

Implementing Cisco Tetration Analytics (DCITET) v1.0

What you'll learn in this course

The **Implementing Cisco Tetration Analytics (DCITET) v1.0** course shows you how to deploy, use, and operate Cisco® Tetration Analytics™ platform for comprehensive workload-protection and application and network insights across a multicloud infrastructure. Through expert instruction, use cases, and hands-on labs, you will learn how the Cisco Tetration Analytics platform uses streaming telemetry, behavioral analysis, unsupervised machine learning, analytical intelligence, and big data analytics to deliver pervasive visibility, automated intent-based policy, workload protection, and performance management. You will get hands-on practice in software agent installation, implementing policy, workload security, administration and operational tasks, and more.

Cisco Tetration offers holistic workload protection for multicloud data centers by enabling a zero-trust model using segmentation. This approach allows you to identify security incidents faster, contain lateral movement, and reduce your attack surface.

Course duration

- Instructor-led training: 3 days in the classroom with hands-on lab practice
- Virtual instructor-led training: 3 days of web-based classes with hands-on lab practice

How you'll benefit

This course will help you:

- Learn how to implement and use the Cisco Tetration platform to address data center security challenges and provide secure infrastructure for workload protection
- Learn how Cisco Tetration Analytics integrates into the intent-based network management automation infrastructure using application security policy and other network policies
- Learn how the Cisco Tetration big data platform analyses data using unsupervised machine learning and behavior analysis to support application, network, and security use cases
- Gain knowledge and skills through Cisco's unique combination of lessons and hands-on practice using enterprise-grade Cisco learning technologies, data center equipment, and software
- Succeed in today's demanding data center operations roles

Who should enroll

- Network Security Operations
- Workload Application Administrators
- Security Operations
- Field Engineers
- Network Engineers
- Systems Engineers
- Technical Solutions Architects
- Cisco Integrators and Partners

How to enroll

- For instructor-led training, visit the [Cisco Learning Locator](#).
- For private group training, visit [Cisco Private Group Training](#).

Technology areas

- Data center

Course details

Objectives

After taking this course, you should be able to:

- Define the Cisco telemetry and analytics approach. Explore common scenarios that Cisco Tetration Analytics can solve.
- Describe how the Cisco Tetration Analytics platform collects telemetry and other context information. Discuss how relative agents are installed and configured. Explore the operational aspects of the Cisco Tetration Analytics platform.
- Describe the Cisco Tetration Analytics support for application visibility or application insight based on the Application Dependency Mapping (ADM) feature.
- List the concepts of the intent-based declarative network management automation model.
- Describe the Cisco Tetration policy enforcement pipeline, components, functions, and implementation of application policy.
- Describe how to use Cisco Tetration Analytics for workload protection in order to provide a secure infrastructure for business-critical applications and data.
- Describe Cisco Tetration Analytics platform use cases in the modern heterogeneous, multicloud data center.
- List the options for the Cisco Tetration Analytics platform enhancements.
- Explain how to perform the Cisco Tetration Analytics administration.

Prerequisites

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

- Knowledge of cloud and (virtual) data center architecture or cloud basic networking concepts
- Familiarity with Cisco basic networking security concepts and application security concepts
- Familiarity with basic Cisco telemetry protocols and Big Data analytics
- Familiarity with basic Cisco data analytics pipelines, intelligent algorithms, tools, and concepts

Outline

- Exploring Cisco Tetration
 - Data Center Challenges
 - Define and Position Cisco Tetration
 - Cisco Tetration Features
 - Cisco Tetration Architecture
 - Cisco Tetration Deployment Models
 - Cisco Tetration GUI Overview

- Implementing and Operating Cisco Tetration
 - Explore Data Collection
 - Install the Software Agent
 - Install the Hardware Agent
 - Import Context Data
 - Describe Cisco Tetration Operational Concepts
- Examining Cisco Tetration ADM and Application Insight
 - Describe Cisco Tetration Application Insight
 - Perform ADM
 - Interpret ADM Results Application Visibility
- Examining Cisco Tetration Intent-Based Networking
 - Describe Intent-Based Policy
 - Examine Policy Features
 - Implement Policies
- Enforcing Tetration Policy Pipeline and Compliance
 - Examine Policy Enforcement
 - Implement Application Policy
 - Examine Policy Compliance Verification and Simulation
- Examining Tetration Security Use Cases
 - Examine Workload Security
 - Attack Prevention
 - Attack Detection
 - Attack Remediation
- Examining IT Operations Use Cases
 - Key Features and IT Operations Use Cases
 - Performing Operations in Neighborhood App-based Use Cases
- Examining Platform Enhancement Use Cases
 - Integrations and Advanced Features
 - Third-party Integration Examples
 - Explore Data Platform Capabilities
- Exploring Cisco Tetration Analytics Administration
 - Examine User Authentication and Authorization
 - Examine Cluster Management
 - Configure Alerts and Syslog

Lab outline

- Cisco Tetration GUI Familiarization
- Software Installation
- Importing Context Data
- Scopes
- Application Dependency Mapping with Agents
- Implementing Policy
- Policy Enforcement and Compliance
- Workload Security
- IT Operations
- Administration




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