NETSCOUT

vSTREAM

HIGHLIGHTS

- vSTREAM® for private / public cloud and virtual environments
- Monitors east-west traffic to provide smart data for smart analytics by nGeniusONE® Service Assurance platform and virtual nGeniusONE
- Part of Smart Edge Monitoring solution for service edge and end-user experience monitoring
- Supports public cloud partners including AWS, Azure, GCP, OCI
- Supports VMware™, OpenStack™, Hyper-V, and KVM private cloud
- Supports installation on target servers running Linux, Windows Server
- Supports Docker, Kubernetes, OpenShift

vSTREAM for Service Assurance

The NETSCOUT® vSTREAM complements exiting Adaptive Service Intelligence® (ASI)-based instrumentation to provide the same smart data visibility within the cloud and virtualized infrastructures that is already possible in physical environments. This provides superior end-to-end analytics, adding east-west traffic monitoring to help identify performance problems and security issues wherever they occur. Key functionality of the vSTREAM includes:

- Provides insight into packet traffic and application workloads, providing IT organizations visibility for service assurance, performance management, and cybersecurity purposes
- Supported by nGeniusONE Service Assurance platform and virtual nGeniusONE for views of end-to-end call trace data, network-wide KPIs, alerts, network and application error details, specialized service monitors, and packet decodes
- Used for proactive monitoring, troubleshooting, baselines, and dependencies to protect end-user experience, as well as the reliability and availability of application and network services

Deployment

From a use case perspective, vSTREAM can be used in Software-Defined Networks (SDNs), private and public cloud, co-locations (co-lo), and branches. The different scenarios vSTREAM can be deployed include a dedicated virtual appliance, an agent installed on a target virtual machine, or as a container/pod. Supported in the world's largest and most demanding hybrid cloud environments, including Amazon Web Services (AWS), Microsoft Azure (Azure), Google Cloud Platform (GCP), and Oracle Cloud Infrastructure (OCI), vSTREAM is both easy to deploy and easy to manage.

For virtualized environments, vSTREAM supports deployment in VMware ESXi, NSX-V, and NSX-T environments, OpenStack, Microsoft Hyper-V, and KVM private cloud, providing visibility to critical network data that is lost when key network functions and services are virtualized. It is ideal for real-time monitoring of business-critical traffic running either locally or on a host or as an aggregation point for multiple hosts. For container networks, vSTREAM supports Docker, Kubernetes (K8S), and Red Hat OpenShift.

The agent form of vSTREAM can be installed on bare-metal or can be co-resident with the workload, running in the same Operating System (OS) as the target application(s).

vSTREAM can be deployed in tandem with InfiniStreamNG® software and hardware appliances to provide seamless, end-to-end, ASI-based analysis across the entire network and application service infrastructure.
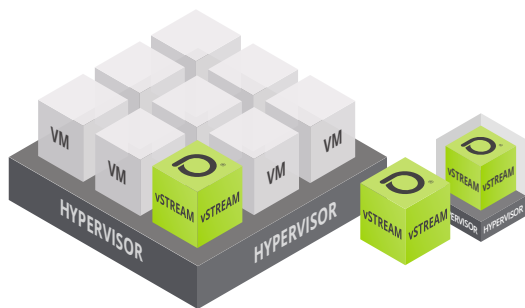

Figure 1: NETSCOUT vSTREAM extends the reach of ASI via software-based solution for critical service visibility in virtual and cloud environments with multiple deployment options, including virtual appliance, agent, and container/pod.

SPECIFICATIONS

vSTREAM Virtual Appliance

Hypervisors	VMware vSphere ESXi Standard, Enterprise or Enterprise Plus running ESXi v7.0, v6.7, or v6.5 Linux KVM 2.0.0, QEMU 2.0, OpenStack OSP 13 (Queens) and OSP 16 (Train) Hyper-V (Windows Server 2012 R2, 2016, 2019)
vSwitches	VMware vSphere VSS & VDS Open vSwitch (OVS) AWS VPC Traffic Mirroring GCP Packet Mirroring
Public Clouds	Amazon Web Services (AWS) – AWS Marketplace Certified Microsoft Azure Certified – Azure Marketplace Google Cloud Platform Oracle Cloud Infrastructure – Certified
Virtual Interfaces	1 Management and up to 4 Monitoring
Network Optimization	Built with Intel Data Plane Development Kit (DPDK) PCI Passthrough support SR-IOV support
vCPU	1 or more (depending on configuration)
Memory	2 GB RAM or more (depending on configuration)
vSTREAM Disk	100 GB
Packet Capture Disk	Configurable

vSTREAM Agent

Guest Operating Systems	Red Hat / CentOS 7.0 through 7.5 Oracle Linux 8.x Amazon Linux 4.9+, Amazon Linux2 (all versions) Ubuntu 18 LTS, 20 LTS SUSE 12
vCPU	1 or more (depending on configuration)
vSTREAM Disk	N/A – Uses host OS Storage

vSTREAM Container/Pod

Environment	Docker, Kubernetes, AWS Elastic Kubernetes Service, Azure Kubernetes Service, Red Hat OpenShift
vCPU	1 or more (depending on configuration)
vSTREAM Disk	N/A – Uses host OS Storage

nGeniusONE Service Assurance Platform

nGeniusONE is a real-time information platform that provides a single pane of glass to view the data, voice, and video service delivery performance to manage both the availability and quality of the user's experience.

NETSCOUT's Smart Edge Monitoring leverages the vSTREAM virtual appliance with smart data from packet monitoring to provide east-west traffic visibility in virtualized environments, as well as, service edge monitoring at the application server edges.

Available on both hardware and virtual platforms, nGeniusONE leverages NETSCOUT smart data as a universal source for providing smarter analytics for end-to-end visibility throughout private, virtualized, public, and hybrid cloud environments.

ASI Technology

ASI technology transforms wire traffic into smart data, providing real-time visibility into user experience for the most advanced and adaptable information platform to ensure security, manage risk, and drive service performance.

NETSCOUT