Multi-Access Edge Computing (MEC)

Multi-Access Edge Computing (MEC) pushes cloud-computing capabilities closer to the user across multiple access network domains. This course provides an overview of the MEC framework, the underlying technology and its 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

Objectives

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

- Define Multi-Access Edge Computing (MEC)
- List the key use cases and benefits of MEC
- Illustrate the ETSI reference architecture for MEC
- Identify key technology enablers for MEC
- Describe how MEC interacts with the rest of the 5G network

What You Can Expect

- Prerequisite: 5G Core Network Overview
- Self-Paced Duration: 4 HOUR

Outline

1. What and Why MEC?
- 1.1 What is MEC and Why?
- 1.2 Benefits of MEC
- 1.3 Location considerations for MEC deployment

Exercise: Knowledge check

2. Enabling Technologies for MEC
- 2.1 Enablers for MEC - Edge cloud, NFV, SDN
- 2.2 5G RAN and 5G Core for MEC
- 2.3 Role of Service-Based Interface (SBI) and API

Exercise: Knowledge check

3. MEC Architecture
- 3.1 MEC architecture of ETSI and 3GPP
- 3.2 MEC and 4G-5G together

Exercise: Design and deploy MEC in 5G

Exercise: Knowledge check

4. MEC Operations and Deployment Scenarios
- 4.1 MEC operations
- 4.2 MEC deployment scenarios

Exercise: Step through MEC operations

Exercise: Knowledge check

Putting it all together

Final assessment