DEVIOT (DEVELOPING SOLUTIONS USING CISCO IOT AND EDGE PLATFORMS) 1.0

Objetivo

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

PÃºblico Alvo

This course is designed primarily for network and software engineers who are interested in learning about automation and programmability and hold the following job roles: â¢ Consulting systems engineer; â¢ IoT Designer; â¢ Network administrator; â¢ Network engineer; â¢ Network manager; â¢ Sales engineer; â¢ Systems engineer; â¢ Technical solutions architect.

PrÃ©-Requisitos

Before taking this course, you should have the following knowledge and skills: â¢ General software development or coding skills; â¢ Basic functional and object-oriented programming skills; â¢ Basic understanding of where applications live and how they are deployed in real-world scenarios; â¢ Basic understand of how networking works; â¢ Basic Linux OS skills: installing code language dependencies, installing code libraries, and general scripting; â¢ Understanding of how to store code using git or another Version-Control System (VCS).

Carga HorÃiria

40 horas (5 dias).

ConteÃºdo ProgramÃitico

Course Introduction
Course Outline
Course Goals & Objectives

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

Lab outline
Lab 1: Use an MQTT Consumer to Subscribe to Sensor Data
Lab 2: Use Cisco IOx Applications to Receive and Process Sensor Data
Lab 3: Troubleshoot a Sensor Connection
Lab 4: Use and Interpret Freeboard Data
Lab 5: Use and Interpret Grafana Data
Lab 6: Use and Interpret Kibana Data
Lab 7: Cisco IOx Familiarity Lab
Lab 8: Develop and Deploy a Cisco IOx Application
Lab 9: Troubleshoot Cisco IOx
Lab 10: Navigate Cisco Field Network Director
Lab 11: Explore Cisco Field Network Director API