Developing Applications Using Cisco Core Platforms and APIs (DEVCOR)

Duration 5 Days

COURSE CONTENT

The Developing Applications Using Cisco Core Platforms and APIs (DEVCOR) v1.0 course helps you prepare for Cisco DevNet Professional certification and for professional-level network automation engineer roles. You will learn how to implement network applications using Cisco® platforms as a base, from initial software design to diverse system integration, as well as testing and deployment automation. The course gives you hands-on experience solving real world problems using Cisco Application Programming Interfaces (APIs) and modern development tools.

This course will help you:

- Take full advantage of the network and software development practices when you implement applications to fulfill business needs
- Gain proficiency with applications, automation, and Cisco platforms
- Prepare for the 350-901 DEVCOR exam, which satisfies the core exam requirement toward Cisco Certified DevNet Professional, and earns Cisco Certified DevNet Specialist – Core

COURSE OBJECTIVE

After taking this course, you should be able to:

- Describe the architectural traits and patterns that improve application maintainability
- Describe the architectural traits and patterns that improve application serviceability
- Identify steps to design and build a ChatOps application
- Implement robust Representational State Transfer (REST) API integrations with network error handling, pagination, and error flow control
- Describe the necessary steps for securing user and system data in applications
- Describe the necessary steps for securing applications
- Identify common tasks in automated application release process
- Describe best practices for application deployment
- Describe methodologies for designing distributed systems
- Describe the concepts of infrastructure configuration management and device automation
- Utilize Yet Another Next Generation (YANG) data models to describe network configurations and telemetry
- Compare various relational and nonrelational database types and how to select the appropriate type based on requirements

PREREQUISITES

There are no formal prerequisites for Cisco Certified DevNet Associate certification, but you should make sure to have a good understanding of the exam topics before taking the exam.
Before taking this course, you should have:

- Knowledge of program design and coding with focus on Python
- Familiarity with Ethernet, TCP/IP, and Internet-related networking
- Understand the utilization of APIs

NETWORK TRAINING CENTER CO.,LTD. (NTC) | www.trainingcenter.co.th
Call us today 0-2634-7993-4
177/1 BUI Bldg., 14th Fl., Unit 1, 3 & 4, Surawongse Rd., Suriyawongse, Bangrak, Bangkok, THAILAND | Email: sales@trainingcenter.co.th

- Understanding of software development and design methodologies
- Hands-on experience with a programming language (specifically Python)

COURSE OUTLINE

This class includes lecture sections and self-study sections. You will need to review self-study sections on your own before taking the certification exam.

- Section title
- Designing for Maintainability
- Designing for Serviceability
- Implementing ChatOps Application
- Describing Advanced REST API Integration
- Securing Application Data
- Securing Web and Mobile Applications
- Automating Application-Release
- Deploying Applications
- Understanding Distributed Systems
- Orchestrating Network and Infrastructure
- Modeling Data with YANG
- Using Relational and Non-Relational Databases

Lab outline

- Construct Sequence Diagram
- Construct Web Sequence Diagram
- Use Cisco Webex Teams™ API to Enable ChatOps
- Integrate Cisco Meraki™ API to List Service Set Identifiers (SSIDs) and Retrieve Location Data
- Use Paginated REST API Endpoint
- Utilize REST API Error Control Flow Techniques
- Evaluate Application for Common Open Web Application Security Project (OWASP) Vulnerabilities
- Resolve Merge Conflicts with Git
- Diagnose Continuous Integration and Continuous Delivery (CI/CD) Pipeline Failures
- Containerize Application Using Docker
- Integrate Application into Existing CI/CD Environment
- Diagnose Problems Using Application Logs
- Configure Network Parameters Using Ansible and Puppet
- Synchronize Firepower Device Configuration
- Utilize RESTCONF for Network Configuration
- Query Relational Database
- Query Document Store
- Query Time Series Database
- Query Graph Database

NETWORK TRAINING CENTER CO.,LTD. (NTC) | www.trainingcenter.co.th
Call us today 0-2634-7993-4
177/1 BUI Bldg., 14th Fl., Unit 1, 3 & 4, Surawongse Rd., Suriyawongse, Bangrak, Bangkok, THAILAND | Email: sales@trainingcenter.co.th