



# Welcome to O-RAN Part 3: SMO and O-Cloud

**5G\_112d | On-Demand | 5G Access | Express**

**Course Duration:** 1 hour

The O-RAN alliance specifies Service Management and Orchestration, along with O-RAN-compliant RAN functions and an Open-Cloud or O-Cloud infrastructure. This gives wireless network operators the automation, intelligence, and open architecture they need to meet the demands of Industry 4.0, including use cases like Augmented Reality and Virtual Reality. In this training, you will learn about both the Service Management and Orchestration (SMO) and the O-Cloud described and specified by the O-RAN Alliance. You will gain an understanding of how these technologies work together to create open and intelligent mobile networks. You will also learn about the benefits of O-RAN, including increased flexibility, reduced costs, and improved scalability.

## Intended Audience

This course is designed for a broad audience of personnel working in the wireless industry.

## Objectives

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

- Describe role of SMO and O-Cloud in O-RAN
- Outline the SMO architecture and specify the interfaces
- Explain the SMO key functions
- List the SMO deployment models
- Sketch the O-Cloud architecture
- Outline the services provided by O-Cloud
- Illustrate options to synchronize O-Cloud
- List the O-Cloud deployment options for use cases

## Course Prerequisites

No Prerequisites

## Outline

1. Service Management and Orchestration (SMO)
  - 1.1 SMO Business Benefits
  - 1.2 SMO Architecture and Interfaces
  - 1.3 SMO Key Functions
  - 1.4 SMO Deployment Models
2. O-Cloud
  - 2.1 O-Cloud Architecture
  - 2.2 O-Cloud Interactions with the SMO
  - 2.3 O-Cloud Service
  - 2.4 O-Cloud Synchronization
  - 2.5 O-Cloud Deployment Scenarios
- Final Assessment