Managed Cisco Thousand Eyes Technology Service Description

Overview

This document provides information relating to the management and monitoring of Cisco Thousand Eyes under the standard MCN offering. The monitoring, configuration, limitations, and available service requests are outlined hereunder.

Client Responsibilities and Prerequisites

There are no technology specific pre-requisites required, however, a description of the standard pre-requisites for the offering are documented in the MCN Statement of Work.

Technology Specific Operations

The following technology specific monitors can be configured by default.

Monitors

Monitor	Description	Alerts	Performance Info	Resolution	Poll Interval (sec)
Network Layer Tests	Measure the performance between Agent to server and includes Loss, Latency, Jitter, Available Bandwidth and Capacity.	✓	Obtains alerts for network layer tests.	Engineering teams will diagnose the connectivity issue and follow the process to investigate and inform / escalate to the Client if needed.	N/A
Page Load Tests	Tests the performance of a page load measuring Response time, Total Wire Size (kB), Component Errors, DOM Load Time (ms), Page Load Time (ms), Throughput (kbps) and Objects.	✓	Obtains page load tests alerts	Engineering teams will diagnose the connectivity issue and follow the process to investigate and inform / escalate to the Client if needed.	N/A
HTTP Server Tests	Tests for HTTP server Availability Response Time, DNS Time, Connect Time, SSL Negotiation Time, Wait Time, Receive Time, Throughput, Wire Size and Total Time.	✓	Obtains HTTP Server availability alerts	Engineering teams will diagnose the connectivity issue and follow the process to investigate and inform / escalate to the Client if needed.	N/A

Configuration Management

Cisco ThousandEyes is a full SaaS offering; therefore, device configuration backups are inherent to the solution and are executed automatically with the built-in toolsets to the Cisco ThousandEyes Cloud. All Cisco ThousandEyes configuration backups are stored in the Cisco ThousandEyes Cloud itself as part of Management Orchestration.

Firmware Maintenance

Firmware maintenance for the Cisco ThousandEyes solution is an automated process and is included within the Cisco ThousandEyes offering. Firmware schedules and frequencies are determined and managed by the Cisco ThousandEyes vendor. For further details in this regard refer to the vendor's relevant documentation.

Supported Configurations

The following configuration are supported under the MCN ThousandEyes offering:

- Cloud agents are supported
- Enterprise agents are supported
- Agent clusters are supported

Agent Types

ThousandEyes Agents are typically referred to as Global Vantage Points which are lightweight, Linux-based software agents. The agents provide the capability to run several layered monitoring tests to gain insight into network and application performance and user experience. There are three types of agents supported by Cisco ThousandEyes, each providing similar capabilities but serve different purposes and exist in different environments.

Cloud Agents

Are made available to all Clients and maintained by Cisco ThousandEyes. They are located in many countries and cities around the globe and provide what is known as "outside-in" visibility to web-based apps or API endpoints. Consult the Vendor documentation for a listing of available countries and cities.
Cloud Agents provide most of the configuration options that Enterprise Agents provide but not all features are available because of their global nature and availability.

Enterprise Agents

Enterprise Agents are deployed by Clients within their own networks and are capable of running any ThousandEyes test types with the exception of Network Layer BGP tests. Enterprise agents can be either the source or target of agent-to-agent tests thereby enabling bi-directional, end-to-end metrics and the path visualizations.
They are intended for server-type environments and should be continuously online continuously to allow scheduled testing. Often Enterprise Agents require time synchronization and firewall/packet filter rules to be added or adjusted for test and administrative traffic. These agents can be installed on several platforms such as virtualised environments (virtual machines and containers), directly on native Linux systems, and on certain types of hardware such as Cisco ISR and ASR routers.

Endpoint Agents

These Agents are installed on personal computers or Macs, and provide on-demand, real-time visibility into the user's experience for both cloud-based and locally hosted applications. They can also provide underlying wired, wireless and Internet connectivity and system health.
Endpoint Agents have the most specialised purpose of all the agent types. Data collection is typically done on-demand such as activating the agent when the user experiences performance or other problems with web-based applications. Agents are deployed as browser plug-ins for Chrome or Internet Explorer and can monitor any application that Chrome and Internet Explorer can access. Note that this agent type is not supported under the MCN offering.

Limitations

- Endpoint agents are excluded from the offering
- Agent to agent tests is excluded from the offering
- Routing, DNS and Voice monitoring are excluded from the offering
- Inbound ICMP error messages inbound to each Enterprise agent must be permitted for path visualization to function properly.
- Page Load test feature is not natively supported by the Cisco CAT9K switches unless an SSD is present.

Service Requests

A list of service requests available for this technology can be found in the MCN Request Catalogue.

Technology Transition Tasks

No technology specific transition tasks are required. A description of the standard transition tasks included for the service offering is documented in the MCN Statement of Work.

Note:

Any tasks not explicitly described under the Technology Transition Tasks are implicitly excluded from transition.