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Computer Learning Centers

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Platinum Learning

Developing Applications Using Cisco Core Platforms and APIs (DEVCOR) V2.0

WHERE GREAT TRAINING HAPPENS EVERYDAY!

+1 (219) 764-3800
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Developing Applications Using Cisco Core Platforms and APIs (DEVCOR) V2.0

Course Duration

5 Days

Course Price

$4,495.00
45 CLCs

Methods of Delivery

In-Person ILT
Virtual ILT
Onsite ILT

About this Class

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.

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How you will benefit

This class will help you:

- Take full advantage of the network and software development practices when implementing applications to fulfill business needs
- Design and implement automated workflows for network provisioning
- Design and develop applications built on Cisco platforms
- Design and implement integration of custom applications with Cisco platforms and devices
- Understand challenges in network programmability and system integration
- Gain knowledge for protocols, solutions, and designs to acquire professional-level and expert-level DevOps roles
- Earn 64 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

Who Should Attend

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

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

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Objectives

After taking this course, you should be able to:

- 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

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)

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Course Outline

Module 1: Designing for Maintainability

Module 2: Designing for Serviceability

Module 3: Implementing ChatOps Application

Module 4: Describing Advanced REST API Integration

Module 5: Securing Application Data

Module 6: Securing Web and Mobile Applications

Module 7: Automating Application-Release

Module 8: Deploying Applications

Module 9: Understanding Distributed Systems

Module 10: Orchestrating Network and Infrastructure

Module 11: Modeling Data with YANG

Module 12: Using Relational and Non-Relational Databases

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Lab Outline

- Lab 1: Construct Sequence Diagram
- Lab 2: Construct Web Sequence Diagram
- Lab 3: Use Cisco Webex Teams™ API to Enable ChatOps
- Lab 4: Integrate Cisco API to List Service Set Identifiers (SSIDs) and Retrieve Location Data
- Lab 5: Use Paginated REST API Endpoint
- Lab 6: Utilize REST API Error Control Flow Techniques
- Lab 7: Evaluate Application for Common Open Web Application Security Project (OWASP) Vulnerabilities
- Lab 8: Resolve Merge Conflicts with Git
- Lab 9: Diagnose Continuous Integration and Continuous Delivery (CI/CD) Pipeline Failures
- Lab 10: Containerize Application Using Docker
- Lab 11: Integrate Application into Existing CI/CD Environment
- Lab 12: Diagnose Problems Using Application Logs
- Lab 13: Configure Network Parameters Using Ansible and Puppet
- Lab 14: Synchronize Firepower Device Configuration
- Lab 15: Utilize RESTCONF for Network Configuration
- Lab 16: Query Relational Database
- Lab 17: Query Document Store
- Lab 18: Query Time Series Database
- Lab 19: Query Graph Database