

Technology Primer: Multi-Access Edge Computing (MEC)

Instructor Led Live Virtual Class | Duration: 0.5 Day | Course Number: TPR1028

Multi-Access Edge Computing (MEC) pushes cloud computing capabilities closer to the user across multiple access network domains. This course provides an overview of MEC framework, underlying technology and its use-cases. It starts with to the key use cases for MEC, its characteristics and benefits. It sketches the MEC framework and compares with the OpenFog architecture. The MEC reference architecture, reference points, key APIs, and function elements are then described. The course concludes with a discussion on different MEC location strategies and its role in 3GPP 5G Networks for different use cases.

Intended Audience

A high-level technical overview to personnel involved in product management, marketing, planning, design, engineering, and operating wireless (4G, 5G) and wireline access networks

Learning Objectives

After completing this course, the student will be able to:

- Define Multi-Access Edge computing(MEC)
- List the key use cases and benefits offered by MEC
- Compare and Contrast different technologies that can be used for MEC deployment
- Sketch the Reference Architectures for MEC and describe the role of each function element
- List different MEC server location strategies

Suggested Prerequisites

- A working knowledge of wireless networks

Course Outline

1. Edge Computing in Networks

- 1.1. Edge Computing in telecom networks
- 1.2. Define MEC
- 1.3. MEC characteristics
- 1.4. Business drivers
- 1.5. MEC benefits

2. MEC Technologies

- 2.1. MEC standardization groups
 - 2.1.1. ETSI MEC
 - 2.1.1.1. Framework & PoC
 - 2.1.2. OpenFog Consortium
 - 2.1.2.1. Reference Architecture & 8 pillars
 - 2.1.3. Open Edge computing

3. MEC Architecture and Functions

- 3.1. Reference Architecture
- 3.2. Mobile Edge Host
- 3.3. Mobile Edge Host Level Management
- 3.4. Mobile Edge System Level Management
- 3.5. Mobile Edge Services

4. Deployment and Use Cases

- 4.1. Deployment Strategies
- 4.2. MEC in 5G and Cloud RAN
- 4.3. Use cases
- 4.4. Challenges and key considerations