vSTREAM Virtual Appliance

vSTREAM Virtual Appliance for Service Assurance in Oracle Cloud Infrastructure

The NETSCOUT vSTREAM virtual appliance complements existing 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 Key Performance Indicators (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 in include a dedicated virtual appliance, an agent installed on a target virtual machine, or as a container. Supported in the world’s largest and most demanding hybrid cloud environments, including being Oracle Cloud Ready for use in Oracle Cloud Infrastructure (OCI). Being both easy to deploy and easy to manage, vSTREAM is also supported in Amazon Web Services (AWS), Microsoft Azure (AZURE), Google Cloud Platform (GCP).

For virtualized environments, vSTREAM supports deployment in VMware NSX-V and NSX-T environments, OpenStack, 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 containers, vSTREAM supports Docker and Kubernetes (K8).

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: This illustrates a single Virtual nGeniusONE server deployed in Oracle Cloud Infrastructure together with its associated vSTREAM Agents and vSTREAM virtual appliances.
SPECIFICATIONS

vSTREAM Virtual Appliance

**Hypervisors**
- VMware vSphere ESXi Standard, Enterprise or Enterprise Plus running ESXi v6.7 or v6.5
- Linux KVM 2.0.0, QEMU 2.0,
- OpenStack OSP 13 (Queens) and OSP 16 (Train)

**Operating Systems**
- Red Hat / CentOS 6.5 thru 7.5
- Amazon Linux 4.9+, Amazon Linux2 (all versions)
- Ubuntu 14LTS, 16 LTS
- SUSE 11 and 12

**vSwitches**
- VMware vSphere VSS & VDS
- Open vSwitch (OVS)
- AWS VPC Traffic Mirroring
- GCP Packet Mirroring

**Public Clouds**
- Amazon Web Services (AWS)
- Microsoft Azure
- Google Cloud Platform
- IBM Cloud
- Oracle Cloud Infrastructure

**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
- Amazon Web Services Elastic Network Adapter

**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 6.5 thru 7.5
- Amazon Linux 4.9+, Amazon Linux2 (all versions)
- Ubuntu 14LTS, 16 LTS
- SUSE 11 and 12

**Containers**
- Docker 1.10
- Kubernetes (K8) 1.6.5+

**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.

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.