

Cisco Certified DevNet Professional 350-901 (DEVCOR)

Duration: 50 Hours

Certification Level: Professional

Course Overview

The **Cisco Certified DevNet Professional (DEVCOR) 350-901** certification validates the skills required to develop and maintain applications built on Cisco platforms. The course focuses on application development, network automation, and programmability using Cisco technologies. This course is intended for software developers, network engineers, and IT professionals looking to advance their knowledge in network programmability, DevOps practices, and automation.

Course Objectives

By completing this course, participants will:

- Understand and apply network automation concepts
 - Develop applications using Cisco APIs
 - Utilize automation tools for managing network devices
 - Gain experience with software development and integration in network environments
 - Prepare for the **Cisco DevNet Professional 350-901 DEVCOR exam**
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Course Modules

Module 1: Software Development and Design (8 Hours)

- Introduction to software development and agile methodology
- Version control with Git and GitHub
- Designing applications for network automation
- Understanding APIs and JSON data format
- Writing and managing scripts in Python for network automation

Module 2: Developing Applications Using Cisco Platforms (10 Hours)

- Introduction to Cisco DevNet resources

- Developing applications with Cisco APIs
- Using Cisco DNA Center API for network management
- Developing applications for Cisco Meraki, WebEx, and other Cisco platforms
- Automation with Python and Ansible for network tasks

Module 3: Network Automation (10 Hours)

- Introduction to network automation concepts
- Automating network configurations using tools like Ansible and Python
- Automating device management and monitoring with REST APIs
- Implementing network automation in multi-cloud environments
- Working with SDN (Software Defined Networking) in network automation

Module 4: Infrastructure as Code (IaC) (8 Hours)

- Introduction to Infrastructure as Code (IaC) and DevOps practices
- Using tools like Terraform for IaC in networking
- Automating infrastructure provisioning and management
- CI/CD (Continuous Integration/Continuous Deployment) for network applications
- Best practices for managing network automation workflows

Module 5: Security and Compliance (6 Hours)

- Secure coding practices for network automation applications
- Ensuring API security in automation workflows
- Understanding network security fundamentals
- Securing network automation scripts and applications
- Compliance considerations in network automation

Module 6: Network Programmability and DevOps (6 Hours)

- DevOps and network programmability concepts
- Integrating network automation with CI/CD pipelines
- Using Docker and Kubernetes in network automation
- Writing scripts to interact with network devices
- Leveraging GitOps for network configuration management

Module 7: Exam Preparation and Labs (6 Hours)

- Review of key exam objectives
 - Hands-on practice with labs and real-world scenarios
 - Practice exam questions and tips
 - Final exam preparation strategy
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Target Audience

This course is ideal for:

- Software developers working with Cisco platforms
- IT professionals looking to implement network automation
- Network engineers transitioning to DevOps and automation roles
- Anyone pursuing a career in network programmability and automation