Aukua MGA2510

Latency Monitoring

Monitor Network Latency on Live Application Traffic

Aukua's new Latency Monitoring Analyzer directly but passively measures the network latency experienced by live application traffic. This new capability is part of a larger suite of powerful analyzers available with the Aukua MGA2510 system.

Network latency has become a primary challenge for IT professionals. Latency sensitive network applications such as audio and video delivery, processor intensive security monitoring systems, and bandwidth hungry storage applications have emerged in almost all businesses. These applications are extremely vulnerable to network latency which degrades application performance, negatively affects end-user experience, and in many cases even breaks an application all together. Failing to understand and address this challenge can be very costly to a business, impacting customer retention and creating a competitive disadvantage.

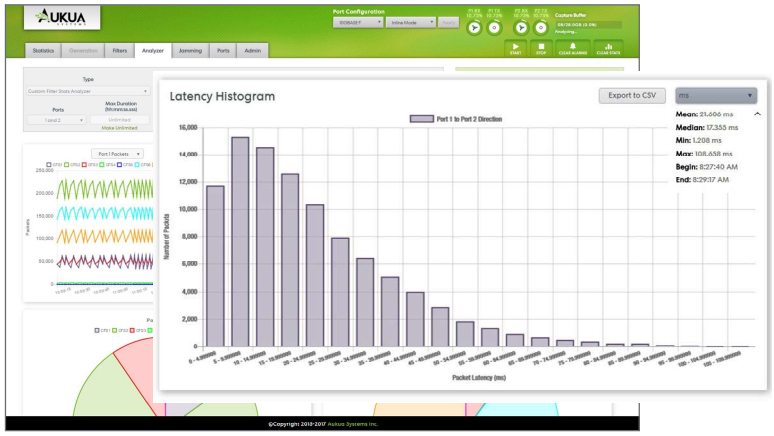
The Challenge:

- How do you characterize and monitor application latency without creating additional latency?
- How do you target only the specific applications, devices or protocols of interest for latency measurement?
- And for many businesses, how do you monitor latency without violating regulatory requirements that restrict the introduction of foreign traffic into the production network?

Aukua's Latency Monitoring Analyzer is designed to address all these challenges by precisely measuring one-way latency between two points. The latency measurement is conducted on live network traffic without introducing additional packets. Users can measure latency on all traffic or on any filtered portion of the traffic using Aukua's customized layer 2-7 filtering capability.

APPLICATION HIGHLIGHTS

- Measures one-way latency directly experienced by application or production traffic with 1.0ns precision!
- Passive deployment - no need to introduce extra unwanted traffic into the network (such as with ICMP or active probes).
- Allows you to stay compliant with regulatory requirements while improving the accuracy of latency measurements
- Leverage a comprehensive and customizable set of L2-L7 filters and triggers to configure which applications, devices, addresses or protocols to monitor or capture
- Real-time stats and graphical analysis including latency histogram, custom bandwidth stats, packet size distribution and more...



Aukua MGA2510: One-way latency measurement histogram

Failing to understand and address the impact of network latency will be costly to a business, impacting customer retention and creating a competitive disadvantage.

Aukua's MGA2510 Latency Monitoring Analyzer directly measures one-way latency experienced by application traffic without introducing artificial packets into the network.

Aukua MGA2510

Network Application Latency Monitoring

PROBLEM - Using active probes or introducing foreign traffic such as ICMP to measure latency experienced by networked applications has many disadvantages:

- It is not a direct measurement! Therefore you cannot be assured that the latency measured on the artificial packets is what the end-user applications experience. For example security devices that perform deep packet inspections do not treat all packets the same.
- It creates additional bandwidth which further affects system and network performance, especially if the testing is done during peak network usage times.
- It is not a continuous measurement of latency experienced by each and every packet. It is only a snapshot of conditions taken every few seconds at best and sometimes only in off-peak hours, which gives false impressions.
- It does not provide insight into how network and security devices are affecting individual applications, protocols, devices or packet sizes differently.
- There are situations where introducing foreign traffic into a network is simply not permitted by government regulations and doing so can cause serious and costly compliance issues for network or service operators.

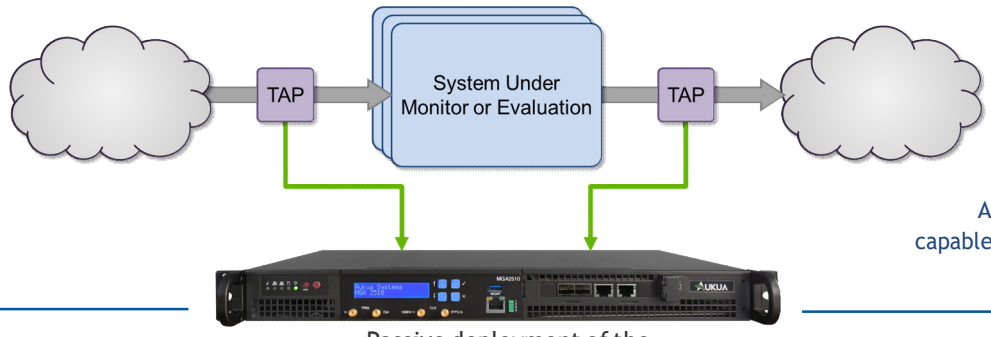
EXAMPLE APPLICATIONS

- *Characterize how latency is affected by deep packet inspection performance of a Next Generation Intrusion Prevention System (NGIPS) or Next Generation Firewall (NGFW)*

- *Monitor how SSL encryption / decryption performance of a security appliance affects network application latency*

- *Any situation where you need to monitor latency, but due to regulatory or procedural requirements you cannot introduce artificial or foreign traffic into the network being monitored (e.g., HIPAA or PCI Security Compliance)*

- *Verify and monitor the latencies applied to each and every network packet associated with financial trading*



Also supports line rate capable packet capture tools

Real-time customizable statistics and analysis (based on port, device, application, protocol CoS and more...)

Passive deployment of the Aukua MGA2510 Latency Monitoring Analyzer (supports 10G, 5G, 2.5G, 1G, 100M Ethernet)

Intuitive HTML5 GUI with full API for easy integration and automation

Leverage Aukua's powerful L2-L7 filtering technology to target specific applications, flows, protocols, devices or even packet sizes for network latency analysis!