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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



Course Information

About this course:

The Developing Applications using Cisco Core Platforms and APIs (DEVCOR) v1.0

course will prepare you for Cisco Certified DevNet Professional certification passing which will qualify you for professional-level network automation engineer roles.

The course gives you hands-on experience solving real world problems using Cisco Application Programming Interfaces (APIs) and modern development tools. You will learn to implement network applications using Cisco platform as a base, from software design to diverse system integration, as well as testing and deployment automation.

Studying this course will prepare you to take the Developing Applications Using Cisco Core Platforms and APIs (350-901 DEVCOR) exam. Once you pass this, you satisfy the core exam requirement toward Cisco Certified DevNet Professional, and earn the Cisco Certified DevNet Specialist – Core certification.

Course Objective:

After taking this course, you should be able to:

- 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
- 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
- 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
- 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

Audience:

The course is appropriate for:

- Solution architects moving to the Cisco ecosystem
- Infrastructure developers designing hardened production environments
- Network engineers expanding their skill-base to include software and automation
- Developers expanding expertise in automation and DevOps

The material in this course is best suited to these job roles:

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

These are additional job roles this course could be useful for:

- 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.

Having following skills and knowledge is useful before taking this course:

- Understand the utilization of APIs
- Understanding of software development and design methodologies
- Knowledge of program design and coding with focus on Python
- Familiarity with Ethernet, TCP/IP, and Internet-related networking
- 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**