

# NetBlackBox Pro®

# Unparalleled capture performance and data archival

#### Features & Benefits

- » Optimized packet capture at speeds through 100 Gbps
- » Flexible architecture for a seamless upgrade path to NIKSUN NetVCR or NetDetector
- » Rich dashboards and comprehensive reports for automated and optimized workflows
- » Variety of data export formats to support different types of analysis
- » Separates data capture from in-depth analysis for performance acceleration
- » Drill down to packet-level information for granular deep-packet analysis and inspection
- » Flexible ad-hoc and scheduled reporting on multiple timescales (subseconds to months) for both real-time operations and strategic decision making
- » Awarded Common Criteria Certification by the National Information Assurance Partnership (NIAP) which is operated by the National Security Agency
- » Plug-and-play device with minimal training and no network downtime
- » Intuitive web-based interface and role-based access control

# Challenge

The pressure on organizations to maintain secure network infrastructures that run at peak performance levels is at an all-time high. Traditional monitoring methods are no longer sufficient to meet newer challenges efficiently and cost effectively. Monitoring needs vary, both by network site and by the depth of analytics required.

For example, the network core and distribution deployments require continuous and in-depth monitoring for instantaneous notification of performance degradation. Other segments have less stringent real-time monitoring needs but are not impervious to network failure. Having a complete record of network activity at these segments is necessary for post-event troubleshooting. Cyber security threats and compliance regulations make the requirement of complete data capture and archival even more important. Unfortunately, simple packet capture tools cannot scale up to the data capture rates required at these segments.

Many businesses also use proprietary applications, services and protocols for a variety of purposes which often require custom tools for application analysis. However, data capture by these custom tools at rates through 100Gbps, is virtually impossible. Network administrators need a solution that provides the flexibility of high-performance data capture, long-term storage and scalable analytics with the best return on investment.

#### Solution

NIKSUN® NetBlackBox Pro solution is a scaled down version of the more popular full-function NIKSUN appliances that offers high performance packet capture and simple analytics. Based on award-winning NIKSUN technology, NetBlackBox Pro can continuously record both inbound and outbound traffic, applications, and services at real-time production traffic rates. NetBlackBox Pro simultaneously captures, precisely timestamps, and indexes full packets in the NIKSUN Network Knowledge Warehouse (NKW), for zero loss monitoring of enterprise, carrier, and ISP networks and services. While the NetBlackBox Pro provides a framework for a brief and quick assessment of network performance, the data stored securely in distributed NetBlackBox Pro appliances can be exported out to a centrally located NetVCR® or NetDetector® for more comprehensive analysis. This enables organizations to completely and cost-effectively monitor their entire network. For more advanced analytics and forensics, NetBlackBox Pro also provides an easy upgrade path to the more advanced NIKSUN NetVCR and NetDetector solutions.

#### Multi-timescale Analysis Across All OSI Layers

NIKSUN NetBlackBox Pro is optimized for accelerated packet capture and designed for deployment in network segments that require fast recording and archival for historical analysis. NetBlackBox Pro also supports multi-layer monitoring (link to application layer) and multi-timescale analysis (down to the subsecond level) over short analysis intervals, enabling users to start at a high-level view and zoom down to application and/or hosts to analyze network traffic patterns and characteristics.

#### Optimized for Proprietary Application Analysis

For organizations looking for an effective way to capture and analyze the variety of proprietary protocols streaming through their networks, NetBlackBox Pro offers the ideal solution. By separating the data capture function from the indepth analysis function, NetBlackBox Pro offers an optimized way to capture all application traffic and re-route it to in-house tools for custom analysis.

## Complete Data Archival

Thanks to the embedded NIKSUN Network Knowledge Warehouse, users have access to a large repository of data of actual traffic from subsecond levels to hours and days, or even months. This allows users to "rewind" back in time to a problem event for troubleshooting and diagnosis. With NetBlackBox Pro's unlimited storage option, it is possible to archive network information for extremely long periods of time, if needed.

### Web Access and Large-scale Deployment

NetBlackBox Pro's web-based interface enables remote access from any computer using standard web browsers (Microsoft Internet Explorer, FireFox). RADIUS, TACACS+, LDAP and active directory support allows administrators to centrally authenticate and manage users. NetBlackBox Pro's configurable architecture enables a distributed, cost-effective deployment for complete and correlated monitoring in large-scale environments.

#### **Technical Information**

- » Network Interfaces Supported (Full-duplex, Half-duplex) - 1GigE (copper/fiber), 10GigE (fiber) or 20/40/60/80/100GigE (fiber)
- » Protocols Supported TCP, UDP, SCTP, IPv4, IPv6, fragmented IP, IEEE 802.3 (Ethernet), Ethernet MPLS, VLAN (ISL, IEEE 802.1q and stacked 802.1q), DNS, ISO8583, GTP, SIP, CDMA2000, RADIUS, Diameter, and many more.
- » Form Factors A variety of 1U and 3U form factors are available. Internal storage scales to tens of terabytes. Unlimited external storage options are available.
- » Integration Authentication TACACS+, RADIUS, LDAP and active directory. All NIKSUN products integrate with NetOmni™ Full
- » Suite for enterprise-wide data aggregation, reporting and visualization.

#### Interested in learning more?

For more information, please visit us online at *niksun.com*.

