



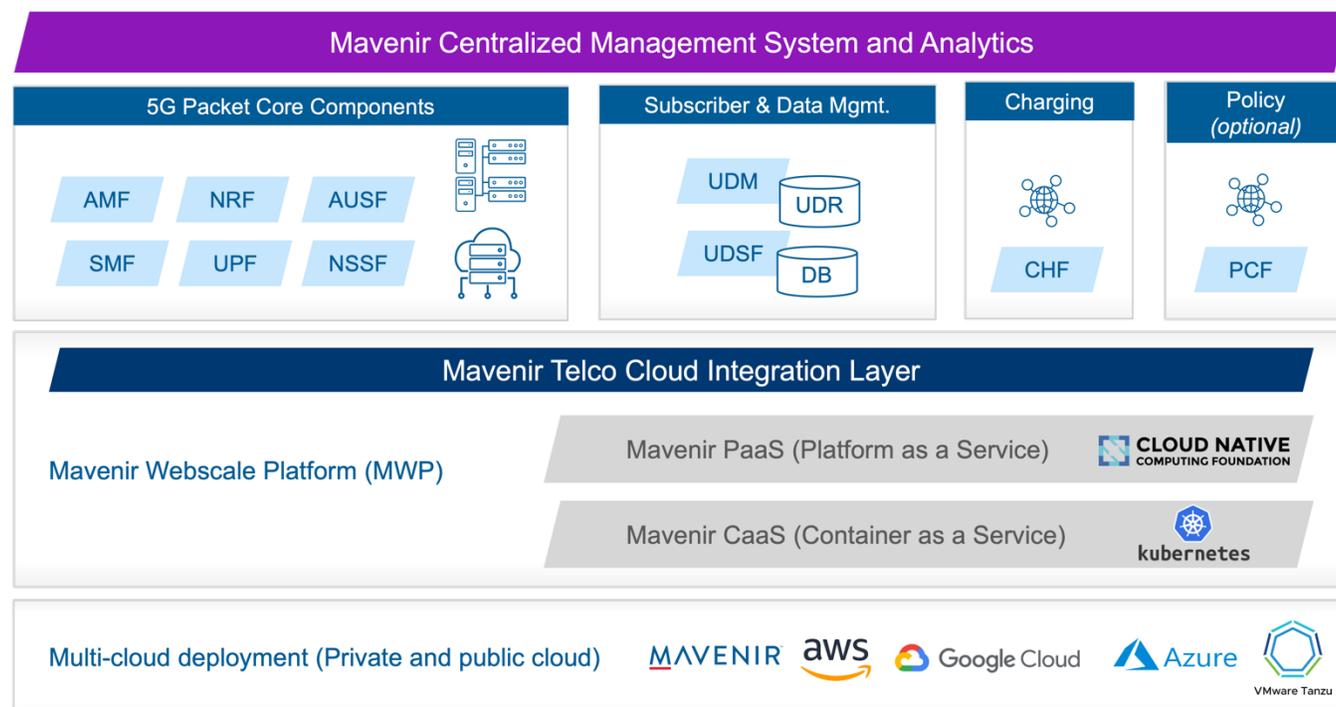
## SOLUTION BRIEF SMALL FOOTPRINT 5GC

### Overview

Mavenir’s cloud-native, asset-light 5G packet core solution is specialized to allow CSPs, private networks, and cable operators to deliver low-cost, optimized-footprint solutions for use by enterprise applications. It is suitable for on-premises, public, or private cloud deployments, even in confined locations or limited geographies. Mavenir’s solution handles various services and use cases across different industry verticals such as manufacturing, utilities, AR/VR, V2X, video surveillance and detection, FWA, eMBB, IoT, and mission-critical services.

The solution can be scaled from a single server to suit business needs without relying on public network operators' more expansive roll-out plans. CSPs and enterprises get a flexible core with a set of open, cloud-native, highly cost-effective tools such as zero-touch provisioning, automation, and lifecycle management to manage the end-to-end network leading to OpEx savings. Mavenir’s Small Footprint 5GC solution delivers a lean yet powerful, customizable, automated, and reliable network that enables CSPs and enterprises to create a competitive advantage.

