
Cisco® Securing Cloud Deployments with Cisco® Technologies v1.0 (SECCLD)

Overview

This course shows you how to implement Cisco® cloud security solutions to secure access to the cloud, workloads in the cloud, and software as a service (SaaS) user accounts, applications, and data. Through expert instruction and hands-on labs, you'll learn a comprehensive set of skills and technologies including: how to use key Cisco cloud security solutions; detect suspicious traffic flows, policy violations, and compromised devices; implement security controls for cloud environments; and implement cloud security management. This course covers usage of Cisco Cloudlock, Cisco Umbrella™, Cisco Cloud Email Security, Cisco Advanced Malware Protection (AMP) for Endpoints, Cisco Stealthwatch® Cloud and Enterprise, Cisco Firepower® NGFW (next-generation firewall), and more.

Prerequisite Comments

To fully benefit from this course, you should have completed the following course or obtained the equivalent knowledge and skills:

- Knowledge of cloud computing and virtualization software basics.
- Ability to perform basic UNIX-like OS commands.

Cisco CCNP® security knowledge or understanding of the following topic areas: Implementing Cisco Edge Network Security Solutions (SENSS), Implementing Cisco Threat Control Solutions (SITCS), Implementing Cisco Secure Access Solutions (SISAS), Implementing Cisco Secure Mobility Solutions (SIMOS).

Target Audience

This course is open to engineers, administrators, and security-minded users of public, private, and hybrid cloud infrastructures responsible for implementing security in cloud environments:

- Security architects
- Cloud architects
- Security engineers
- Cloud engineers
- System engineers
- Cisco integrators and partners

Course Objectives

After taking this course, you should be able to:

- Contrast the various cloud service and deployment models.
- Implement the Cisco Security Solution for SaaS using Cisco Cloudlock Micro Services.
- Deploy cloud security solutions using Cisco AMP for Endpoints, Cisco Umbrella, and Cisco Cloud Email Security.
- Define Cisco cloud security solutions for protection and visibility using Cisco virtual appliances and Cisco Stealthwatch Cloud.
- Describe the network as a sensor and enforcer using Cisco Identity Services Engine (ISE), Cisco Stealthwatch Enterprise, and Cisco TrustSec®.
- Implement Cisco Firepower NGFW Virtual (NGFWv) and Cisco Stealthwatch Cloud to provide protection and visibility in AWS environments.
- Explain how to protect the cloud management infrastructure by using specific examples, defined best practices, and AWS reporting capabilities.

Course Outline

1 - Introducing the Cloud and Cloud Security

Describe the Evolution of Cloud Computing
Explain the Cloud Service Models
Explore the Security Responsibilities Within the Infrastructure as a Service (IaaS) Service Model
Explore the Security Responsibilities Within the Platform as a Service (PaaS) Service Model
Explore the Security Responsibilities Within the SaaS Service Model
Describe Cloud Deployment Models
Describe Cloud Security Basics

2 - Implementing the Cisco Security Solution for SaaS Access Control

Explore Security Challenges for Customers Using SaaS
Describe User and Entity Behavior Analytics, Data Loss Prevention (DLP), and Apps Firewall
Describe Cloud Access Security Broker (CASB)
Describe Cisco CloudLock as the CASB
Describe OAuth and OAuth Attacks

3 - Deploying Cisco Cloud-Based Security Solutions for Endpoints and Content Security

Describe Cisco Cloud Security Solutions for Endpoints
Describe AMP for Endpoints Architecture
Describe Cisco Umbrella
Describe Cisco Cloud Email Security
Design Comprehensive Endpoint Security

4 - Introducing Cisco Security Solutions for Cloud Protection and Visibility

Describe Network Function Virtualization (NFV)
Describe Cisco Secure Architectures for Enterprises (Cisco SAFE)
Describe Cisco NGFWw/Cisco Firepower Management Center Virtual
Describe Cisco ASAv
Describe Cisco Services Router 1000V
Describe Cisco Stealthwatch Cloud
Describe Cisco Tetration Cloud Zero-Trust Model

5 - Describing the Network as the Sensor and Enforcer

Describe Cisco Stealthwatch Enterprise
Describe Cisco ISE Functions and Personas
Describe Cisco TrustSec
Describe Cisco Stealthwatch and Cisco ISE Integration
Describe Cisco Encrypted Traffic Analytics (ETA)

6 - Implementing Cisco Security Solutions in AWS

Explain AWS Security Offerings
Describe AWS Elastic Compute Cloud (EC2) and Virtual Private Cloud (VPC)
Discover Cisco Security Solutions in AWS
Explain Cisco Stealthwatch Cloud in AWS

7 - Describing Cloud Security Management

Describe Cloud Management and APIs
Explain API Protection
Illustrate an API Example: Integrate to ISE Using pxGrid
Identify SecDevOps Best Practices
Illustrate a Cisco Cloud Security Management Tool Example: Cisco Defense Orchestrator
Illustrate a Cisco Cloud Security Management Tool Example: Cisco CloudCenter™
Describe Cisco Application Centric Infrastructure (ACI)
Describe AWS Reporting Tools
