Developing Solutions Using Cisco IoT and Edge Platforms (DEVIOT)

Course Content

Course Description:

This 5-day course, Developing Solutions Using Cisco IoT and Edge Platforms (DEVIOT) v1.0, prepares you to develop Internet of Things (IoT) applications for Cisco® IoT edge compute and network architecture. Through a combination of lessons and hands-on experience, you will learn to implement and deploy Cisco IOx applications using Cisco Field Network Director and Cisco Kinetic. This course covers designing, deploying, and troubleshooting edge applications, and understanding the use of management tools, so you can control your industrial network and connected devices at scale. This course will prepare you for the 300-915 Developing Solutions Using Cisco IoT and Edge Platforms (DEVIOT) exam.

At Course Completion:

After competing this course, student will be able to:
- Explain the fundamentals of Cisco IoT and list common devices involved
- List the common protocols, standards, and data flows of IoT
- Explain the Cisco IoT, common needs, and the corresponding solutions
- Explain how programmability can be used to automate and make operations, deployment, and support of Cisco IoT more effective
- Describe common Cisco IoT applications and how they apply to Cisco IoT use cases
- Explain the functions and use cases for Cisco security applications and Cisco IoT

Prerequisites:
- General software development or coding skills
- Basic functional and object-oriented programming skills
- Basic understanding of where applications live and how they are deployed in real-world scenarios
- Basic understand of how networking works
- Basic Linux OS skills: installing code language dependencies, installing code libraries, and general scripting
- Understanding of how to store code using git or another version-control system (VCS)

Target Student:
- Network engineer
- Systems engineer
- Consulting systems engineer
- Technical solutions architect
- Network administrator

- IoT Designer
- Network manager
- Sales engineer

Topics:

Defining Cisco IoT
- Describe Cisco IoT and the motivations behind it, as well common standards and protocols used in IoT and Cisco IoT

IoT Networking and Other Devices
- List common devices used with Cisco IoT

Examining IoT Protocols
- List the common protocols used with IoT

Examining IoT Standards
- Describe Cisco IoT common standards and protocols used in Cisco IoT

Recognizing Cisco IoT Needs and Solutions
- Describe the fundamentals of Cisco IoT operations

Using Programmability with Cisco IoT
- Explain how programmability can be used to automate and make operations, deployment, and support of Cisco IoT more effective

Describing Cisco IoT Applications
- Describe common Cisco IoT applications and how they apply to Cisco IoT use cases

Defining Cisco Security Applications
- Describe Cisco security applications that form a foundation for Cisco IOT security design considerations