

Private Mobile Networks and the Future of Edge Computing

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INTEL[®] NETWORK BUILDERS PARTNER

A GLOBAL ECOSYSTEM TRANSFORMING THE NETWORK WITH DIGITAL INNOVATION

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Macro Trends



Edge Internet

Next generation of the Internet, with latency as the new currency

Drivers



- **5G**: 5G-NR, open RAN, 5GC-SA/NSA, distributed systems
- Edge computing: Architecture and hierarchy
- **Use cases**: Machine Vision, AI/ML, IoT, connected intelligence, autonomous systems, 3D Internet
- **Other drivers**: Hybrid work, CBRS, WiFi 6, digital transformation

Private mobile networks will create a connectivity revolution

Multiple simultaneous growth trends

Next generation internet economy !

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Steps to the Edgetech value chain

Edge Solutions as a Service: Private 5G, edge enhanced and edge native business solutions

Edge Platforms as a Service: Compute management and orchestration, network and mobility functions, security, app enablement

Edge Infrastructure as a Service: Edge data centers, fiber, hardware, storage, and other related managed services



Value Enhancement

Connectivity revolution: Private mobile networks

Shared Spectrum

CBRS and equivalent initiatives (in other countries) means businesses can have their **own spectrum** managed by SAS providers

The 4 Cs

- **Coverage:** Cellular style coverage with mobility
- **Capacity:** Cooper's law!
- **Control:** Telco functionality with IT controls
- **Customize:** Address business needs

But...

5G is complicated and there are opportunities to address technology friction through APIs; **launch in minutes!**

From a handful of public mobile networks to millions of interconnected private networks!



Early Innovation

4G/5G innovation

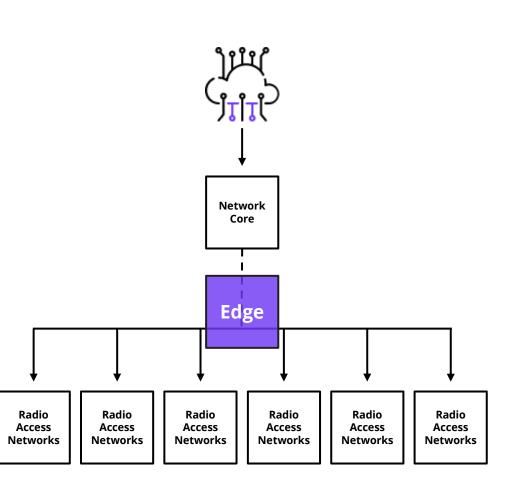
 Intelligent orchestration of core network functions to the edge

Distributed Internet

 Intelligent platform for various cloud software workloads

Neutral host architecture

- Control and customize
 - 5G Edge vs 5G LAN

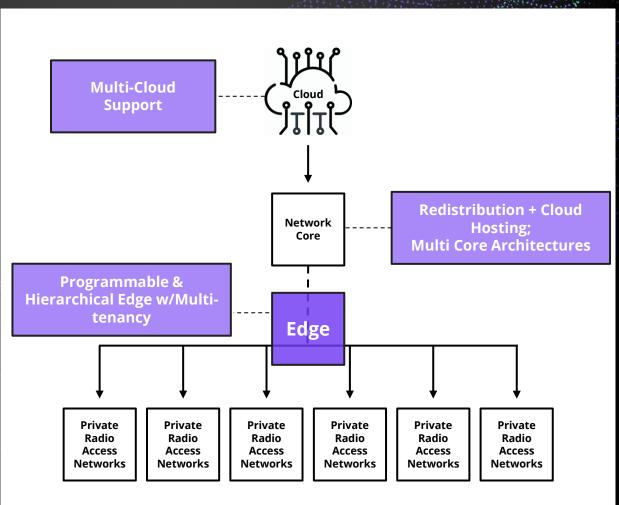




Evolution

Recent innovation trends

- Private radio networks
- Programmable and hierarchical edge with multitenancy
- Multi-core architectures with cloud hosting
- Multi-cloud support





Private Mobile Edge Platform

Technology areas - 3GPP plus Edge

- 3GPP technologies 4G/5G innovation and tech assets
- Edge technologies distributed Internet innovation and tech assets

Product focus - Private edge platform with APIs for Enterprises to:

• Launch their own custom private edge Internet using our platform

Approach - Abstract functionality, across neutral host edge points, through APIs combined with a dev first approach



Steps to launch your own private mobile network Spectrum acquisition and management

RAN installation and commissioning

Connect to edge and mobile packet core

SIM/eSIM distribution and management

Build solution and tools across various layers

2

5

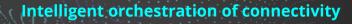
Expanded platform

High degree of abstraction and disaggregation (disaggregating software stacks)

- Intelligent algorithms for cross-layer optimization
- Hyper-automation with open APIs
- Developer first approach and ecosystem

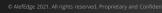
Edge based API solutions

- Private Networks
- Machine Vision, IoT, AI/ML
- Edge Slicing
- Autonomous Systems
- Edu-as-a-Service
- Healthtech



- 4G/5G
- Wi-Fi 6
- SD-WAN
- All offered as APIs

Interconnected edge point computing network with compute APIs



Customer Workflow, Edge Internet Framework

Basic

Applications

Value Add







Connectivity, Compute

loT, ML/Al, Video

Security, WAN Optimization, Multi-cloud networking, Network Slicing



Workflow: Enterprise developer accesses our portal, purchase edge APIs*, leverage edge points. Start building.

Launch any private edge internet service or solution in minutes!



*potentially ecosystem APIs especially in the application layer: providing flexibility to our customers as they customize their solutions



Open APIs for the Edge Internet



Thank You!

Further Questions? Contact us at dev.relations@wearealef.com

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