Training overview

Designing and Implementing Enterprise Network Assurance (ENNA)

Description

The **Designing and Implementing Enterprise Network Assurance (ENNA)** training is designed to enrich and expand your knowledge and skills in the realm of enterprise network assurance and management. This training collectively encompasses a broad spectrum of network assurance and monitoring aspects. You will overview different Cisco assurance products, Cisco ThousandEyes, and Meraki Insight. You will acquire the skills not just to utilize these solutions effectively, but also to deploy, configure, and manage them in your network environments. This includes learning about the initial setup, fine-tuning for optimal performance, and conducting day-to-day operations that ensure continuous, seamless network assurance.

This training prepares you for the 300-445 ENNA v1.0 exam. If passed, you earn the Enterprise Network Assurance Specialist certification and satisfy the concentration exam requirement for the Cisco Certified Network Professional (CCNP) Enterprise certification. This training also earns you 32 Continuing Education (CE) credits toward recertification.

How you'll benefit

This training 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

Who should enroll

- Network Administrators

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

Technology areas

- Enterprise
- Networking
- Network Assurance

Objectives

- 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

There are no prerequisites for this training. However, the knowledge and skills you are recommended 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

These skills can be found in the following Cisco Learning Offerings:

- Implementing and Administering Cisco Solutions (CCNA)
- Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR)

Outline

- Enterprise Network Assurance Overview
- Introduction to Cisco Catalyst Center Assurance
- Introduction to Splunk AppDynamics

- Introduction to Cisco Catalyst SD-WAN Assurance
- Introduction to Cisco ThousandEyes
- Enterprise Agents Deployment
- BGP, Network, DNS, and Voice Tests Configuration
- Web Layer Tests Configuration
- Endpoint Agent
- System Administration
- Network Troubleshooting with Cisco ThousandEyes
- Internet Insights
- Alerts and Dashboards Configuration
- Monitoring Solutions
- Cisco Meraki Network Assurance
- Cisco Meraki Insight

Lab Outline

- Troubleshoot the Health of Network Devices Explore
- Cisco Catalyst SD-WAN Analytics
- Schedule a Test
- Deploy Enterprise Agent
- Configure Network, DNS, and Voice Tests
- Configure Web Server Tests
- Configure Transaction Tests
- Deploy and Configure an Endpoint Agent
- Configure Account Administration
- Utilize Device Layers
- Examine Internet Insights
- Configure Alerts
- Build a Dashboard
- Implementing Network Assurance with Cisco Meraki
- Examine Cisco Meraki Insight

What to expect on the exam

Designing and Implementing Enterprise Network Assurance (300-445 ENNA) v1.0 is a 90-minute exam associated with the Enterprise Network Assurance Specialist certification and satisfies the concentration exam requirement for the CCNP Enterprise certification.

The multiple-choice format tests your knowledge of network assurance design and implementation, including:

- Platforms and architecture
- Data collection and implementation
- Data analysis
- Insights and alerts