

API Overview

eLearning (H5v) | Average Duration: 1 Hour | Course Number: NWV_108



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 provides a high level view of the impact and benefits of Application Programming Interfaces, the vision and opportunities created by future provider networks, as well as their role in supporting communication across a transformed network.

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.

Learning 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 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**