Implementing and Troubleshooting Networks using Cisco ThousandEyes

Duration: 3 Days   **Course Code: ENTEIT**   **Version: 1.0**   **Delivery Method: Virtual Learning**

Overview:

The **Implementing and Troubleshooting Networks Using Cisco ThousandEyes (ENTEIT)** course is designed to introduce you to Cisco® ThousandEyes. Through a combination of lectures and hands-on experience, you will learn to install and configure the Cisco ThousandEyes agents with different test types and perform root cause analysis when troubleshooting.

This course will help you:
Describe and define Cisco ThousandEyes
Integrate, implement, and deploy Cisco ThousandEyes solutions
Configure Cisco ThousandEyes agents
Perform root cause analysis when troubleshooting
Customize dashboard and reports
Monitor solutions
Administer the system

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

Target Audience:

Network Administrators, network engineers, network managers and system engineers involved in the installation, configuration and usage of the Cisco ThousandEyes solution.

Objectives:

- **After completing this course, you should be able to:**

- Describe the Cisco ThousandEyes solution and its high-level use cases

- Identify different types of ThousandEyes agents and supported tests

- Describe different Enterprise Agent deployment options, requirements, and procedures for agent deployment

- Describe different ThousandEyes test types

- Compare Thousand Eyes web layer tests

- Describe the role of an Endpoint Agent

- Deploy and Configure an Endpoint Agent

- Utilize ThousandEyes when performing the root cause analysis

- Discuss the challenges that ThousandEyes Internet Insights can address

- Describe the role and configuration of default and custom alerts

- Distinguish between usability of dashboards and reports

- Utilize ThousandEyes to monitor solutions end-to-end

- Describe how to perform system administration

Prerequisites:

Attendees should meet the following pre-requisites:

- Basic understanding of network fundamentals
- Basic understanding of Internet Control Message Protocol (ICMP), User Datagram Protocol (UDP), Transmission Control Protocol (TCP), HTTP, SSL, and DNS protocol
- CCNA - Implementing and Administering Cisco Solutions

Testing and Certification

Recommended as preparation for the following exams:

- There are no exams currently aligned to this course

Content:

Introducing Cisco ThousandEyes

- Modern Network Challenges
- Cisco ThousandEyes Overview
- See Inside-Out Use Case
- See Outside-In Use Case
- WAN Experience Use Case
- How Cisco ThousandEyes Does It
- Cisco ThousandEyes Visibility
- Modern IT Visibility Architecture

Introducing Cisco ThousandEyes Agents and Tests

- Cisco ThousandEyes Cloud Agents
- Cisco ThousandEyes Enterprise Agents
- Cisco ThousandEyes Endpoint Agents
- Cisco ThousandEyes Tests
- Agent Test Capabilities
- Agent Locations

Deploying Enterprise Agents

- Enterprise Agent Operation
- Enterprise Agent Firewall Requirements
- Enterprise Agent Network Utilization
- Enterprise Agent Deployment Options
- Enterprise Agent on Cisco IOS XE Platforms
- Virtual Appliance Setup
- Custom Virtual Appliance
- Embedded Enterprise Agent CLI Deployment
- Embedded Enterprise Agent Deployment with Cisco DNA Center
- Enterprise Agent Deployment in Proxy Environments
- Agent Labels
- Enterprise Agent Utilization
- Enterprise Agent Clusters

Describing ThousandEyes Routing, Network, DNS and Voice Tests

- Routing BGP Test
- BGP Test - Configuration
- Network Tests
- Agent-to-Server Network Test - Data Collection
- Agent-to-Agent Network Test - Data Collection
- Network Test - Path Visualization View
- Agent-to-Server Network Test- Configuration
- Agent-to-Agent Network Test - Configuration
- DNS Tests
- DNS Test - Metrics
- DNS Test - Configuration
- Voice Tests
- Vocie Tests - Metrics
- Voice Tests - Configuration

Describing Cisco ThousandEyes Web Tests

- Web Layer Tests

Introducing Endpoint Agents

- Endpoint Agent Overview
- Browser Session Monitoring - Monitored Domains and Monitored Networks
- Endpoint Agent Use Cases - Last Mile Monitoring
- Endpoint Agent Use Cases - Performance Troubleshooting
- Endpoint Agent Use Cases - Application Experience Monitoring
- Endpoint Agent - Collected Data

Deploying Endpoint Agents

- Endpoint Agent System Requirements
- Endpoint Agent Installation
- Endpoint Agent Operation
- Endpoint Agent Configuration
- Endpoint Agent Proxy Configuration
- Endpoint Agent Views

Troubleshooting with Cisco ThousandEyes

- Practice Activity - Scenario A
- Troubleshooting Analysis - Scenario A
- Practice Activity - Scenario B
- Troubleshooting Analysis - Scenario B
- Practice Activity - Scenario C
- Troubleshooting Analysis - Scenario C
- Share Links and Saved Events
- Multi-Service Views

Using Internet Insights

- Challenges with Internet Monitoring
- Internet Insights Packages
- Internet Insights Dashboard
- Internet Insights View

Configuring Alerts

- Alerts Overview
- Notification Triggers
- Alert Rule Configuration
- Dynamic Baselines
- Alert Views
- Alert Suppression Window
- Enterprise Agent Notifications

Customizing Dashboards and Reports

- Data Retention
- Dashsboards and Reports Comparison
- Report Snapshots
- Baseline Metrics with Reports
- Data Aggregation
- Widget Configuration
- Dashboard Examples

Monitoring Solutions

- Microsoft 365 Solution Monitoring
- Microsoft 365 Test Targets
- Microsoft 365 Service Level Metrics
- Cisco Webex Monitoring
- Cisco Webex Web Zone Testing
- Cisco Webex CB and MMP Testing
- Cisco Webex Test Targets
- Cisco Webex Service Level Metrics
- SD-WAN Monitoring
- SD-WAN Overlay Monitoring
- SD-WAN Underlay Monitoring
- SD-WAN Service-Level Metrics

Administrating the System

- Role Based Access Control
- Account Groups
- User Account Settings
- Organization Settings
- Time Zone Settings
- Activity Log
- Cisco ThousandEyes Billing
- Unit Calculator

Labs

- Schedule a Test
- Deploy Enterprise Agent
- Configure Network, DNS, and Voice Tests
- Configure Web Tests
- Deploy and Configure an Endpoint Agent
- Examine Internet Insights
- Configure Alerts
- Build a Dashboard and Report
- Account Administration

- HTTP Server Test - Metrics
- HTTP Server Test - Configuration
- Page Load Test - Metrics
- Page Load Test - Configuration
- Transaction Test - Metrics
- Transaction Test - Configuration
- Transaction Test - ThousandEyes Recorder
- Web Layer Tests - Proxy Metrics

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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