DEVELOPING SOLUTIONS USING CISCO IOT AND EDGE PLATFORMS (DEVIOT) V1.0

The Developing Solutions Using Cisco IoT and Edge Platforms (DEVIOT) v1.0 course 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.

How you'll benefit

This course will help you:

- Use network programmability and automation to streamline applications to reduce data size and complexity and strengthen security protocols.
- Gain hands-on experience in maximizing MQ Telemetry Transport (MQTT) protocol for lower power usage, faster data transmission, and more agility in device usage.
- Earn 40 CE credits toward recertification.

Why Attend with Current Technologies CLC

- Our Instructors are the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses

6210 Central Ave, Portage, IN. 46368   Phone: 219.764.3800   Fax: 219.764.3805   Web: http://www.ctclc.com

DEVELOPING SOLUTIONS USING CISCO IOT AND EDGE PLATFORMS (DEVIOT) V1.0

Objectives

Upon completing this course, the student will be able to meet these objectives:

- 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

Course Duration
5 day
Course Price
$4,500.00
Methods of Delivery
- ILT
- V-ILT

Certification Exam
300-915
Cisco CE Credits
40

Who Should Attend

The job roles best suited to the material in this course are:

- Consulting Systems Engineer
- IoT Designer
- Network Administrator
- Network Engineer
- Network Manager
- Sales Engineer
- Systems Engineer
- Technical Solutions Architect

Prerequisites

Before taking this course, you should have the following knowledge and skills:
- 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

DEVELOPING SOLUTIONS USING CISCO IOT AND EDGE PLATFORMS (DEVIOT) V1.0

- 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)

Course Outline

Module 1: Defining Cisco IoT

Module 2: IoT Networking and Other Devices

Module 3: Examining IoT Protocols

Module 4: Examining IoT Standards

Module 5: Recognizing Cisco IoT Needs and Solutions

Module 6: Using Programmability with Cisco IoT

Module 7: Describing Cisco IoT Applications: Cisco IOx

Module 8: Describing Cisco IoT Applications: Cisco Kinetic and Cisco Field Network Director

Module 9: Defining Cisco Security Applications

LAB OUTLINE

- **Use an MQTT Consumer to Subscribe to Sensor Data**
- **Use Cisco IOx Applications to Receive and Process Sensor Data**
- **Troubleshoot a Sensor Connection**
- **Use and Interpret Freeboard Data**
- **Use and Interpret Grafana Data**
- **Use and Interpret Kibana Data**
- **Cisco IOx Familiarity Lab**

DEVELOPING SOLUTIONS USING CISCO IOT AND EDGE PLATFORMS (DEVIOT) V1.0

- **Develop and Deploy a Cisco IOx Application**

- **Troubleshoot Cisco IOx**

- **Navigate Cisco Field Network Director**

- **Explore Cisco Field Network Director API**

2022 Current Technologies CLC