service quickly enough to keep up. eSIM orchestration via MVNOs only solves part of the problem in providing multi-network *coverage*, but this approach leads to inconsistent *capabilities* across your connectivity.



Managing Devices, Data and SIMs at Scale

As an IoT business grows in number of devices and geographic footprint, operations teams are constantly in and out of different platforms and services trying to manage and control connectivity and SIM lifecycle. Gaining visibility across multiple networks is difficult, especially when it comes to troubleshooting and resolving connectivity disruptions.



Traditional Telco Technology Stacks are Not Compatible with Modern Cloud Technology

Resource constrained IoT businesses are struggling with the number of integrations necessary to build an end-to-end IoT solution with critical data flowing up and down the tech stack. With each network that's added, another manual integration is needed. Just finding the dev talent to manage these integrations is a challenge, not to mention maintaining multiple code bases, versioning, security, and more.



Network Security Threats and IoT Data Theft

IoT devices are vulnerable to a variety of cyber attacks with new threats arising daily. Visibility and control across networks diminishes with every new network added. Traditional telcos aren't able to keep up with demand and services; setting up IPsec and VPN connections can take months and adding dedicated hardware for network security is expensive.

Overcome your biggest IoT connectivity challenges with a transformative, cloud-native approach

SuperNetwork Global IoT Connectivity

The SuperNetwork mobile core

Distributed, cloud-native, in 22 AWS regions around the globe, eliminates home network routing with inherent latency and regulatory compliance issues.

Subscriber management | Policies | Messaging | Data transit

Cross-network connectivity management, consistent capabilities and features, and deep network insights regardless of the network your devices are connecting to.



Low-code/no-code integrations with leading edge documentation and support.

Secure device SIM, data and communications on a single platform with a suite of security features and services.

Modern eSIM Platform

Light up countless use cases and applications with real-time connectivity and device data.

A single, distributed network opens up multi-network access around the world with access to technologies from 2G-5G, LTE, LTE-M, NB-IoT, and satellite.

The SuperNetwork is the future of IoT connectivity

The SuperNetwork is built on a foundation of direct, IoT-specific network access partnerships with local mobile networks. Unlike other MVNO services, the SuperNetwork is not constrained by dependencies on upstream carrier partners for critical business requirements including coverage, commercial and regulatory terms, and technical functionality.

The SuperNetwork is the largest IoT-specific global network with the highest number of IoT-specific negotiated agreements. This ensures more reliable and sustainable connectivity, as well as anticipating future connectivity and business needs.

The SuperNetwork's cloud-native mobile core provides a consistent set of capabilities, regardless of where your device is deployed or what network provider you're connecting to. Interfacing with one unified network, one core network, and one provider is a leap forward in reducing complexity in managing your connectivity, from contracts to SIM lifecycle management to security and integrations.

Unlike traditional MNO offerings which were built for voice, emnify built the SuperNetwork as a global, distributed, dedicated network for the future of IoT.

Coverage



Reliable, redundant IoT coverage where you need it today and where you'll grow tomorrow

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Connectivity Management



Control and keep pace with complex and changing business requirements

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Network Insights



Real-time, network level insights across all networks

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Integrations



Integrate connectivity with current cloud IoT applications and backend infrastructure

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Security



Prevent security threats and data thefts

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The SuperNetwork provides a single, distributed network with regional breakouts around the globe

IOT OUTCOME

Reliable, redundant coverage where you need it today and where you'll grow tomorrow.

CHALLENGE

IoT connectivity overlays a **constantly changing coverage map** with a dynamic and complex technology landscape. IoT businesses have to manage multiple networks, multiple operator contracts, and multiple SIMs to access coverage where and when it's needed. Time to market is bogged down by slow manual processes.

SUPERNETWORK APPROACH

Direct network access with regional breakouts around the globe.

Unlike network resellers or lite MVNOs with access that can disappear without notice, emnify negotiates directly with our partner network, ensuring long-term, reliable access to their networks, specifically for IoT connectivity. This direct access is more reliable and also guarantees visibility directly into our partner networks providing connectivity data to our customers, across all networks, in real-time.

Direct partnerships provide IoT specific coverage with redundancy and network resiliency, so your devices stay connected. SuperNetwork platform customers take advantage of the greatest coverage and industry leading uptime with network redundancy in every region. Connectivity issues are surfaced across all networks in real-time so devices can intelligently switch to a backup network and you have transparency into all network events.

With a growing list of partnerships, on average 2 added each month, you can quickly expand to new markets as your business grows.

- **540+ networks in 180+ countries, new countries added continuously**
- **On average 2 new networks are added to the SuperNetwork every month**
- **100+ permanent roaming allowances protecting customers from regulatory changes**
- **Average 2 to 3 networks in every country we operate**

Consistent, full-featured connectivity management across all networks and devices



IOT OUTCOME

Reduce IoT operations cost and complexity with single-provider IoT connectivity management

CHALLENGE

Today's IoT businesses have to deal with a **fragmented set of providers, platforms, portals, features, and processes** which results in inconsistent capabilities for connectivity management and device deployments. Making updates to coverage or SIMs results in slow manual processes with deployments often taking several weeks. This can lead to unexpected costs.

