vSTREAM Virtual Appliance Overview

The vSTREAM™ virtual appliance complements existing Adaptive Session Intelligence™ (ASI)-based instrumentation to provide the same level of visibility within virtualized and cloud infrastructures that is already possible in physical environments. The vSTREAM virtual appliance is ideal for monitoring service-critical traffic running within virtualized or cloud infrastructures, either locally on a host or as an aggregation point for multiple hosts. With complete visibility across physical, virtual and cloud networks, the vSTREAM virtual appliance presents real-time views of end-to-end call trace data and network-wide KPIs, to protect the reliability and availability of networks and application services.

Deployment

NETSCOUT® supports VMware and OpenStack + KVM private cloud, as well as, Amazon Web Services and Microsoft Azure public cloud environments, providing visibility to critical network data that is lost when key network functions and services are virtualized. Administrators can use the full suite of OpenStack and VMware administrative tools to orchestrate the NETSCOUT virtual probes and the virtualized network functions and application services monitored by them.

The vSTREAM virtual appliance supports the virtual and physical nGeniusONE® Service Assurance platform deployments and the InfiniStream® appliance monitoring, analysis and capture software. vSTREAM virtual appliances can be deployed in tandem with physical InfiniStream and InfiniStreamNG™ appliances, to provide seamless, end-to-end ASI-based analysis across the entire network and application service infrastructure.

ASI Technology Overview

The cornerstone of NETSCOUT’s technology approach to service assurance is comprised of Smart Data and Superior Analytics with patented Adaptive Service Intelligence (ASI) technology. Based on wire data, ASI is the foundation of the most robust set of data sources available for use in troubleshooting service and application performance across complex, mission critical, environments. Offering unsurpassed scalability, ASI is delivered on a variety of platforms from hardware appliances and COTS software-based platforms to virtual appliances.

NETSCOUT's vSTREAM virtual appliance is a seamless extension of the nGenius® architecture that provides much needed visibility into Cloud environments. This broad range of ASI-based data sources enables service providers to support a variety of visibility requirements, including on-premise or off-premise, on bare metal, in private cloud or public cloud. All the ASI-based monitoring platforms are integrated with the nGeniusONE Service Assurance platform to provide a common set of metadata analytics.
nGeniusONE Platform

The nGeniusONE Service Assurance platform provides insights into the performance characteristics of data, voice and video service delivery to manage the availability and quality of the user's experience. nGeniusONE helps dramatically shorten the time required to solve network and application performance issues by providing a common set of metadata for service visibility across network elements, applications and devices to address the needs of network and IT operations teams.

ASI Technology

NETSCOUT's patented, ASI technology is a next generation Deep Packet Inspection (DPI) engine that intelligently and efficiently analyzes packet and flow data to provide real-time, contextual analysis of service, network and application performance. ASI provides an unparalleled wealth of information and uses sophisticated algorithms that determine the best way to process, store and retrieve data, guaranteeing that InfiniStreamNG probes make the most efficient use of compute and storage resources.

SPECIFICATIONS

vSTREAM Virtual Appliance

**Hypervisors**
VMware vSphere ESXi Standard, Enterprise, or Enterprise Plus running ESXi v5.5 or v6.0
Linux KVM 2.0.0, QEMU 2.0
OpenStack + KVM

**vSwitches**
VMware vSphere VSS & VDS
Open vSwitch
Cisco Nexus 1000V for vSphere

**Public Clouds**
Amazon Web Services (AWS)
Microsoft Azure

**Virtual Interfaces**
1 Management & 4 Monitoring

**Network Optimization**
Built with Intel® Data Plane Development Kit (DPDK)
PCI Passthrough support
SR-IOV support

**vCPUs**
4 or more

**Memory**
8 GB RAM or more

**vSTREAM Disk**
60 GB or more

**Packet Capture Disk**
Configurable