



DEVELOPING APPLICATIONS USING CISCO CORE PLATFORMS AND APIS (DEVCOR) V1.0

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 helps you prepare to take the 350-901 Developing Applications using Cisco Core Platforms and APIs (DEVCOR) exam. By passing this exam, you satisfy the core exam requirement toward Cisco Certified DevNet Professional, and you earn the Cisco Certified DevNet Specialist – Core certification.

How you'll benefit

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
- 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



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Objectives

Upon completing this course, the student will be able to meet these objectives:

- 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 non-relational database types and how to select the appropriate type based on requirements

Course Duration

5 day

Course Price

\$4,500.00

Methods of Delivery

- ILT
- V-ILT

Certification Exam

350-901

Cisco CE Credits

64

Who Should Attend

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

- Network Engineers expanding their skill-base to include software and automation
- Developers expanding expertise in automation and DevOps
- Solution Architects moving to the Cisco ecosystem
- Infrastructure Developers designing hardened production environments
- 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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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 as well as knowledge in the following areas:

- Knowledge of program design and coding with focus on Python
- Familiarity with Ethernet, 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)

Here are Cisco learning resources that can help you prepare:

- Developing Applications and Automating Workflows Using Cisco Core Platforms (DEVASC)

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

- 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