

PRODUCT ADVISORY

Observer 15: Monitoring High-Capacity Networks

IT operations teams must be sure today's data centers can keep pace with tomorrow's business demands. To ensure optimal performance and validate significant IT investments, managers purchasing performance monitoring solutions need to carefully consider how they invest in capture technology, traffic analysis, and long-term data storage. The Observer® 15 platform introduces several hardware and software innovations to address these challenges and guarantee the long-term success of data center investments.

True Wire-Speed Capture

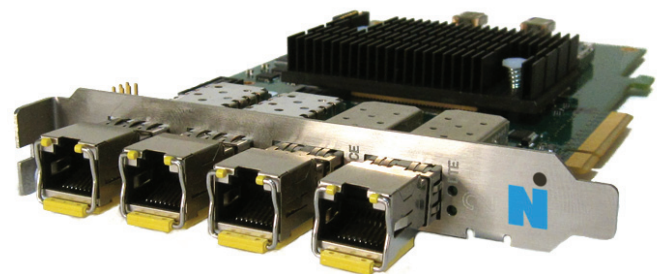
At the core of any performance management strategy within high-speed environments is the ability to capture and save full-duplex 10 Gb traffic to disk at line rate in a cost-effective manner. Without access to all the packets, engineers cannot guarantee optimal performance or efficiently resolve issues.

Network Instruments® is the only performance analysis vendor to internally design and manufacture all aspects of its capture technology from the capture card to the storage appliances. With Version 15, the company introduces a completely redesigned Gen2 card that delivers robust and cost-effective analysis across multiple gigabit and 10 Gb links.

The new card offers the highest port density available, allowing aggregating for up to 12 ports. It also provides de-duplication, filtering, and synchronized hardware acceleration all at the card level ensuring line-rate capture and analysis on gigabit and 10 Gb links. This new design significantly reduces instrumentation complexity and deployment costs by connecting multiple links to a single collection device.

Gen2™ Benefits

- Scale from two ports to 12 ports
- Improve analysis accuracy via deduplication
- Synchronized hardware accelerated filtering for up to 12 ports
- PCI Express 2.0 architecture for full line-rate throughput



Optimized for fast, flexible 10 Gb capture

The three keys for keeping pace with high-speed networks are robust capture, scalable analysis, and long-term data storage.

Scalable GigaStor™ Analysis

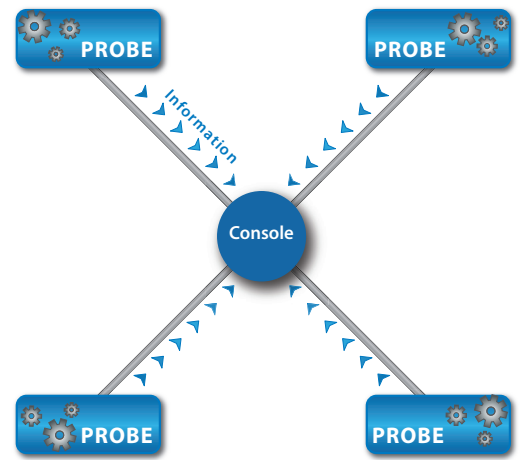
As data centers grow larger and tracking applications requires the deployment of collection points at multiple remote locations, scalability restrictions and the time required to send gigabytes of data to the console for analysis become real barriers to effective performance management.

Observer 15 addresses these issues through its new Smart Probe Architecture, which eliminates the need to transfer data for analysis by shifting the processing to the collection device. This new probe-centric approach improves workflow speed by reducing the time teams wait for file transfers and analysis to occur. In addition, this move has resulted in a significant increase in the number of probes supported by each console.

Smart Probe Architecture eliminates the transfers of data over the network for analysis.

Smart-Probe Architecture Benefits

- Increased scalability in enterprise environments
- Ideal for large analysis deployments
- Improves troubleshooting workflow by eliminating data transfers
- 97 percent reduction in network overhead



Probe-centric analysis eliminates data transfers

Robust Long-Term Storage

With organizations migrating to higher-capacity networks, long-term packet capture has become the only viable method to quickly assess performance and effectively resolve complex issues. Relying only upon flow metrics or packet sampling presents a partial picture of actual performance, resulting in many hours wasted attempting to resolve problems.

Given the increased need to ensure all network traffic and packets are captured, Network Instruments now offers GigaStor packet capture and retention solutions capable of scaling to petabytes (PB) of storage.

Beyond offering the largest network forensics solutions available, Network Instruments provides an extensive line of GigaStor appliances to meet a variety of enterprise needs. The company offers 2-4 TB stand-alone units, 8-48 TB upgradeable units, and expandable options from 48 TB-5 PB for growing companies. GigaStor is also available in 2 TB and 4 TB portable units.

Long-term packet capture is the only viable method for solving complex network problems.

GigaStor Benefits

- Rewind the network to troubleshoot intermittent issues
- Capture, save, and rapidly identify anomalies
- Optimized to support 10 Gb and data center environments
- Baseline and evaluate application rollouts
- Obtain long-term analysis of performance and growth for capacity planning



Scale from 8 TB-5 PB with GigaStor 5U appliances

Conclusion

As IT teams migrate to higher network capacities and deploy applications across the enterprise, they need to be sure their performance monitoring solutions can keep pace. Failing to do so can jeopardize the performance of large IT investments and bring business productivity to a halt. The Observer 15 new software and hardware innovations provide wire-speed capture, scalable analysis, and robust data storage designed to ensure optimal performance today and the flexibility to meet an organization's future management needs.



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