

AI Closed Loop Management Architecture Fundamentals

(Course code - ODF-2505)

Closed loop automation is a crucial element of any service provider's automation. It will be essential for minimizing operational expenses, improving productivity, and increasing scalability while enhancing the end-user experience.

The traditional network and service operations cannot continue to operate with its current labor intensive approach, due to the dynamic nature of the new networks.

With 5G, virtual network functions (VNFs), cloud-native network functions (CNFs) and software-defined networking (SDN), it means that the rate at which these networks can scale up or down is growing exponentially. This associated complexity creates the need for AI driven automated management.

In this course you will learn about an AI Closed Loop Automation Reference Architecture and process flows around key use cases, including the Closed Loop Anomaly Detection and Resolution Automation (CLADRA) reference architecture. You will gain knowledge on how to define and automate anomaly detection and resolution through standard functions, components and interfaces.

Format: Onsite | virtual

Level: Intermediate

Duration: 1 day

Prerequisites:

Highly recommended that the following is considered due to the wider references of managing AI in telecom networks and topics made throughout the course.

- AI and Automation - Deploying in ODA Overview ODF-150

what will you learn?

- The basic principles and definitions of a closed loop system.
- Business drivers and benefits of AI closed loop implementations for industry, CSPs and different parties.
- The use of closed loop within the wider autonomous network architectures and standards.
- The underlying AI closed loop model and its relationship to the CLADRA architecture.
- Applying closed loop solutions in the real world through case studies.
- The challenges of implementation of closed loop solutions.

who should attend?

- Anyone tasked with ensuring autonomous network within telecoms deliver value to the business.
- Data Scientists working for enterprise application providers or integrators.
- Anyone working at the practical level of data research and analytics and its impacts on the 5G rollouts.
- Engineers and Architects working on learning how to implement new AI solutions into networks.
- Anyone investigating the field of AI and its challenges and practicalities in its rollout.

course certification:

A course attendance certificate is issued on satisfactory completion of the course. There is a knowledge certification exam also associated with the course material. Passing this exam counts toward skill certification with TM Forum. Find out more about certification tracks [here](#).

This course will be the starting point for all our proposed AI skill paths including Autonomous Networks.

what to take next?

- Intent-driven Autonomous networks ODF-2503
- AI Operations (AIOps) Fundamentals ODF-2504

course syllabus

MODULE 1

AI Closed-Loop - introduction & drivers

MODULE 2

Principles & Closed loop Architecture Overview

MODULE 3

AI Closed-Loop Modelling (AI-CLM) & CLADRA

MODULE 4

Case studies of AI Closed Loop

MODULE 5

Challenges of AI-CLM Implementation

MODULE 6

Summary & next steps