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Learning Style: On Demand

Technology: Cisco

Difficulty: Intermediate

Course Duration: 40 Hours

Developing Applications using Cisco Core Platforms and APIs (DEVCOR) v1.0 - On Demand



About this course:

The Developing Applications using Cisco Core Platforms and APIs (DEVCOR) v1.0 course helps you prepare for Cisco Certified 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 Developing Applications Using Cisco Core Platforms and APIs (350-901 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.

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

Audience:

The course is appropriate for:

- 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

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

- Senior network automation engineer
- Senior software developer
- Senior system integration programmer

Additional job roles that could find this course useful are:

- Senior infrastructure architect
- Senior network designer
- Senior test development engineer

Students preparing for Cisco Certified DevNet Professional and Cisco Certified DevNet Specialist – Core certification will also find this material useful.

Prerequisite:

There are no formal prerequisites for Cisco Certified DevNet Professional certification, but you should have a good understanding of the exam topics before taking the exam.

Before taking this course, you should have the following knowledge and skills:

- 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 Platforms (DEVASC)
- Explore the DevNet Certification area for specific topics and labs related to this course and certification: <https://developer.cisco.com/certification>

Course Outline:

- **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**