Mobile Edge Computing vs. Multi-Access Edge Computing

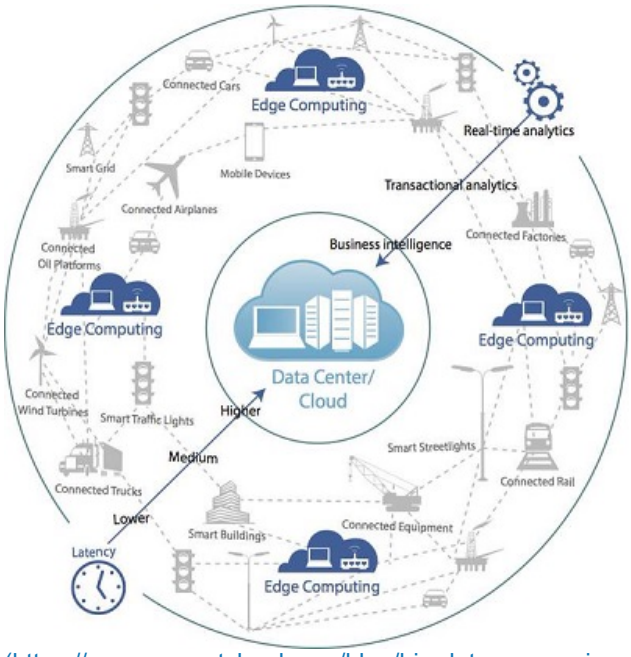
The acronym MEC is used interchangeably to stand for mobile edge computing or multi-access edge computing (https://www.sdxcentral.com/edge/definitions/what-multi-access-edge-computing-mec/). What is the definition of mobile edge computing versus multi-access edge computing? The definition is the same for both terms with one small distinction that formed during the evolution of MEC research (https://www.sdxcentral.com/edge/definitions/mec-research/).

MEC computing refers to computing at the edge of a network. The edge is similar to a distributed cloud (https://www.sdxcentral.com/edge/definitions/whats-the-difference-between-mec-and-distributed-cloud/) with proximity close to the end user that delivers ultra-low latency, reliability, and scalability. When first conceptualized, the edge of a network meant the edge of a mobile network, hence the name mobile edge computing. As MEC research progressed, technology experts realized that the term leaves out several access points that may also construct the edge of a network. Thus, prompted the change from mobile edge computing to multi-access computing in order to reflect that the edge is not solely based on mobile networks.

In September 2017, the European Telecommunications Standards Institute (ETSI (https://www.sdxcentral.com/nfv/definitions/etsi-isg-nfv/)) Industry Specification Group (ISG) officially changed its name (http://www.etsi.org/images/files/ETSInewsletter/etsinewsletter-issue2-2017.pdf) from Mobile Edge Computing ISG to Multi-Access Edge Computing (https://www.sdxcentral.com/edge/) ISG to “to embrace the challenges in the second phase of work and better reflect non-cellular operators’ requirements.”

Tapping into the edge of a network elevates computing to handle the onslaught of connected devices, and it helps enterprises with their business-critical missions. Edge computing reduces latency to milliseconds and allows for constant connectivity. Plus, when the edge network experiences high traffic, the edge may offload data to the cloud (https://www.sdxcentral.com/cloud/) to maintain a quick and reliable connection.

Now that we’ve noted the difference in terminology between mobile edge computing versus multi-access computing, and discovered that the “correct” name for MEC is multi-access edge computing, we’ll cover where the edge is it located. Let’s review the types of access points currently in use, and the ones envisioned for the near-future computing.



(https://www.promptcloud.com/blog/big-data-processing-

edge-computing)

Source: PromptCloud

The Access Points that Create the Edge in MEC:

The access point is typically one hop away from the user. The access point can be either of these items to establish the network edge:

- Base Stations, including mobile base stations, cell towers, central office base stations
- RAN (https://www.sdxcentral.com/5g/definitions/radio-access-network/) for LTE/5G (https://www.sdxcentral.com/5g/)
- Radio network controller for WiFi
- Cable modem termination systems (CMTS) for cable
- PON OLT for fiber or the access points for other networks such as Zigbee, CBRS, LoRA, DSL, MuLTEfire, private LTE.
- Hot spots
- Small cells
- Data centers (and micro-data centers)
- Routers
- Switches
- WiFi access points

Additional Mobile Edge Computing vs. Multi-Access Edge Computing Resources

OpenEdge Computing (http://openedgecomputing.org/)

What is Multi-Access Edge Computing? (https://www.sdxcentral.com/edge/definitions/what-multi-access-edge-computing-mec/)

What are the MEC Standards? A Quick Review (https://www.sdxcentral.com/edge/definitions/mec-standards/)

The Promise of Disruption: The MEC, 5G Impact on the Computing Landscape (https://www.sdxcentral.com/edge/definitions/mec-5g/)

Related Definitions

Considerations for an Effective Multi-Cloud Strategy

IoT Spurs Huawei's Focus on MEC

Vapor IO Hones in On Edge Computing

What is Open Edge Initiative? MEC Research and Tests

What's the Difference between MEC and Fog Computing?

What are the MEC Standards? A Quick Review