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# Developing Applications Using Cisco Core Platforms and APIs (DEVCOR) V1.0

***WHERE GREAT TRAINING  
HAPPENS EVERYDAY!***



## Developing Applications Using Cisco Core Platforms and APIs (DEVCOR) V1.0

### Course Duration

5 Days

### Course Price

\$4,500.00

45 CLCs

### Methods of Delivery

In-Person ILT

Virtual ILT

Onsite ILT

### Certification Exam

350-901

### Cisco CE Credits

64

### About this Class

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.**



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### How you will benefit

This class 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

### 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:

- 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

## Developing Applications Using Cisco Core Platforms and APIs (DEVCOR) V1.0

### 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

## Developing Applications Using Cisco Core Platforms and APIs (DEVCOR) V1.0

### 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**

## Developing Applications Using Cisco Core Platforms and APIs (DEVCOR) V1.0

### Lab Outline

- Construct Sequence Diagram
- Construct Web Sequence Diagram
- Use Cisco Webex Teams™ API to Enable ChatOps
- Integrate Cisco 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

## Developing Applications Using Cisco Core Platforms and APIs (DEVCOR) V1.0

### Lab Outline Cont.

- Synchronize Firepower Device Configuration
- Utilize RESTCONF for Network Configuration
- Query Relational Database
- Query Document Store
- Query Time Series Database
- Query Graph Database