
Designing and Implementing Enterprise Network Assurance (ENNA)

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HAPPENS EVERYDAY!*



Designing and Implementing Enterprise Network Assurance (ENNA)

Course Duration

4 days

Course Price

\$3595.00

36 CLCs

Methods of Delivery

In-Person ILT

Virtual ILT

Onsite ILT

About this Class

In this Designing and Implementing Enterprise Network Assurance course provides a comprehensive overview of enterprise network assurance, focusing on how Cisco assurance platforms deliver visibility, analytics, and proactive troubleshooting across campus, WAN, cloud, and internet environments. It is designed to help network and operations teams understand how multiple Cisco assurance tools work together to ensure application performance, network health, and end-user experience.

The course begins with an overview of enterprise network assurance and introduces Cisco Catalyst Center Assurance for monitoring campus networks and device health. It then covers Cisco AppDynamics to explain how application performance is correlated with network behavior, followed by Cisco Catalyst SD-WAN Assurance for gaining insight into WAN performance and path quality. Cisco ThousandEyes is introduced as a key platform for internet, cloud, and SaaS visibility, including Enterprise Agent and Endpoint Agent deployment.

Learners explore the configuration of BGP, network, DNS, voice, web, and transaction tests to monitor performance across multiple layers. The course also covers system administration, advanced troubleshooting using Cisco ThousandEyes, Internet Insights for global outage awareness, and alert and dashboard configuration for proactive monitoring. Cisco Meraki network assurance and Meraki Insight are included to demonstrate simplified, cloud-managed visibility for branch and edge environments.

Hands-on labs reinforce these concepts by troubleshooting network health, analyzing SD-WAN analytics, deploying agents, configuring tests, examining device and internet performance, building dashboards, and implementing network assurance using Cisco Meraki and Meraki Insight.

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How you will benefit

This class will help you:

- Position different assurance products from Cisco portfolio
- Install, configure, and manage Cisco ThousandEyes solution
- Utilize Cisco ThousandEyes to perform network troubleshooting
- Configure and leverage Meraki Insight and available dashboard tools to manage network assurance in Meraki environments
- Prepare for the 300-445 ENNA v1.0 exam
- Earn 32 CE credits toward recertification

Why Attend with Current Technologies CLC

- Our Instructors are the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses

Who Should Attend

The job roles best suited to the material in this course are:

- Network Administrators
- System Engineers
- Network Analysts
- NOC Operators
- IT Professionals

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Objectives

After taking this course, you should be able to:

- Describe enterprise network assurance
- Describe how to monitor health and performance with Cisco Catalyst Center Assurance
- Introduce Cisco AppDynamics, Cisco Catalyst SD-WAN Assurance, and Cisco ThousandEyes
- Describe different Enterprise Agent deployment options, requirements, and procedures for agent deployment
- Describe different ThousandEyes test types
- Compare ThousandEyes web layer tests
- Describe, deploy, and configure an Endpoint Agent
- Describe how to perform system administration
- Utilize ThousandEyes when performing the root cause analysis
- Describe Internet Insights
- Explain alerts and dashboards configuration
- Explain monitoring solutions
- Describe Cisco Meraki Network Assurance
- Showcase Cisco Meraki Insights

Prerequisites

The knowledge and skills you are expected to have before attending this training are:

- Basic understanding of network fundamentals
- Basic understanding of Internet Control Message Protocol (ICMP), User Datagram Protocol (UDP), Transmission Control Protocol (TCP), Hypertext Transfer Protocol Secure (HTTPS), Secure Sockets Layer (SSL), and Domain Name System (DNS) protocol
- Basic familiarity with Cisco Catalyst SD-WAN, Cisco Catalyst Center, and Cisco Meraki

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Course Outline

Module 1: Enterprise Network Assurance Overview

Module 2: Introduction to Cisco Catalyst Center Assurance

Module 3: Introduction to Splunk AppDynamics

Module 4: Introduction to Cisco Catalyst SD-WAN Assurance

Module 5: Introduction to Cisco ThousandEyes

Module 6: Enterprise Agents Deployment

Module 7: BGP, Network, DNS, and Voice Tests Configuration

Module 8: Web Layer Tests Configuration

Module 9: Endpoint Agent

Module 10: System Administration

Module 11: Network Troubleshooting with Cisco ThousandEyes

Module 12: Internet Insights

Module 13: Alerts and Dashboards Configuration

Module 14: Monitoring Solutions

Module 15: Cisco Meraki Network Assurance

Module 16: Cisco Meraki Insight

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Lab Outline

- Lab 1: Troubleshoot the Health of Network Devices
- Lab 2: Explore Cisco Catalyst SD-WAN Analytics
- Lab 3: Schedule a Test
- Lab 4: Deploy Enterprise Agent
- Lab 5: Configure Network, DNS, and Voice Tests
- Lab 6: Configure Web Server Tests
- Lab 7: Configure Transaction Tests
- Lab 8: Deploy and Configure an Endpoint Agent
- Lab 9: Configure Account Administration
- Lab 10: Utilize Device Layers
- Lab 11: Examine Internet Insights
- Lab 12: Configure Alerts
- Lab 13: Build a Dashboard
- Lab 14: Implementing Network Assurance with Cisco Meraki
- Lab 15: Examine Cisco Meraki Insight