WildPackets TimeLine network recorder capture to disk results

WildPackets TimeLine network recorder simultaneously monitors and captures network traffic to disk at a sustained rate of 11.7 Gbps with zero dropped packets.

WildPackets TimeLine network recorder is a premier capture to disk solution for network forensics applications, uniquely suited for high-bandwidth enterprise networks. TimeLine is a turnkey solution, bundled with OmniPeek Connect console and OmniAdapter 10G or 1G advanced analysis cards. It is available in 8TB, 16TB, 32TB and SAN storage configurations.

Miercom recently evaluated the WildPackets TimeLine network recorder and conducted tests on the capture to disk capabilities of the appliance. We found the TimeLine network recorder to capture and monitor sustained traffic of 11.7 Gbps, writing those packets to disk without loss for forensics analysis, significantly faster than competing products. TimeLine is able to display crucial network statistics in an intuitive visualization format with no negative impact on capture-to-disk rate.

Test and Results

Testing was conducted on the WildPackets TimeLine network recorder running OmniEngine 6.5 with a 2-port10 Gigabit network adapter card. OmniPeek 6.5 was used to configure the TimeLine network recorder and view results of the remote capture.

The objective was to evaluate the performance of the appliance and the packet capture capability over a specific period of time with mixed traffic sizes.

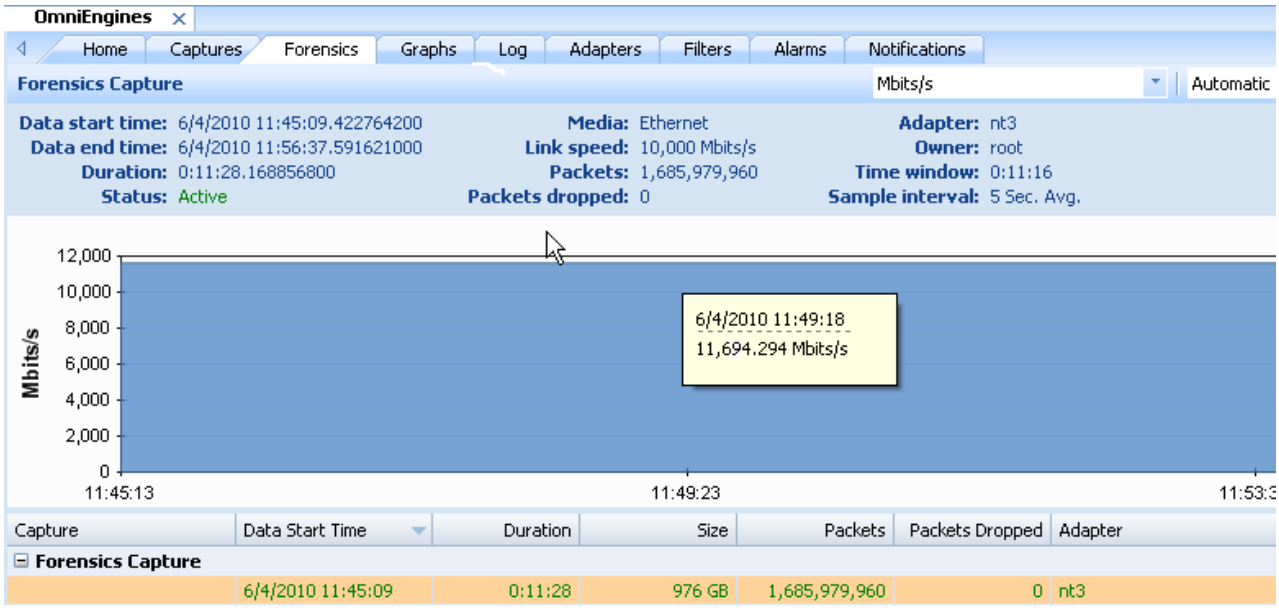
The WildPackets TimeLine network recorder running OmniEngine 6.5 captured packets without any drops at transmit rate of 11.7 Gbps

The performance was measured in terms of maximum traffic rate without loss in packets written to disk. We used a profile of equally weighted frames consisting of UDP traffic with sizes of 64, 128, 256, 512, 1024 and 1518 bytes. The capture to disk was run for 10 minute durations. Ixia XM2 chassis with LSM10GXM3-01 cards, IxAutomate 6.80.79.15GA was used to drive mixed frame size traffic.

Two 10 Gigabit interfaces were used on the Ixia with each connected to the WildPackets TimeLine network recorder. Traffic from the Ixia was transmitted utilizing binary search iterations with incremental increases in traffic rate until a loss was recorded. Once the test was completed, the transmitted frame count was compared to the packets received on the TimeLine network recorder to check for any loss of frames during capture to disk. When there is no loss, all these counts match up exactly. With the TimeLine network recorder, no loss was observed for transmit rates up to 11.7 Gbps.

Bottom Line

Other network capture solutions claim line-rate analysis based on specifications of the embedded network capture card. Packet capture performance varies from the actual rate at which packets are written to disk without data loss. Testing the WildPackets TimeLine network recorder confirmed that it is one of the fastest, continuous network capture and analysis solutions in its class, achieving capture-to-disk rates of 11.7 Gbps without any loss in a mixed traffic profile of equally distributed frame sizes.



Screen shot: 11.7 Gbps sustained capture-to-disk rate while displaying key network statistics with zero packet loss.

About Miercom's Product Testing Services…

Miercom has hundreds of product-comparison analyses published over the years in leading network trade periodicals including Network World, Business Communications Review - NoJitter, Communications News, xchange, Internet Telephony and other leading publications. Miercom's reputation as the leading, independent product test center is unquestioned.

Miercom's private test services include competitive product analyses, as well as individual product evaluations. Miercom features comprehensive certification and test programs including: Certified Interoperable, Certified Reliable, Certified Secure and Certified Green. Products may also be evaluated under the NetWORKS As Advertised program, the industry's most thorough and trusted assessment for product usability and performance.

Miercom
609.490.0200 • www.miercom.com

