Developing Applications Using Cisco Core Platforms and APIs (DEVCOR 2.0)

Duration: 5 Days

Course Description:

The **Developing Applications Using Cisco Core Platforms and APIs** training is designed to help you prepare for the Cisco DevNet Professional certification and professional-level network automation engineer roles. The focus of this training is implementation of network applications using Cisco platforms as a base, from initial software design to diverse system integration, as well as testing and deployment automation. The training provides hands-on experience solving real world problems using Cisco Application Programming Interfaces (APIs) and modern development tools.

This training prepares you for the 350-901 DEVCOR exam. If passed, you earn the Cisco Certified DevNet Specialist – Core certification and satisfy the core exam requirement for the Cisco Certified DevNet Professional and Cisco Certified DevNet Expert certifications. This training also earns you 64 Continuing Education (CE) credits toward recertification.

Target Audience:

- Sr. Network Automation Engineer
- Sr. Software Developer
- Sr. System Integration Programmer
- Sr. Infrastructure Architect
- Sr. Network Designer
- Test Development Engineer

Prerequisites:

The knowledge and skills you are expected to have before attending this training are:

- Knowledge of program design and coding with focus on Python
- Familiarity with Ethernet, Transmission Control Protocol Internet Protocol (TCP/IP) and internet-related networking
- Understand the utilization of APIs
- Understanding of software development and design methodologies
- Hands-on experience with a programming language (specifically Python)

These skills can be found in the following Cisco Learning Offering:

- Developing Applications and Automating Workflows using Cisco Platforms 1.0

Course Objectives:

- Describe the architectural traits and patterns that improve application maintainability and 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 applications and their user and system data
- 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

Course Outlines:

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