



Endace Latency Monitoring



Endace Latency Monitoring is a unique solution used by organisations to monitor latency between two or more points in their network. The capability is included in every compatible Endace System as part of the Endace Application Suite. Latency measurements are achieved by comparison between precision nanosecond accurate timestamps given to specific packets at either end of a monitored link.

To avoid adding additional traffic to the link (which in itself adds latency), latency measurements are derived using a sophisticated algorithm that identifies unique traffic patterns at both ends of the link. This capability offers the very highest levels of accuracy with zero performance overhead.

SOLUTION ARCHITECTURE

The Latency Monitoring solution comprises two distinct software components: the Latency Monitoring Agent and the Latency Monitoring Correlator. The Latency Monitoring Agents sit at either end of the link and the correlator either runs separately or is co-hosted with one of the Agents.

LATENCY MONITORING AGENT

The Latency Monitoring Agent is installed on one or more time-synchronised Endace Systems, monitoring different points along links of the target network. The Agent is responsible for analysing captured packets, creating a unique identifier for packet content and sending it, along with a timestamp, to the Correlator.

KEY FEATURES

- Traffic latency measurement at microsecond accuracy
- Support for multiple Agents connecting to a single Correlator
- Health and status alarms and system logs for both the Agent and Correlator
- User-defined logical paths and latency statistics
- GUI and CLI API for management and status
- Performs consistently and correctly on fully utilised 10Gb networks



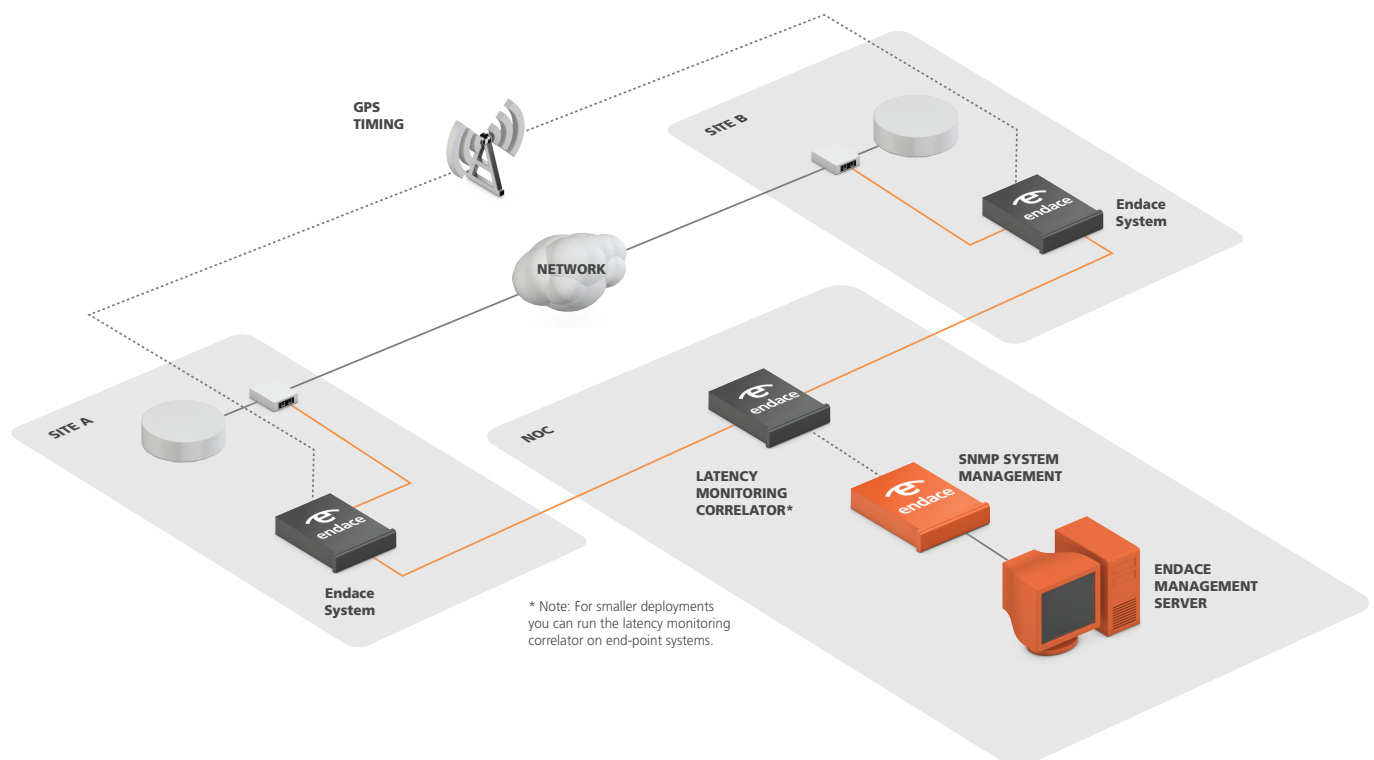
LATENCY MONITORING CORRELATOR

The Latency Monitoring Correlator is a central data collection and matching application deployed in a virtual machine environment. It receives information from all deployed Agents, determines when the same packet is observed at more than one location and then calculates the latency between them. The information is stored in the database and then broadcast to recipients as unicast latency feeds.

The latency feeds can be rendered via a web interface to provide latency metric information (including max, mean, median, and min over time) for a set of network links.

MEASUREMENT GRANULARITY

The accuracy of the system is dependent on the time source; with a global positioning system (GPS) and network time protocol (NTP) time source synch, the timestamps between two or more machines will be +/- 100ns. With just a NTP time source, the accuracy will only be +/- 10ms; with PTP it will be slightly higher.



For more information on Endace products visit: endace.com
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