

Cisco Secure Workload (Tetration) Overview and Course Agenda

Why OneCloud?

OneCloud Consulting is dedicated to providing exceptional technical education and professional services. Our team of experts combine skill, knowledge, and experience in providing quality education on Cloud Transformation, Infrastructure Automation, and Software Development. Our specializations include Cloud Services, Network and Services Automation, Data Center Solution Design and Deployment Services, and Technical Strategy.

Course Description

This course provides an overview of the Cisco Secure Workload (Tetration) platform. Secure Workload addresses important data center operational and security challenges by providing behavior-based application insight, automating policy generation, and enabling zero-trust deployment using application segmentation. The goal of this course is to understand how Secure Workload works and how it can be used to address these challenges comprehensively, using rich traffic telemetry. This course will also include hands-on labs in which you will be configuring and administer Secure Workload Platform.

After this course you should be able to understand:

- Secure Workload Platform Overview, Use Cases, and Business Drivers
- Machine Learning Concepts
- Tetration Architecture and Concepts
- Software & Hardware Sensors
- Scopes & RBAC Definitions
- Tetration Use Cases - Deep Dive
 - Applications Insights and Dependency
 - Automated Whitelist Policy Generation
 - Automated Policy Enforcement
- Policy Simulation and Assessment
- Policy Compliance & Auditability
- Forensics & Visibility
- Tetration Ecosystem/Integration
- Policy Deployment with Cisco ACI
- Tetration Open Access; Rest API, Kafka, and Tetration Apps

Who Should Attend

- Data Center Architects
- Solution Architects
- Network Engineers
- Systems Engineers
- System Administrators
- Storage Administrators
- Systems Integrators
- Applications Owners
- DevOps & Cloud Engineers

Prerequisites

- Understanding of Linux Operating System Administration
- Familiarity with Basic Network Concepts (TCP/IP, Layer 2 and Layer 3 networking)
- Familiarity with Server Virtualization
- Familiarity with Firewall and Load Balancer Principles

Course Type:
Instructor Led Training, Classroom with Hands on Lab

Course ID:
TET0218

Duration:
2 Day



Secure Workload Overview and Course Agenda

Course Content

Module 1: Introduction

- DC Story in action
- The cost of “invisibility”
- Value proposition of Tetration

Module 2: Data Center Analytics

- Introducing Tetration Analytics Platform
- Today’s challenges
- What problems are we solving?

Module 3: Secure Workload Overview & Architecture

- Tetration Overview
- Machine Learning
- Tetration Analytics Architecture
- Multiple Sensors & Data Sources
- Hardware & Software Sensors
- Pervasive Sensor Framework

Module 4: Scopes & RBAC

- How Scopes are Defined
- Scopes & Hierarchical
- RBAC Model

Module 5: Real-time Asset Tagging

- Introduction to Asset Tagging
- Annotation Concepts & Use Cases
- User Defined Asset Tags

Module 6: Application Insights & Dependency

- ADM Overview
- Visualize Application & Resources
- Identify Application Performance Issues
- Import 3rd Party Application Configurations
- Whitelist Policy Creation

Module 7: Automated Whitelist Policy Generation

- Export Policies in XML/JSON/YAML
- Export to ACI,AWS Security groups,other SDN
- Policy & Whitelist Creation

Module 8: Policy Simulation & Assessment

- Auto-Generate Whitelist Policies
- Perform Impact Analysis on Policies
- Apply Policies with zero risk

Module 9: Policy Compliance & Auditability

- Baseline & Policy Comparison
- Compliance Audit

Module 10: Forensics & Visibility

- Compliance Auditing
- Baseline and Policy comparison

Module 11: Tetration Ecosystem & Integration

- Ecosystem Partners

Module 12: ACI Integration

- Policy Deployment with Cisco ACI
- ConfigPush

Module 13: Tetration Open Access

- Rest API
- Kafka – a Distributed Streaming Platform
- Tetration Apps

Module 14: Tetration Analytics Platform Review

- Why Tetration was created
- Problems Tetration is solving
- Q&A

Labs:

1. Accessing the Secure Workload UI and OpenCart Application
2. Automatically Discover Policies using Application Dependency Mapping
3. Viewing and Understanding the Policy
4. Policy Analysis and Policy Enforcement
5. Advanced Workload Security Dashboard and Forensics
6. Installing a Secure Workload Agent