

Implementing Automation for Cisco Security Solutions (SAUI)

Course Duration: 40 Hours

Course code: SAUI

1. Course Overview

The Implementing Secure Solutions with Virtual Private Networks (SVPN) course equips you with the knowledge and skills to design, configure, implement, and troubleshoot various Virtual Private Network (VPN) solutions using Cisco technologies. You'll work through both site-to-site and remote access VPN implementations using protocols such as IPsec, SSL, FlexVPN, and DMVPN. With hands-on labs and expert instruction, you'll gain critical expertise in securing communications across distributed networks.

2. What you'll learn?

After completing this course you should be able to:

- Describe the overall architecture of the Cisco security solutions and how APIs help enable security
- Know how to use Cisco Firepower APIs
- Explain how pxGrid APIs function and their benefits
- Demonstrate what capabilities the Cisco Stealthwatch APIs offer and construct API requests to them for configuration changes and auditing purposes
- Describe the features and benefits of using Cisco Stealthwatch Cloud APIs
- Learn how to use the Cisco Umbrella Investigate API
- Explain the functionality provided by Cisco AMP and its APIs
- Describe how to use Cisco Threat Grid APIs to analyze, search, and dispose of threats

3. Target Audience

Individuals looking to use automation and programmability to design more efficient networks, increase scalability and protect against cyberattacks.

4. Pre-Requisites

Attendees should meet the following prerequisites:

- Basic programming language concepts
- Basic understanding of virtualization
- Ability to use Linux and Command Line Interface (CLI) tools, such as Secure Shell (SSH) and bash
- CCNP level core networking knowledge
- CCNP level security networking knowledge

Recommended prerequisites:

- CCNA - Implementing and Administering Cisco Solutions
- SCOR - Implementing and Operating Cisco Security Core Technologies
- CSAU - Introducing Automation for Cisco Solutions

5. Course content

1- Introducing Cisco Security APIs

- Role of APIs in Cisco Security Solutions
- Cisco Firepower, Cisco ISE, Cisco pxGrid and Cisco Stealthwatch APIs
- Use Cases and Security Workflow

2- Consuming Cisco Advanced Malware Protection APIs

- Cisco AMP Overview
- Cisco AMP Endpoint API
- Cisco AMP Use Cases and Workflows

3- Using Cisco ISE

- Introducing Cisco Identity Services Engine

- Cisco ISE Use Cases
- Cisco ISE APIs

4- Using Cisco pxGrid APIs

- Cisco pxGrid Overview
- WebSockets and STOMP Messaging Protocol

5- Using Cisco Threat Grid APIs

- Cisco Threat Grid Overview
- Cisco Threat Grid API
- Cisco Threat Grid Use Cases and Workflows

6- Investigating Cisco Umbrella Security Data Programmatically

- Cisco Umbrella Investigate API Overview
- Cisco Umbrella Investigate API: Details

7- Exploring Cisco Umbrella Reporting and Enforcement APIs

- Cisco Umbrella Reporting and Enforcement APIs Overview
- Cisco Umbrella Reporting and Enforcement APIs: Deep Dive

8- Automating Security with Cisco Firepower APIs

- Review Basic Constructs of Firewall Policy Management
- Design Policies for Automation
- Cisco FMC APIs in Depth
- Cisco FTD Automation with Ansible
- Cisco FDM API In Depth

9- Operationalizing Cisco Stealthwatch and the API Capabilities

- Cisco Stealthwatch Overview
- Cisco Stealthwatch APIs: Details

10- Using Cisco Stealthwatch Cloud APIs

- Cisco Stealthwatch Cloud Overview
- Cisco Stealthwatch Cloud APIs Deep Dive

11- Describing Cisco Security Management Appliance APIs

- Cisco SMA APIs Overview
- Cisco SMA API