### Digital Transformation with Mavenir Small Footprint 5GC Solution





**Mavenir’s Small Footprint 5GC solution** offers 5GC Network Function (NF) applications built independently of the platform, allowing 5GC NFs to run in any underlying CaaS/PaaS and IaaS layers. In addition, Mavenir has de-coupled the 5GC NF application services from the common management services to provide a truly disaggregated and independently scalable packet core architecture. To realize the full potential of 5G, Mavenir’s solution implements cloud-based technologies and adheres to strong design principles and architecture.

All of Mavenir’s Small Footprint 5GC NFs are 100% cloud-native, 100% microservices-based, and 100% containerized, supporting dynamic scaling.

Mavenir’s Small Footprint 5GC solution is 3GPP compliant, allowing small deployments with up to 10,000 users and 40 Gbps throughput systems, and the capacity can be extended as required. The solution can be hosted on any COTS servers, either using three servers with redundancy or a single server without redundancy.

Mavenir’s Configuration Management System (mCMS) system provides Fault, Configuration, Accounting, Performance, and Security (FCAPS) functionality for all the 5GC network functions. A built-in analytics framework enables real-time monitoring of the 5GC network. The management framework features:

- > FCAPS
- > Offline charging (CDR)
- > Remote monitoring and diagnostics
- > Quality control

## Expansion Options

### Local breakout or edge deployment

Mavenir’s Small Footprint 5GC solution empowers an enterprise or small network operator to add remote UPFs for local traffic breakouts.

Local data centers reduce costs, risk, latency, and connectivity constraints in challenging environments rendering them more feasible for real-time and mission-critical applications.

### Capacity addition

Extend the Mavenir Small Footprint 5GC solution by adding additional server instances to increase capacity.

Mavenir’s 5GC enterprise solution is cloud-native, containerized, and based on a microservices architecture that enables enterprises and CSPs to unlock business agility and deliver competitive, diverse use cases.



## Benefits

- 1. Multiple use cases and differentiated services on the same core with network slicing** – The cloud-native Small Footprint 5GC can be optionally divided or "sliced" into parts. Each part can be individually tailored and controlled to adapt to specific network performance parameters or the needs of a group of users in a business ecosystem.
- 2. Small form factor network** – CSPs can start small and scale with a single-server solution that delivers the same capabilities as a full-sized 5GC network. It is cost-effective, power-efficient, and easily managed and operated.
- 3. Open architecture and APIs** – An open-source environment for automating deployment, scaling, and managing containerized applications enables flexibility. Mavenir's telco-grade common services provide open APIs for application integration with the OSS, PaaS layer, and network management.
- 4. Edge Performance** – CSPs can achieve low latency, bandwidth efficiency, and low-cost data processing at the edge.

## Mavenir's Small Footprint 5GC solution features

- > Mobility management
- > Authentication and security
- > Session management
- > Network slicing
- > UE presence in area of interest
- > VoNR and IMS voice
- > Emergency services
- > Local Area Data Network (LADN)
- > SMS over non-access stratum (NAS)
- > EPC interworking procedures
- > Dual connectivity
- > Non-3GPP access support
- > Converged charging
- > Event exposure restoration
- > Load and overload control
- > Geo redundancy
- > Lawful intercept

Mavenir's Small Footprint 5GC solution enables enterprises and CSPs to build lean, fit-for-purpose, and powerful networks to drive growth, agility, and efficiency for factories of the future and consumers. With ultra-reliable and low latency communication, enterprises and CSPs can benefit from the efficiency and automation gains while staying ahead of the competition.

## About Mavenir

Mavenir is building the future of networks and pioneering advanced technology, focusing on the vision of a single, software-based automated network that runs on any cloud. As the industry's only end-to-end, cloud-native network software provider, Mavenir is transforming the way the world connects, accelerating software network transformation for 250+ communications service providers in over 120 countries, which serve more than 50% of the world's subscribers.

For more on Mavenir solutions please visit our website at [www.mavenir.com](http://www.mavenir.com)