



CISCO TRAINING

Implementing Automation for Cisco Security Solutions

Master automation for Cisco Security Solutions. Learn to streamline security operations and enhance threat response using programmability.

DURATION

2 hours

LEVEL

Intermediate

FORMAT

Instructor-Led

- Globally Recognized Certification

- Expert-Led Hands-On Training

- Flexible Scheduling

Computer Pride | 1st Floor, ICEA Building, Kenyatta Avenue, Nairobi | www.computer-pride.co.ke

COURSE OVERVIEW

This concise, intermediate-level course on 'Implementing Automation for Cisco Security Solutions' is meticulously designed for IT professionals aiming to modernize and streamline their security operations. In today's dynamic threat landscape, manual configuration and monitoring are no longer sustainable. This course equips you with the essential skills to leverage automation for enhanced efficiency, faster incident response, and a stronger security posture across your Cisco security infrastructure. You'll delve into the core principles of security automation, exploring how to interact with Cisco security products programmatically using APIs and scripting. By mastering the automation techniques covered, you will significantly reduce operational overhead, minimize human error, and accelerate the deployment of security policies and solutions. The course covers key Cisco security platforms, focusing on practical applications of Python scripting, REST APIs, and relevant automation tools. Upon completion, you'll be capable of automating routine tasks, integrating security systems, and building more resilient and adaptive security environments, making you an invaluable asset in any organization's security team. This expertise is crucial for staying competitive and effective in the rapidly evolving field of cybersecurity.

Duration	2 hours
Level	Intermediate
Vendor	Cisco

COURSE CURRICULUM

01 Module 1: Foundations of Security Automation and Cisco APIs

- Introduction to Network Security Automation principles
- Understanding RESTful APIs and their role in automation
- Exploring Cisco Security APIs: Firepower Management Center (FMC), Cisco ISE, SecureX
- Using Postman for API exploration and testing

02 Module 2: Scripting with Python for Cisco Security

- Python essentials for network and security automation
- Interacting with Cisco Security APIs using Python requests library
- Working with JSON data structures for API payloads and responses
- Error handling and best practices in Python automation scripts

03 Module 3: Automating Cisco Firepower and Network Devices

- Automating policy management on Cisco Firepower Threat Defense (FTD)
- Scripting rule updates, object creation, and device configurations
- Integrating automation with Cisco Adaptive Security Appliance (ASA) via API
- Monitoring and reporting automation for Cisco network security devices

04 Module 4: Orchestration with Cisco ISE and SecureX

- Automating policy enforcement and user access with Cisco Identity Services Engine (ISE)
- Leveraging Cisco SecureX orchestration for threat response
- Building custom SecureX workflows for security incident management
- Practical scenarios: automating threat intelligence feeds and vulnerability remediation

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Security Automation Engineer specializing in Cisco environments**
- > **DevSecOps Engineer focusing on integrating security into CI/CD pipelines with Cisco tools**
- > **Network Security Architect designing automated and orchestrated security solutions**

FREQUENTLY ASKED QUESTIONS

Q: What foundational knowledge or prerequisites are recommended before enrolling in this course to maximize learning and practical application?

To get the most out of 'Implementing Automation for Cisco Security Solutions,' it is highly recommended to have a basic understanding of network security concepts, familiarity with Cisco security products like Firepower or ISE, and fundamental Python scripting knowledge. While core automation concepts will be introduced, prior exposure to programming logic and command-line interfaces will significantly enhance your learning experience.

Q: Upon completing this course, what specific types of security automation tasks will I be proficient in performing using Cisco platforms?

After completing this course, you will be proficient in a range of practical automation tasks. This includes automating the creation and modification of firewall rules on Cisco Firepower, scripting user and device policy updates on Cisco ISE, programmatically querying threat intelligence, and building basic incident response workflows using Cisco SecureX. You'll gain the ability to write Python scripts to interact with Cisco APIs for configuration, monitoring, and orchestration.

Q: How does this 'Implementing Automation for Cisco Security Solutions' course enhance an existing Cisco Security certification, such as CCNP Security, and what advanced concepts does it introduce?

This course significantly enhances an existing Cisco Security certification like CCNP Security by bridging traditional security knowledge with modern automation principles. While CCNP Security focuses on design, implementation, and troubleshooting, this course adds the critical skill of programmatic interaction, enabling you to automate and scale those operations. It introduces advanced concepts in API-driven security management, Python scripting for security tasks, and orchestration frameworks like SecureX, preparing you for roles in DevNet or SecOps.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

Years of Excellence

10,000+

Professionals Trained

50+

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

Location

1st Flr, ICEA Building
Kenyatta Ave, Nairobi

Email

info@computer-pride.co.ke

Phone

+254 705 900 900

www.computer-pride.co.ke