



# API Overview

NWV\_108d | On-Demand | 5G Core | Express

Course Duration: 1 hour

Wireless, wireline and cable service providers are on the cusp of a multitude of network and business transformation choices. A good conceptual understanding of the new networking and wireless, wireline and cable service provider business paradigms is essential for professionals in the communication industry. This course explores the technology behind Application Programming Interfaces (APIs), details the requirements and benefits of using APIs, and describes how to leverage APIs as part of network transformation.

## Intended Audience

The course is intended for all that are interested in understanding what APIs are and how they will enable the transformation of the Wireless, Wireline and Cable service provider networks over the next few years.

## Objectives

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

- Outline the concept of Application Programming Interfaces (APIs)
- Describe how to leverage APIs as part of the Network Transformation
- Identify three possible examples of APIs

## Course Prerequisites

No Prerequisites

## Outline

1. What is an API?
  - 1.1 API defined
  - 1.2 What is an API?
2. Why APIs?
  - 2.1 Benefits of APIs
  - 2.2 Requirements of APIs
3. Using APIs
  - 3.1 API In action: End-to-end view of API
4. API Process
  - 4.1 Simplified API process
5. Technology Behind APIs
  - 5.1 RESTful APIs
  - 5.2 OAuth2
6. APIs and Network Transformation
  - 6.1 APIs and network transformation
  - 6.2 Example: OpenStack APIs for VM Instantiation
  - 6.3 Example: APIs in Software-Defined Networking
7. API Examples
  - 7.1 Data center example
  - 7.2 Wireless network example
  - 7.3 What is an API platform?
8. End of Course Assessment