



Developing Solutions Using Cisco IoT and Edge Platforms(DEV-IOT) v1.0

Objetivos

After taking this course, you should 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

Pre-requisitos

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
- 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)

Contenido

- Defining Cisco IoT
- IoT Networking and Other Devices
- Examining IoT Protocols
- Examining IoT Standards
- Recognizing Cisco IoT Needs and Solutions
- Using Programmability with Cisco IoT
- Describing Cisco IoT Applications: Cisco IOx
- Describing Cisco IoT Applications: Cisco Kinetic and Cisco Field Network Director
- Defining Cisco Security Applications

Laboratorio

- Use an MQTT Consumer to Subscribe to Sensor Data
- Use Cisco IOx Applications to Receive and Process Sensor Data



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- Troubleshoot a Sensor Connection
 - Use and Interpret Freeboard Data
 - Use and Interpret Grafana Data
 - Use and Interpret Kibana Data
 - Cisco IOx Familiarity Lab
 - Develop and Deploy a Cisco IOx Application
 - Troubleshoot Cisco IOx
 - Navigate Cisco Field Network Director
 - Explore Cisco Field Network Director API
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