SUPERNETWORK APPROACH

A consistent set of connectivity management capabilities across all networks, with automated SIM lifecycle management including global provisioning, activation, configuration and deactivation of SIMs. Reliable over-the-air updates enable access to new coverage options and network technologies as they become available, future-proofing deployments. An intuitive, modern, cloud-native portal provides single-pane-of-glass management over connectivity tasks and tracking.

Reduce complexity and scale faster with a consistent set of connectivity management capabilities.

SuperNetwork customers get greater consistency and control over their connectivity which helps them accelerate their IoT business and reduce operational friction and cost. API-first design enables easy integration of all connectivity management capabilities into your IoT operations applications and services.

Optimize IoT connectivity with detailed, cross-network insights

IOT OUTCOME

Real-time device and connectivity insights across all networks increases device uptime, security, and data integrity.

CHALLENGE

Collecting, aggregating and analyzing network data across multiple networks can be impossible if you're relying on multiple network providers across your deployment. But without visibility into all of your data how can you prevent or resolve connectivity and device issues?

SUPERNETWORK APPROACH

Direct access to networks enables network event data across ALL networks, with single-pane-of-glass monitoring and insights.

Eliminate blind-spots with total visibility over your network performance, regardless of which carrier your device happens to be connected to. This helps alert, pinpoint and resolve connectivity issues and reduce disruption to your IoT business.

Network insights include:

- Live packet capture/flow logs
- Full transparency real-time radio network signaling events and charging events
- Real-time status and health for all radio networks
- Detailed real-time incident and recovery time information

Protect IoT data and devices with advanced, end-to-end security



IOT OUTCOME

Increase the level of protection on your data and your devices, lowering costs, increasing IoT device uptime, and complying with the organizations' network security policies.

CHALLENGE

IoT devices are vulnerable to a variety of cyber attacks and security breaches with new threats arising daily; it's no longer an option to have vulnerable devices.

Today's workarounds provide little visibility or control over the device, SIM, and data. Existing solutions are costly and complex, for example, adding security capabilities to the device is impractical requiring more data and processing resources which drain battery life.

SUPERNETWORK APPROACH

Built-in, reliable and comprehensive security for IoT devices and data, increases the level of protection of your IoT data transmissions and SIMs, guards against security threats, and prevents costly data theft.

The SuperNetwork combines advanced security features and services

- IMEI lock
- Encrypted device communications
- In-region, cloud-native core network
- Secure eSIM
- Easy to control policies and security features in a single platform.

A long-term partner in achieving your IoT outcomes

emnify has been at the forefront of cellular IoT connectivity for a decade, creating innovative approaches to solving the toughest challenges in IoT connectivity for our customers.

Industry-leading customer reviews

CATEGORY TOPPING G2 REVIEWS

9.7

Ease of Use

9.8

Quality of Support

9.6

Ease of Setup

The highest customer satisfaction ratings and reviews, setting a new bar for the industry.

www.G2.com

AWARDS AND RECOGNITIONS 2022



Business Impact Award
2022 by IoT Evolution



Best Connectivity Solution
at IoT Solutions WC 22



Best Cellular IoT
Connectivity Solution by
Juniper Research



Best cloud-based MVNO
solution by MVNO world
congress



Working with emnify: What do our customers say?

“

“emnify gives Y.Share access to all four mobile operators in Italy including Vodafone, Telecom Italia Mobile, Wind Tre, and Iliad with a single IoT SIM card. Devices automatically connect to the best available network where they are deployed to guarantee uptime.”

[READ MORE](#)

“

“The service was easy to implement... really easy to follow. Service is very stable and easy to use via the web or API,”

Stefan I., Sr. Monitoring Engineer, G2 Review

“The management portal is not only excellent and easy to use, but it also provides a great diagnosing tool to check connectivity issues.”

Aurelio F., Tracking Platform Manager, G2 Review

“

“With the SuperNetwork’s Data Streamer, we improved oversight and operational efficiency, enabling us to expand our charging network by 6 times by 2030.”

Be Power, a leading provider of sustainable energy solutions

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“

“emnify is way ahead of the game in terms of both technical integration and LTE-M support. Our partnership has been integral to the global success of VuLink.”

**Matt Trumbo
Senior Product Manager, In-Situ**

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“

“emnify provided us with direct access to its engineering experts, so we could jointly design a solution which enabled us to continue innovating at both an operational and commercial level.”

Rob Cumming, CEO, Urban.io



emnify's commitment to successful IoT outcomes

With decades of experience in setting the standard for cloud-native IoT connectivity, emnify is partnering with organizations and industries around the world to help define best practices and achieve great outcomes in IoT.

Through the SuperNetwork, we're empowering IoT businesses to expand to new markets by bringing together a complete IoT connectivity service with a consistent set of capabilities, modern, intuitive connectivity management, and the world's most comprehensive network coverage. Together, we're enabling organizations to gain the transparency and insights they need to plan and optimize their IoT connectivity, and focus on the business investments that drive value.

Alongside our global partners, we're investing in technology, markets, and leading edge IoT projects to help drive the transformation in IoT connectivity and beyond.

For more information:

Visit emnify.com or [talk to us!](#)