Virtual NetVCR™

Virtualized Solution for Proactive Network, Services and Application Monitoring

Features & Benefits

» *Packet capture and multi-timescale analysis for traffic rates through 10 Gbps*

» *Replace manual troubleshooting processes with proactive discovery, classification, and analysis of diverse applications and protocols*

» *Visibility into network for capacity planning, trending, accounting, and usage*

» *Monitor QoS and SLAs in real-time*

» *Hypervisor/Platform Support (OpenStack, KVM, VMWare ESX/ESXi, AWS, XEN, Hyper-V, Oracle VM, etc.)*

» *Unifies both physical and virtual infrastructure in one holistic view*

» *Detect and analyze short-lived events that are undetectable when data is aggregated by the minute*

» *Ad-hoc and scheduled reporting on multiple timescales for both real-time operations and strategic decision making*

» *Plug-and-play solution with intuitive web-based interface*

» *Drill down to packet-level information for granular deep-packet analysis*

Challenge

The benefits associated with virtualization have led to the proliferation of virtual networks and the explosion of cloud computing. Both public and private clouds that share infrastructure present new performance problems, which have complicated the deployment of otherwise appealing new technologies. Total visibility into the virtual network infrastructure and cloud environments, in terms of availability and performance of virtualized network functions, is just as critical as insight into the physical network. Network and application performance problems are just as real but more difficult to diagnose.

Solution

NIKSUN's Virtual NetVCR is a real-time packet capture and analysis solution that fits right into your virtual environment. Built upon the same powers of our flagship NetVCR®, NIKSUN Virtual NetVCR is a lightweight, software deployable NetVCR. It records, indexes, and analyzes all traffic directed to it from either virtual or physical segments. Data from distributed virtual appliances can be aggregated and viewed on a central NIKSUN NetOmni™ console.

Virtual NetVCR intelligently integrates vital network and application performance management (NPM and APM) into a single scalable solution to facilitate:

» Proactive end-to-end SLA/QoS monitoring and surveillance
» Continuous, interactive analysis from link to application
» Multi-timescale analysis (sub-seconds to months)
» Real-time and historical expert analysis
» Ad-hoc and scheduled reporting

Application Performance Monitoring

Providing 100% visibility into infrastructure in multiple timeframes (from sub-seconds to months), NIKSUN Virtual NetVCR analyzes a multitude of protocols and applications for proactive discovery, classification, correlation, and real-time analysis with just a few clicks!

NIKSUN Virtual NetVCR provides a large array of benefits including:

» Point-and-click rewind back in time for rapid troubleshooting and diagnostics
» QoS management and reporting
» Capacity planning and trending
» Accounting/usage
» Application/services monitoring (including web, email, DNS, databases, VoIP, multicast, trading, custom applications, etc.)

» Performance analysis (loss, delay, latency, jitter, service/application response time, goodput, throughput, etc.)
» Seamless integration with other management systems
» Proactive alerting from link to application

NIKSUN Virtual NetVCR's consolidation of critical infrastructure and application monitoring and analysis capabilities results in a highly valuable solution that immediately replaces multiple monitoring/troubleshooting solutions and empowers enterprises with the key advantages of automation, triage, and cost-efficient instrumentation.

Unified View of All Network Traffic

As organizations move towards virtualization, as well as public and private cloud networks, NIKSUN's Virtual NetVCR ensures visibility into both the existing physical and virtual/cloud infrastructure. It provides a comprehensive platform that ensures the integrity of all facets of the network, including visibility into both the north-south and east-west traffic that exists in every virtual environment.

Metadata from deployed physical and virtual appliances can be pulled into NIKSUN NetOmni to present a unified view of all traffic across the virtual, LAN, WAN and MAN environments.
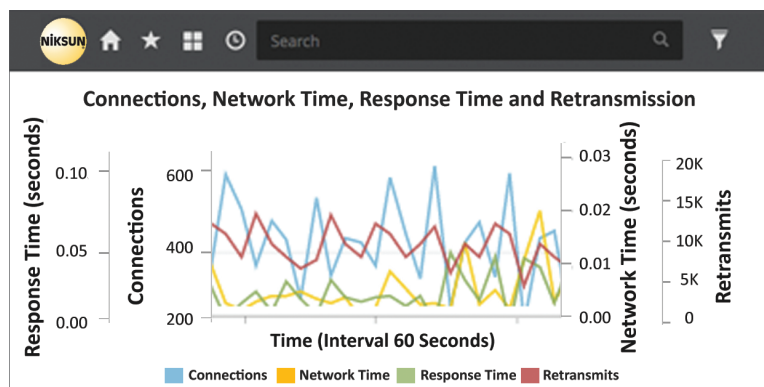
Real-time Traffic Analysis

Proactive End-to-End SLM and QoS Monitoring

Virtual NetVCR continuously monitors both inbound and outbound traffic, applications, and services at real-time production traffic rates. It simultaneously captures, timestamps, and indexes packets in the NIKSUN Network Knowledge Warehouse (NKW) for zero loss monitoring, while generating intelligence for insightful analytics. All traffic is analyzed in real-time at line speeds and alerts immediately inform users of service interruptions or infrastructure/application degradation as soon as they occur. Each alert is linked to contextual analysis and corresponding packet information, giving users the capability to immediately zoom down to the sub-second level for troubleshooting and root-cause discovery.

On-demand Reporting

Virtual NetVCR facilitates highly customizable reports generated on-demand or per a defined schedule to suit the needs of senior management, network architects, and analysts. Quick, real-time operational reports spanning extremely flexible time frames from sub-seconds to days maximize operational efficiency, while long-term reports spanning months or even years of network history assist in strategic decision making, planning, trending, optimization and change control. With NIKSUN's Virtual NetVCR's storage options, the ability of archiving information for long periods of time is available.

Technical Information

» **Models**: *Virtual NetVCR*
» **Database Size:** *1TB / 4TB*
» **Network Interface:** *1 Gbps / 10 Gbps*
» **Scalability:** *Unlimited instances for continuous growth and scalability*
» **Hypervisor Support and Management:** *OpenStack [Kilo, Liberty, Mitaka, Newton, Ocata]; KVM; VMWare ESX/ESXi [4.x, 5.x, 6.x]; AWS; XEN; Hyper-V; Oracle VM*
» **Supported Protocols:** *IEEE 802.3 (Ethernet), Ethernet MPLS, VLAN (ISL, IEEE 802.1q and stacked 802.1q), QinQ, IPv4, IPv6, fragmented IP, Multicast, ICMP, TCP, UDP, SCTP, DNS, HTTP, HTTPS, MSSQL, Oracle, ISO8583, FIX, GTP, SIP, RTP, RADIUS, Diameter, and many more*
» **Integration:** *Authentication - TACACS+, RADIUS, CAC, LDAP and Active Directory. All NIKSUN products integrate with NIKSUN NetOmni™ Full Suite for enterprise-wide aggregation, reporting and visualization*

NIKSUN

About NIKSUN, Inc. NIKSUN is the recognized worldwide leader in making the Unknown Known. The company develops a highly scalable array of real time and forensics-based cyber security and performance management solutions for large enterprises, government & intelligence agencies, service providers and financial services companies. NIKSUN's award winning enterprise solutions deliver unprecedented flexibility and packet capture power. The company's patented real-time analysis and recording technology is the industry's most comprehensive solution for secure and reliable network infrastructure and services. NIKSUN, headquartered in Princeton, New Jersey, has sales offices and distributors throughout the US, Europe, the Mid East and Asia-Pacific. For more information, please visit www.niksun.com.