

ANL fundamentals

(Course code - N/A)

The Autonomous Network (AN) and Autonomous Network Levels (ANL) are concepts jointly proposed by TM Forum and industry partners which aim to evolve network infrastructure and operations systems using automation and intelligence. Over the past four years, systematic AN concepts, standards, implementation methods and application use cases have been defined, resulting in a resounding consensus on AN across the industry and significant achievements in terms of AN practices and deployment.

This learning path brings together the set of TM Forum's Micro courses to provide a full appreciation of how Autonomous Networks are defined at a certain level and the methodology that an operator can use to measure the maturity against the standard defined model.

what will you learn?

- The needs and drivers for AI and automation in operations, and why service providers need to implement them.
- The essentials of the ANL model and the definition of each level.
- The methodology as defined by the TM forum collaboration project to understand the level of autonomous maturity.
- How the model and the methodology can be applied in different situations.

Format: Instructor Led

Level: Fundamental

Duration: 2 days

TM Forum Micro courses included

- Autonomous Network Levels (ANL) Model
- Autonomous Network Levels (ANL) Evaluation Methodology
- Autonomous Network Levels (ANL) Use Cases
- Autonomous Network Levels Evaluation Tool (ANLET)

who should attend?

- Anyone involved in managing or developing Autonomous Networks, requiring an introduction to the Autonomous Network Levels model and evaluation methodologies.
- Business owners of telecom and vertical industries and managers, to help them in conducting high level autonomy assessments of networks, services and systems, identifying their maturity and specific areas for future improvement.
- Solution providers including system architects, consultants, engineers as a reference for the development direction of emerging network innovations.

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 towards the TM Forum Open API skill certification track. Find out more [here](#).

Autonomous Network Levels (ANL) model

(Course code - ODF-2507)

A common understanding of Autonomous Network Levels is essential to support an operator's operational and management efforts, as well as the coordination of dedicated human resources, all of which vary depending on the level of network autonomy. It is crucial for operators—and the industry as a whole—to have a clear understanding of the expectations for their network's level of automated maturity. This enables them to prioritize key features needed to achieve the required level of autonomy for their networks.

This course explores the definitions of Autonomous Network Levels based on TM Forum collaboration programs. It explains the concepts behind each level, offering insights into the wide-ranging benefits of the Autonomous Network Levels model and its role within Autonomous Network initiatives. Participants will also gain an understanding of how the model can be used to define clear, measurable targets on the Autonomous Journey.

what will you learn?

- The drivers and the needs for Autonomous Network Levels, including the multitude of benefits that the model of Autonomous Network Levels can bring.
- The five levels of network automation, ranging from no automation to fully autonomous.
- How to use the model to define clear and measurable targets on the Autonomous Journey.

Format: Instructor Led

Level: Fundamental

Duration: 2+hrs

who should attend?

- Anyone involved in managing or developing Autonomous Networks, requiring an introduction to the Autonomous Network Levels Model.
- Business owners of telecom and vertical industries, senior managers, managers, business and system architects, consultants, engineers that need to understand the Autonomous Networks levels and their requirements.

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 towards the TM Forum Open API skill certification track. Find out more [here](#).

Autonomous Network Levels (ANL) evaluation methodology

(Course code - ODF-2506)

Conducting a detailed assessment of network autonomy requires a clear, explicit, and operable Autonomous Network Level methodology and approach, providing the basis for measuring the level of autonomy.

This course aims to help understand the systematic approach to evaluate the level of autonomy a network is currently running at, according to the Autonomous Network Levels Evaluation Methodology by TM Forum. It looks to provide insights into the approach of measuring the level of an Autonomous Network or Autonomous Network

what will you learn?

- Introduction to Autonomous Network Levels evaluation methodology.
- Basic principles and concepts of the methodology and the Key Effective Indicators.
- Insights to the challenges and mitigations of measuring the level of an autonomous network or autonomous network feature.

Format: Instructor Led

Level: Fundamental

Duration: 2+hrs

who should attend?

- Anyone involved in managing or developing Autonomous Networks, requiring an introduction to the ANL Evaluation Methodology.
- Business owners of telecom and vertical industries, senior managers, managers, business and system architects, consultants, engineers that need to understand the evaluation process measuring Autonomous Networks and Services and be able to have common language/conversations.

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 towards the TM Forum Open API skill certification track. Find out more [here](#).

Autonomous Network Levels (ANL) use cases

(Course code - ODF-2508)

Conducting a detailed assessment of network autonomy requires a clear, explicit, and operable Autonomous Network Level methodology and approach, providing the basis for measuring the level of autonomy.

This course is designed to help participants understand the systematic approach to evaluating a network's current level of autonomy based on TM Forum's Autonomous Network Levels (ANL) Evaluation Methodology. It offers insights into the process of measuring the level of an Autonomous Network or its features, including its components and workflows, to achieve a quantifiable evaluation.

what will you learn?

- Introduction to Autonomous Network Levels evaluation methodology.
- Key principles, concepts, and Effective Indicators used in the evaluation process
- Challenges and solutions in measuring the level of an Autonomous Network or its features.

Format: Instructor Led

Level: Fundamental

Duration: 2+hrs

who should attend?

- Anyone involved in managing or developing Autonomous Networks, requiring an introduction to the ANL Evaluation Methodology.
- Business owners of telecom and vertical industries, senior managers, managers, business and system architects, consultants, engineers that need to understand the evaluation process measuring Autonomous Networks and Services and be able to have common language/conversations.

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 towards the TM Forum Open API skill certification track. Find out more [here](#).

Autonomous Network Levels evaluation tool (ANLET) fundamentals

(Course code - ODF-2509)

TM Forum's Autonomous Network Levels (ANL) model and approach provide the essential methodology for an operator to clearly and explicitly assess the level of autonomous maturity. To facilitate this assessment and method, the TM Forum and their members have created the Autonomous Network Level Evaluation Tool (ANLET). The ANLET uses a series of scenario-based questionnaires and assessments aimed to explore the different technology domains and objects and to provide a consistent and repeatable definition of the Autonomous level.

This course is designed to provide a comprehensive understanding of the Autonomous Network Evaluation Tool, covering fundamental concepts, advanced features, and practical applications.

The course covers the core functionalities of ANLET, the methodology for conducting evaluations, and practical applications to improve network performance and autonomy. Participants will gain hands-on experience with the tool, learn to interpret results, and implement best practices for network automation.

what will you learn?

- An overview of the ANLET and its importance in the evaluation process.
- How to effectively use the ANLET with practical examples including Radio and Core networks.
- The methods for collecting necessary data for the evaluation.

Format: Instructor Led

Level: Fundamental

Duration: 2+hrs

who should attend?

- Anyone involved in managing or developing Autonomous Networks and those requiring an introduction to the Autonomous Networks Level Evaluation Tool, and its relationship to the Model and the methodology.
- Senior managers, managers, business and system architects, consultants and engineers who need to understand the Autonomous Networks levels and their requirements.

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 towards the TM Forum Open API skill certification track. Find out more [here](#).