What is Multi-access Edge Computing?

Multi-access Edge Computing (MEC) offers application developers and content providers cloud-computing capabilities and an IT service environment at the edge of the mobile network. This environment is characterized by ultra-low latency and high bandwidth as well as real-time access to radio network information that can be leveraged by applications.

MEC provides a new ecosystem and value chain. Operators can create new revenue streams by exposing their Radio Access Network (RAN) edge to authorized third-parties for application hosting and providing RAN-based services, allowing them to flexibly and rapidly deploy innovative applications and services towards mobile subscribers, enterprises and vertical segments.

Strategic Relevance

MEC is a natural development in the evolution of mobile base stations and the convergence of IT and telecommunications networking. Multi-access Edge Computing will enable new vertical business segments and services for consumers and enterprise customers. Use cases include:

- connected vehicles
- video analytics
- location services
- Internet-of-Things (IoT)
- augmented/virtual reality
- optimized local content distribution
- data caching
- integration of "private" mobile networks into enterprise networks
- industrial internet

It allows software applications to tap into local content and real-time information about local-access network conditions. By deploying various services and caching content at the network edge, mobile core networks are alleviated of further congestion and can efficiently serve local purposes.

New MEC industry standards and deployment of MEC platforms will act as enablers for new revenue streams to operators, vendors and third-parties. Differentiation will be enabled through the unique applications deployed in the edge cloud.
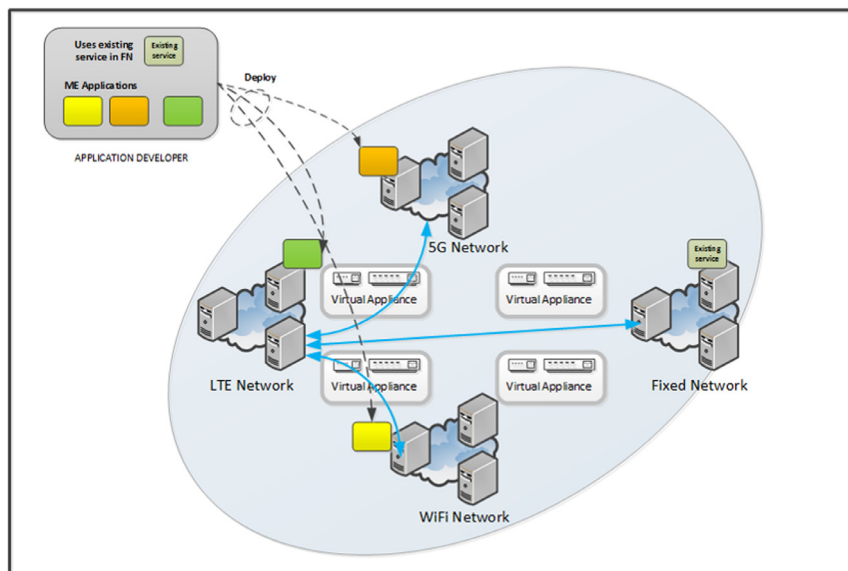
ETSI Multi-access Edge Computing ISG

The Multi-access Edge Computing (MEC) initiative is an Industry Specification Group (ISG) within ETSI. The purpose of the ISG is to create a standardized, open environment which will allow the efficient and seamless integration of applications from vendors, service providers, and third-parties across multi-vendor Multi-access Edge Computing platforms.

The ISG aims to benefit all entities within the value chain, including mobile operators, application developers, Over the Top (OTT) players, Independent Software Vendors (ISVs), telecom equipment vendors, IT platform vendors, system integrators, and technology providers. All of these parties are interested in delivering services based on Multi-access Edge Computing concepts.

The work of the MEC group aims to unite the telco and IT-cloud worlds, providing IT and cloud-computing capabilities within the RAN (Radio Access Network). The ISG MEC will specify the elements that are required to enable applications to be hosted in a multi-vendor multi-access-edge computing environment.

MEC will enable applications and services to be hosted 'on top' of the mobile network elements, i.e. above the network layer. These applications and services can benefit from being in close proximity to the customer and from receiving local radio-network contextual information.
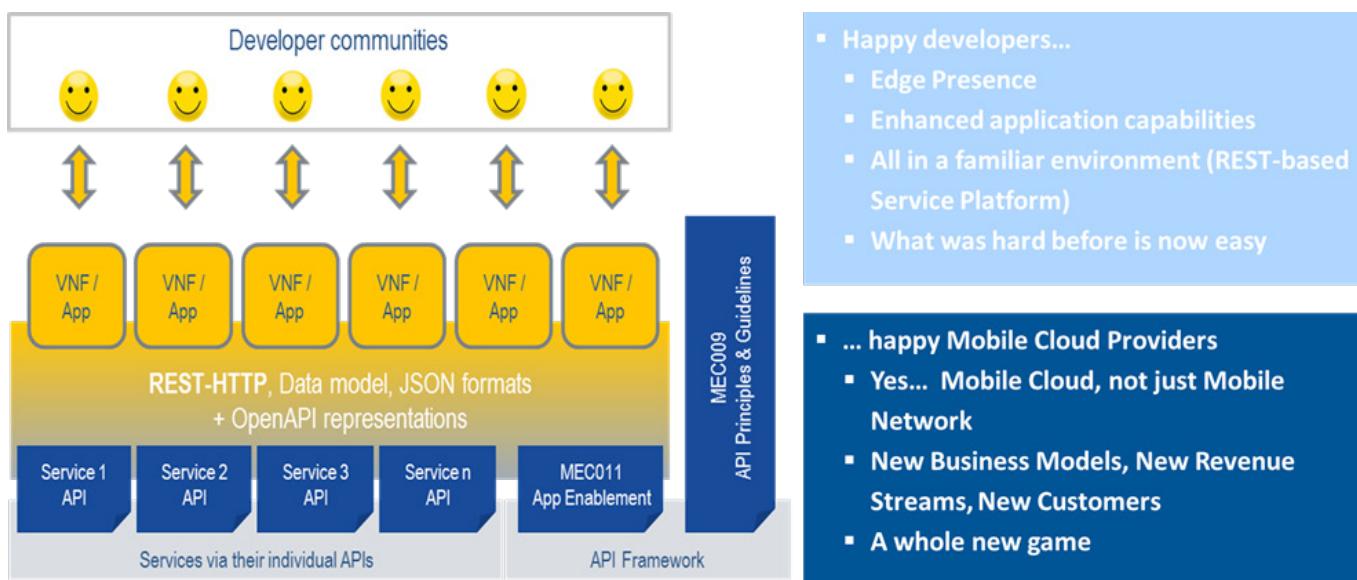
MEC defines standardized Application Programming Interfaces (APIs) to support edge computing interoperability. OpenAPIs descriptions for the interfaces specified in ETSI MEC API Group Specifications are available on an ETSI Repository at https://forge.etsi.org.

To find out about our latest MEC white papers, specifications and all our marketing documents, please visit:

www.etsi.org/mec

ETSI provides members with an open and inclusive environment to support the timely development, ratification and testing of globally applicable standards for ICT-enabled systems, applications and services across all sectors of industry and society. We are at the forefront of emerging technologies. We address the technical issues which will drive the economy of the future and improve life for the next generation. We are a not-for-profit body with more than 850 member organizations worldwide, drawn from 68 countries and five continents. Members comprise a diversified pool of large and small private companies, research entities, academia, government and public organizations. ETSI is one of only three bodies officially recognized by the EU as a European Standards Organization (ESO).

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