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Register

Cisco DevNet Professional™ Certification Training

ALL-IN-ONE: EXAM INCLUDED IN THE PRICE

5 days (35 hours)

Overview

Choose Cisco DevNet Professional™ certification and demonstrate your ability to use Cisco technologies to automate networks, develop applications, and integrate network solutions with other technologies.

Our training program is specifically designed to effectively prepare you for the Cisco DevNet Professional™ certification exam. It covers all [aspects of the exam](#), from the fundamentals of software development to advanced network automation and security techniques.

Each module of our training corresponds to a specific section of the exam, allowing you to master each topic in depth.

You will learn how to design and develop distributed applications, use Cisco APIs to automate network tasks, deploy applications securely, and manage network infrastructure efficiently.

This program offers constantly updated training that is aligned with the latest versions of the Cisco DevNet Professional™ exam. You will benefit from the latest technological advances and industry best practices to prepare you optimally for the exam.

Objectives

- Master the effective use of Cisco APIs and other APIs

- Acquire the skills needed to deploy applications in various network environments
- Learn how to automate network infrastructure using tools and technologies
- Understand the principles of test-driven development and know how to apply them

Target audience

- Software developers
- Application developers
- Network engineers

Prerequisites

- Basic knowledge of computers and networks
- Basic knowledge of programming (especially Python)
- An understanding of basic API concepts is important
- Practical experience in application development or network administration is a plus
- Completion of the [Cisco DevNet Associate™ training course](#) is an excellent prerequisite

Note: Ambient IT does not own Cisco Certifications™; this certification belongs to Cisco, Inc.

Cisco Devnet Professional™ Training Program

Software Development and Design

- Basic concepts in software development
- Front-end
- Back-end
- Load Balancing
- Scalability
- Modularity
- High availability
- Latency management
- Maintenance
- Observability
- Diagnosis of application problems from logs
- Application design and development tools
- Database selection
- Architectural models
- Advanced version control operations with Git
- Version packaging
- Dependency management
- Creating sequence diagrams with API calls

Using APIs

- Advanced API management
- Error management with REST APIs
- Handling unrecoverable errors
- Optimizing API usage
- Consumption of APIs that support pagination
- Three-step OAuth2 authorization

Cisco platforms and development

- Using Cisco APIs
- Chatops with the Webex API
- Firepower Device Management (FDM)
- Using Meraki APIs
- Retrieving Data from Intersight
- Provisioning UCS Servers with Python
- Viewing wireless health information with Cisco DNA Center APIs
- Using AppDynamics
- Creating custom dashboards with Cisco API data

Application deployment and security

- Application deployment and security
- Diagnosing CI/CD pipeline failures
- Application integration with Docker and Kubernetes
- Continuous testing and static code analysis
- Application containerization with Docker
- Principles of the "12-factor app"
- Effective logging strategies
- Data privacy and secure storage
- SSL certificate configuration
- OWASP threat mitigation
- End-to-end encryption of APIs

Infrastructure and Automation

- Network Infrastructure and Automation
- Model-based telemetry and data storage
- Network device configuration with RESTCONF
- Network parameter configuration with Ansible and Terraform
- Configuration management solutions
- Application hosting on network devices

Strategy and methods for passing the exam

Practice exam

Target companies

This training is intended for both individuals and companies, large or small, wishing to train their teams in new advanced IT technologies or to acquire specific business knowledge or modern methods.

Placement at the start of training

The positioning at the start of the training complies with Qualiopi quality criteria. Upon final registration, the learner receives a self-assessment questionnaire that allows us to assess their estimated level of knowledge of different types of technologies, their expectations and personal objectives for the upcoming training, within the limits imposed by the selected format. This questionnaire also allows us to anticipate certain connection or internal security issues within the company (intra-company or virtual classroom) that could be problematic for the monitoring and smooth running of the training session.

Teaching methods

Practical training: 60% practical, 40% theory. Training materials distributed in digital format to all participants.

Organization

The course alternates between theoretical input from the trainer, supported by examples and discussion sessions, and group work.

Assessment

At the end of the session, a multiple-choice questionnaire is used to verify that the skills have been correctly acquired.

Certification

A certificate will be issued to each trainee who has completed the entire training course.