

Operationalizing Cisco Full-Stack Observability with AppDynamics, ThousandEyes, and Intersight

Course Summary

Description

When completely integrated, AppDynamics, ThousandEyes, and Intersight give real-time insights correlated across domains and linked with business context across the entire stack of apps, infrastructure (network and cloud, computing, storage), and security.

Cisco Full-Stack Observability gives you a unified view of resource allocation, infrastructure, and security, allowing you to fine-tune an application ecosystem to deliver the best possible application experience while keeping key performance indicators (KPI) in these areas.

This course covers the key aspects of AppDynamics, Intersight Workload Optimizer and ThousandEyes and how they are integrated to provide FSO. You will learn the architecture and features of the individual products and then incorporate them using hands-on labs to solve common customer use cases.

Objectives

At the end of this course, students will be able to:

- Explain the functionality, benefits, and use cases for Cisco FSO
- Understand the roles AppDynamics, ThousandEyes, & Intersight play in FSO
- Describe Hybrid application monitoring for AppOps
- Convey the requirements of Distributed application monitoring for DevOps
- Explain how Secure App identifies and prevents application vulnerabilities
- Describe how to use Cisco Intersight Workload Optimizer for hybrid cost optimization
- Perform application resource optimization with Cisco Intersight Workload Optimizer and AppDynamics
- Explain Application dependency monitoring for NetOps with Cisco ThousandEyes
- Describe Customer Digital Experience monitoring with Cisco ThousandEyes

Topics

- | | |
|---|--|
| • Introduction to Cisco Full Stack Observability | • Application Resource Optimization with Cisco Intersight Workload Optimizer and AppDynamics |
| • Cisco Full Stack Observability Foundational Products | • Application Resource Optimization with Cisco Intersight Workload Optimizer and Intersight Infrastructure Service |
| • Hybrid Application Monitoring for AppOps | • Application Dependency Monitoring for NetOps with Cisco ThousandEyes |
| • Distributed Application Monitoring for DevOps | • Customer Digital Experience Monitoring with AppDynamics and ThousandEyes |
| • Application Security for AppOps / DevOps and SecOps with Cisco Secure Application | |
| • Hybrid Cost Optimization for InfraOps with Cisco Intersight Workload Optimizer | |

Audience

The primary audience for this course is as follows: Field Engineers, Solutions Architects, Systems Engineers, and Systems Administrators.

Prerequisites

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

- Fundamental knowledge of networking and application delivery concepts
- Familiarity with ARM and APM concepts
- Basic understanding of cloud-native and distributed applications

Duration

Five days

Operationalizing Cisco Full-Stack Observability with AppDynamics, ThousandEyes, and Intersight

Course Outline

I. Introduction to Cisco Full Stack Observability

- A. Application landscape complexity and digital transformation
- B. Cisco FSO functional architecture
- C. Teams and Use Cases

II. Cisco Full Stack Observability Foundational Products

- A. From Visibility to App Performance, Optimization and Security
- B. Getting Started with AppDynamics Architecture and Features
- C. Getting Started with Intersight Architecture and Features
- D. Getting Started with ThousandEyes Architecture and Features
- E. Product integrations and API

III. Hybrid Application Monitoring for AppOps

- A. Aligning application performance and user experience to business outcomes with AppDynamics
- B. Optimize digital experience with AppD and proactive diagnosis
- C. Linking IT to business initiatives by qualifying User Experience impact
- D. Correlating app infrastructure and performance insights

IV. Distributed Application Monitoring for DevOps

- A. Monitoring performance of cloud-native distributed applications with AppDynamics
- B. Identifying infrastructure-related issues across hybrid cloud environments
- C. Driving agility and optimizing hybrid cloud resources

V. Application Security for AppOps / DevOps and SecOps with Cisco Secure Application

- A. Correlating security to business impact
- B. Vulnerability lifecycle management across App and Security teams
- C. Threat detection and app protection in real time
- D. Shared security insights for collaboration

VI. Hybrid Cost Optimization for InfraOps with Cisco Intersight Workload Optimizer

- A. Balancing utilization between public and on-prem resources
- B. Eliminating cloud overprovisioning for app performance
- C. Preventing underutilized on-prem resources

VII. Application Resource Optimization with Cisco Intersight Workload Optimizer and AppDynamics

- A. Relating infrastructure resourcing decisions and optimization to end-user experience
- B. Correlating application performance data with infrastructure health
- C. Application-aware infrastructure optimization for on-prem and cloud

VIII. Application Resource Optimization with Cisco Intersight Workload Optimizer and Intersight Infrastructure Service

- A. Aligning workloads to lowest cost infrastructure options across complex environments
- B. Balancing Performance and Cost
- C. Preventing resource management performance issues

IX. Application Dependency Monitoring for NetOps with Cisco ThousandEyes

- A. Understanding how external network dependencies affect user experience
- B. Correlating insights from networking and routing data
- C. Visualizing comprehensive third-party dependencies
- D. Application dependency monitoring with Internet Insights
- E. Use Cases
- F. Selecting ISP based on Internet Insights
- G. Application analysis based on Internet Insights

Operationalizing Cisco Full-Stack Observability with AppDynamics, ThousandEyes, and Intersight

Course Outline (contd')

X. Customer Digital Experience Monitoring with AppDynamics and ThousandEyes

- A. Providing a comprehensive unified view of digital experience
- B. Application, hybrid cloud, and internet performance data visibility
- C. Correlating App performance to internet performance data
- D. Unified workflows and navigation

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

- Lab 1: Navigating FSO foundational products dashboards and features
- Lab 2: AppDynamics End User Monitoring
- Lab 3: Configuring APM with AppDynamics
- Lab 4: Hybrid Application Monitoring with AppDynamics
- Lab 5: AppDynamics Distributed Application Monitoring
- Lab 6: Identifying application vulnerability with Secure Application
- Lab 7: Adding targets to Cisco Intersight Workload Optimizer
- Lab 8: Application performance and cost analysis
- Lab 9: Integrating AppDynamics in Intersight
- Lab 10: Optimizing application resources with Intersight and AppDynamics
- Lab 11: Transaction visualization and analysis in ThousandEyes
- Lab 12: Selection of ISP based on Internet Insights
- Lab 13: Application analysis based on Internet Insights
- Lab 14: Validating Customer Digital Experience in ThousandEyes