

Cisco Secure Workload Firewall Enforcement Agents, Data Flow Mapping, and Advanced Policy Deployment (CSWADV)



Table of Contents

Cisco Secure Workload Firewall Enforcement Agents, Data Flow Mapping, and Advanced Policy Deployment (CSWADV)

Duration	2
Course Overview	2
Prerequisites.....	2
Learning Objectives.....	2
Course Outline.....	3
Module 1: Cisco Secure Workload Firewall Agent	3
Module 2: Cisco Secure Workload Enforcement Agent Components, Messaging, and Interaction ...	3
Module 3: Enforcement Agent UI Configurations and Troubleshooting	3
Module 4: Secure Connector, Edge and Ingest Appliances.....	3
Module 5: Application Dependency Mapping.....	3
Module 6: Cisco Secure Workload Policy Analysis	4
Module 7: Cisco Secure Workload Analytics Policy Enforcement Overview	4
Module 8: Cisco Secure Workload Flow Search	4
Module 9: Using Secure Workload Forensics.....	4
Module 10: Cisco Secure Workload Apps and API.....	4
Lab Outline:.....	5
Lab 1: Cisco Secure Workload GUI Familiarization.....	5
Lab 2: Software Agent Installation	5
Lab 3: Importing Context Data	5
Lab 4: Scopes	5
Lab 5: Application Dependency Mapping with Agents	5
Lab 6: Implementing Policy	5
Lab 7: Policy Enforcement and Compliance	6
Lab 8: Workload Security	6
Lab 9: Secure Connector, Edge and Ingest Appliances.....	6

Duration

The **Cisco Secure Workload Firewall Enforcement Agents, Data Flow Mapping, and Advanced Policy Deployment** training is a 5-day course.

Course Overview

Cisco Secure Workload Firewall Enforcement Agents, Data Flow Mapping, and Advanced Policy Deployment, **CSWADV**, is a 5-day course exploring telemetry data, the flows corpus, and how Cisco Secure Workload Firewall Agent provides enforcement. This course will provide the details and hands-on activities necessary to successfully deploy, manage, and troubleshoot policies in Cisco Secure Workload.

[The course qualifies for 40 Cisco Continuing Education Credits \(CE\).](#)

Prerequisites

The knowledge and skills that the learner should have before attending this course are as follows:

- Knowledge of cloud and (virtual) data center architecture or cloud basic networking concepts
- Familiarity with Cisco basic networking security concepts and application security concepts
- High-level familiarity with basic telemetry protocols and Big Data analytics

Learning Objectives

Upon completing this course, the learner will be able to meet these overall objectives:

- Describe how the Cisco Secure Workload Agents work to enforce security policy
- Describe how to deploy the Cisco Secure Workload Firewall Agent
- Describe how to Manage and Troubleshoot Cisco Secure Workload Firewall Agent policies
- Review administrative and management tasks necessary to operate, support and manage Cisco Secure Workload
- Describe how Cisco Secure Workload telemetry data is utilized in the Flows Corpus
- Construct effective policies based on discovered flows and Application Dependency Mapping (ADM)

Course Outline

Module 1: Cisco Secure Workload Firewall Agent

- How the Cisco Secure Workload Firewall Agent Enforces Firewall Rules
- Deploying and Managing Linux Enforcement Agents
- Deploying and Managing Windows Enforcement Agents
- Deploying and Managing AIX Enforcement Agents

Module 2: Cisco Secure Workload Enforcement Agent Components, Messaging, and Interaction

- Enforcement Front End
- Firewall and Catch-all Rules
- The Preserve Rules Option
- Agent Config Intents
- Stateful Enforcement

Module 3: Enforcement Agent UI Configurations and Troubleshooting

- Agent UI Configuration
- Monitoring Agents
- Platform Specific Enforcement Features and Requirements
- Known Limitations
- Troubleshooting Inbound and Outbound Firewall Rules

Module 4: Secure Connector, Edge and Ingest Appliances

- Secure Connector Overview
- Secure Connector features and configuration
- Edge Appliance Overview
- Edge Appliance configuration
- Ingest Appliance Overview
- Ingest appliance features and configurations

Module 5: Application Dependency Mapping

- Application Management Workflow Cycle
- Application Insight
- ADM Process
- ADM Run Results
- Cluster Confidence

Module 6: Cisco Secure Workload Policy Analysis

- Enable Policy Analysis
- Live Policy Analysis
- Backdated Policy Experiments
- Quick Policy Analysis
- Diagnosis Using Policy Analysis

Module 7: Cisco Secure Workload Analytics Policy Enforcement Overview

- Policy Global Ordering & Conflict Resolution
- Scope Priorities
- Troubleshooting Policy Enforcement

Module 8: Cisco Secure Workload Flow Search

- Understanding the Flow Corpus
- Using Scopes to Filter Results
- Searching with Conjunctions
- Correlating Flow Data with Hosts and Processes
- Leveraging Annotations

Module 9: Using Secure Workload Forensics

- Forensic Signals
- Configuring Forensics
- Forensics Visualization and Alerts
- Forensics Scoring
- Network and Process Hash Anomaly Detection

Module 10: Cisco Secure Workload Apps and API

- App Store
- User Apps
- Visualize Data Sources
- Bring your own Data
- OpenAPI

Lab Outline:

Labs are designed to assure learners a whole practical experience, through the following practical activities:

Lab 1: Cisco Secure Workload GUI Familiarization

- Task 1: Log in to Cisco Secure Workload and Explore the Security Dashboard
- Task 2: Explore the Visibility Dashboard
- Task 3: Explore the Visibility Flow Search Options
- Task 4: Explore the Visibility Inventory Search Options

Lab 2: Software Agent Installation

- Task 1: Configure Agent Intents
- Task 2: Install the Enforcement Agent for Linux
- Task 3: Install the Enforcement Agent for Windows
- Task 4: Monitor Enforcement Agent Status

Lab 3: Importing Context Data

- Task 1: Upload User-Defined Annotations
- Task 2: View User-Defined Annotations
- Task 3: Search by User-Defined Annotations

Lab 4: Scopes

- Task 1: Navigate Scopes
- Task 2: Create a Scope
- Task 3: Edit a Scope

Lab 5: Application Dependency Mapping with Agents

- Task 1: Create an Application Workspace
- Task 2: Examine Conversations
- Task 3: Examine Endpoint Clusters
- Task 4: Create an Application View

Lab 6: Implementing Policy

- Task 1: Gather IP Address Information
- Task 2: Create the Server Load Balancing Information File
- Task 3: Create an Application Workspace
- Task 4: Review Day 0 and Automated Policies

Lab 7: Policy Enforcement and Compliance

- Task 1: Enable Policy Enforcement and Compliance
- Task 2: Test Policy Enforcement and Compliance
- Task 3: Monitor and Troubleshoot Policy Enforcement Status and Compliance

Lab 8: Workload Security

- Task 1: Review Packages and CVE Reports
- Task 2: Review Policy Enforcement
- Task 3: Review Rule Order and Efficiency

Lab 9: Secure Connector, Edge and Ingest Appliances

- Task 1: Review Secure Connector deployment and configurations
- Task 2: Review Edge and Ingest Appliance deployment and configurations

