

Implementing and Troubleshooting Networks using Cisco ThousandEyes

Durée: 3 Jours Réf de cours: ENTEIT Version: 1.1 Méthodes d'apprentissage: Virtual Learning

Résumé:

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

This course is worth 24 Continuing Education (CE) Credits.

Public visé:

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

Objectifs pédagogiques:

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

Pré-requis:

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 - Mettre en oeuvre et administrer des solutions réseaux Cisco

Test et certification

Recommended as preparation for the following exams:

- There are no exams currently aligned to this course

Contenu:

Introduction to Cisco ThousandEyes

- Cisco ThousandEyes Visibility
- How Cisco ThousandEyes Does It
- Cisco ThousandEyes Cloud Agents
- Cisco ThousandEyes Enterprise Agents
- Cisco ThousandEyes Endpoint Agents
- Cisco ThousandEyes Tests
- Agent Test Capabilities
- Agent Locations

Enterprise Agents Deployment

- Enterprise Agent Operation
- Enterprise Agent Firewall Requirements
- Enterprise Agent Network Utilization
- Enterprise Agent Deployment Options
- Enterprise Agent on Cisco Platforms
- Virtual Appliance Setup
- Custom Virtual Appliance
- Embedded Enterprise Agent CLI Deployment
- Enterprise Agent Deployment with Cisco Catalyst Center
- Enterprise Agent Deployment with Cisco Catalyst SD-WAN Manager
- Enterprise Agent Deployment with Meraki Dashboard
- Enterprise Agent Docker Deployment
- Enterprise Agent Deployment in Proxy Environments
- Agent Labels
- Enterprise Agent Utilization
- Enterprise Agent Clusters

BGP, Network, DNS and Voice Tests Configuration.

- Unified Test Overview
- 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
- Voice Tests - Metrics
- Voice Tests - Configuration

Web Layer Tests Configuration

- Web Layer Tests
- HTTP Server Test - Metrics
- HTTP Server Test - Configuration
- Page Load Test - Metrics
- Page Load Test - Configuration

Endpoint Agent

- Endpoint Agent Overview
- Endpoint Agent Use Cases
- Collected Data
- System Requirements and Installation
- Agent Settings
- Monitoring Settings
- Endpoint Agent Views

System Administration

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

Network Troubleshooting with Cisco ThousandEyes

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

Internet Insights

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

Alerts and Dashboard Configuration

- Alerts Overview
- Alert Rule Configuration
- Alert Views
- Integration with Splunk HTTP Event Collector
- Alert Suppression Window
- Enterprise Agent Notifications
- Notification Triggers
- Data Retention
- Dashboards
- Dashboard Snapshots
- Baseline Metrics
- Data Aggregation
- Widget Configuration
- Dashboard Examples
- Integration and Data Export
- Adaptive Alerting

Monitoring Solutions

- Monitoring Cisco Webex Meetings
- Monitoring Microsoft 365
- Monitoring Microsoft Teams
- Monitoring Cisco Catalyst SD-WAN
- WAN Insights

Labs

- Discovery 1: Schedule a Test
- Discovery 2: Deploy Enterprise Agent
- Discovery 3: Configure Network, DNS, and Voice Tests
- Discovery 4: Configure Web Tests
- Discovery 5: Deploy and Configure an Endpoint Agent
- Discovery 6: Configure Account Administration
- Discovery 7: Utilize Device Layers
- Discovery 8: Examine Internet Insights
- Discovery 9: Configure Alerts
- Discovery 10: Build a Dashboard and Report

- Web Authentication Methods
 - Transaction Test - Metrics
 - Transaction Test - Configuration
 - Transaction Test - ThousandEyes Recorder
 - Web Layer Tests - Proxy Metrics
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Autres moyens pédagogiques et de suivi:

- Compétence du formateur : Les experts qui animent la formation sont des spécialistes des matières abordées et ont au minimum cinq ans d'expérience d'animation. Nos équipes ont validé à la fois leurs connaissances techniques (certifications le cas échéant) ainsi que leur compétence pédagogique.
- Suivi d'exécution : Une feuille d'émargement par demi-journée de présence est signée par tous les participants et le formateur.
- En fin de formation, le participant est invité à s'auto-évaluer sur l'atteinte des objectifs énoncés, et à répondre à un questionnaire de satisfaction qui sera ensuite étudié par nos équipes pédagogiques en vue de maintenir et d'améliorer la qualité de nos prestations.

Délais d'inscription :

- Vous pouvez vous inscrire sur l'une de nos sessions planifiées en inter-entreprises jusqu'à 5 jours ouvrés avant le début de la formation sous réserve de disponibilité de places et de labs le cas échéant.
- Votre place sera confirmée à la réception d'un devis ou ""booking form"" signé. Vous recevrez ensuite la convocation et les modalités d'accès en présentiel ou distanciel.
- Attention, si cette formation est éligible au Compte Personnel de Formation, vous devrez respecter un délai minimum et non négociable fixé à 11 jours ouvrés avant le début de la session pour vous inscrire via moncompteformation.gouv.fr.

Accueil des bénéficiaires :

- En cas de handicap : plus d'info sur globalknowledge.fr/handicap
- Le Règlement intérieur est disponible sur globalknowledge.fr/reglement