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Cisco DevNet Professional™ Certification Training

ALL-IN-ONE: EXAMINATION INCLUDED IN PRICE

5 days (35 hours)

Presentation

Opt for 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 specially designed to prepare you effectively for the Cisco DevNet Professional™ certification exam. It covers all aspects of the exam, from software development fundamentals to advanced network automation and security techniques.

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

You'll 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, in line with the latest versions of the Cisco DevNet Professional™ exam. You'll benefit from the latest technological advances and industry best practices to prepare you optimally for the exam.

Objectives

- Master the effective use of Cisco and other APIs

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

Target audience

- Software developers
- Application developers
- Network engineers

Prerequisites

- Basic computer and network skills
- Basic programming skills (particularly in Python)
- An understanding of basic API concepts is important
- Practical experience in application development or network administration is a plus
- Cisco DevNet Associate™ training 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
- Diagnose application problems from logs
- Application design and development tools
- Choice of databases
- Architectural models
- Advanced version control operations with Git
- Version packaging
- Dependency management
- Creating sequence diagrams with API calls

Using APIs

- Advanced API management
- Error handling with REST APIs
- Management of unrecoverable errors
- Optimizing API use
- Paging API consumption
- Three-step OAuth2 authorization

Cisco platforms and development

- Using Cisco APIs
- Chatops with the Webex API
- Firepower Device Management (FDM)
- Using Meraki APIs
- Data recovery from Intersight
- Provisioning UCS servers with Python
- Displaying wireless health information with Cisco DNA Center APIs
- Using AppDynamics
- Create customized dashboards with Cisco API data

Application deployment and security

- Application deployment and security
- Diagnosis of CI/CD pipeline failures
- Application integration with Docker and Kubernetes
- Continuous testing and static code analysis
- Application containerization with Docker
- 12-factor app" principles
- Efficient logging strategies
- Confidentiality and secure data storage
- Configuring SSL certificates
- OWASP threat mitigation
- End-to-end API encryption

Infrastructure and Automation

- Network infrastructure and automation
- Model-based telemetry and data storage
- Configuring network devices with RESTCONF
- Configuring network parameters with Ansible and Terraform
- Configuration management solutions
- Hosting applications on network devices

Strategy and methods for exam success Mock

exam

Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

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

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.