An innovative microservice-based NFV-ready virtualized evolved packet core that can scale independently

Virtualized Evolved Packet Core (vEPC)

Mavenir vEPC is an innovative Evolved Packet Core (EPC) specifically designed from the ground up for virtualized environments. Organized in independent slices of the control, user, and management planes, Mavenir vEPC is free of the architectural restrictions posed by traditional, physical node-based packet cores. Running on Intel x86 servers, it can efficiently support networks of any size and scale. Mavenir vEPC provides the lowest total cost of ownership and ensures that all the benefits of running a virtualized network function get passed on to operators and their customers, leading to a renewed focus on business growth.

The Mavenir vEPC cloud-based core network architecture is targeted to transform mobile networks through a highly scalable and nimble virtualized Evolved Packet Core (EPC) that can adapt to a range of emerging 4G LTE deployment use cases. Moreover, its visionary nature allows it to be natively extensible to emerging 5G standards. The resultant approach eliminates the expensive hardware, long upgrade cycles, over-provisioning, and years-in-advance budgeting that traditionally characterize mobile service provider networks.

Operators can now experience the benefits of a fully virtualized EPC implementation.

The innovative cloud core architecture allows for the vEPC platform to be deployed flexibly as a collapsed all-in-one vEPC, or as a vEPC with a separately instantiated Mavenir vHSS, or as a standalone Mavenir vPGW, Mavenir vSAE-GW, or Mavenir vC-SGN.

Cloud-Friendly Design

- Distributed stateless clustered components for high availability and performance
- Event-driven asynchronous design allows for maximum parallelism
- Stateless, share-nothing architecture allows for unlimited linear scalability

Open Architecture

- "Run Anywhere" Paradigm (Hypervisor agnostic/Hardware agnostic)
- Simple-to-integrate APIs for integration with Network Manager System (NMS) and NFV Orchestrators for onboarding and scaling