

Network Programmability with Cisco APIC-EM - Course Resources

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Workshops Overview

The Cisco Networking Academy's Emerging Technologies Workshops are short, hands-on experiences--developed in partnership with Cisco DevNet--that expose your students to the latest internet technologies. The traditional networker skillset is evolving from being limited to solving problems using the CLI interface to meeting the opportunities and demands of programmable networks and automation. To meet this opportunity, students learn about new concepts in network programmability and automation, see how they work on real-world equipment, and quickly develop new emerging skills for today's evolving job market. Furthermore, each 8-hour Workshop is designed as bite-sized learning experiences to be flexibly and easily used to complement your existing learning pathways.

In each Workshop, students learn to work with emerging technologies that are frequently heard only as a series of buzzwords (i.e. APIs, REST, JSON, Python, Git, Postman, SDN, NFV, NETCONF, RESTCONF, Controllers, Orchestration, YANG, YAML, ACI, APIC-EM, Containers, etc.). The Workshop concept is to translate these buzzwords into simple "hello world" type systems integration practice with hands-on experiences. To accelerate the skills acquisition and to support future real-world tasks, students also learn the value of Communities of Practice such as Cisco DevNet, GitHub, StackOverflow. They will join these communities to further learn, collaborate, build, share as active members and start building their online professional presence.

Certification and Career Pathways

The Emerging Technologies Workshops provide a good starting point on the journey towards the [Cisco DevNet Associate certification](#). Moreover, expanding existing learning pathways with Workshops increase the relevancy of the students in the job market with new emerging skills in network programmability and automation domain. There is a Certificate of Completion available for each Workshop.

Workshop: Network Programmability with Cisco APIC-EM

The Network Programmability with Cisco APIC-EM workshop introduces students to the basic competencies to operate and automate management tasks on a controller-based network.

By the end of this workshop, students will be able to:

- Understand the value, set-up and use of software concepts and tools relevant to network



programmability (Python scripting, Git, JSON, Postman, APIs).

- Describe a different approach to software-defined networking (SDN), including central application policy control.
- Use the Cisco DevNet Sandbox to learn how to interact with programmable devices using real-world APIs on Cisco APIC-EM programmable controllers.
- Understand the value of joining professional communities of practice to working in the network programmability domain. Participate in Cisco DevNet, GitHub, and Stack Overflow.

Equipment & Applications

- In this workshop, students will use Cisco DevNet Sandbox environments to provide access to virtualized real-world equipment and pre-built networking topologies.

Pre-requisites

- CCNA SRWE course level networking knowledge.
- Basic programming knowledge.