Corporate enterprise business today relies on the availability and flawless execution of the customer-facing, revenue-impacting application services. Lines of business are benefiting from the promise of rapid deployment and swift agility of application introductions as well as the support for elasticity offered when these services are virtualized and delivered via the cloud. These business goals and consistently efficient customer experience can only be achieved with high-quality service assurance.

NETSCOUT’s vSCOUT™ software agent provides visibility into application services deep in the server farm gaining visibility into east-west traffic in the virtualized world of private, hybrid, and public cloud-based environments.

Application Service Assurance Challenges

Most companies in recent surveys report wide-spread deployment of virtualized network services and high adoption rates of “as-a-service” models. Microservices applications, customer resource management (CRM) and collaboration services are just a few of the essential business applications being virtualized or deployed as a service so when slowdowns and outages occur, users and customers feel the pain.

Pinpointing root cause of degradations has become more challenging given the complexity of the modern environments. Resolution may be delayed and time lost as equipment and service vendors claim innocence as to the source of the problem. Those issues are compounded by gaps in monitoring and service assurance visibility for virtualized server technology that IT organizations and cloud providers have been leveraging in their data centers for years.

Bridging the Gap with vSCOUT Software Instrumentation

Overcoming deployment issues and cost concerns have, to date, been barriers to achieving the necessary visibility into virtualized applications, regardless of whether they are hosted in private data centers or public cloud environments. Based on wire data, NETSCOUT’s extended Adaptive Service Intelligence™ (ASI) technology provides smart data and is the foundation for the most robust instrumentation available to monitor and analyze service delivery of applications throughout the modern IT landscape. Our innovative vSCOUT software agent expands the reach of ASI to places unfeasible for a physical probe, thus overcoming visibility challenges for deeper analysis of the east-west traffic of virtualized applications.

vSCOUT

vSCOUT is ideal for monitoring virtualized services within data centers or public cloud infrastructures, where traditional packet acquisition techniques are not feasible or cost effective. This newest generation of ASI-based software products monitors and converts high-volume east-west traffic into highly structured, multi-dimensional metadata, also known as, smart data, in real time, thus providing a highly scalable and affordable option for managing the complexities of applications deployed in hybrid environments. The vSCOUT agent sends only light-weight KPIs across the infrastructure to provide deep insight into

Figure 1: The nGeniusONE platform supports superior analytics from vSCOUT deployed throughout the application service delivery environments. In this case, vSCOUT monitors and provides KPIs to help nGeniusONE pinpoint application service health & performance issues in private or public cloud.
vSCOUT In Action

Virtualized data centers aim to automate time-consuming manual tasks, helping IT introduce new application services faster while cutting costs. With industry-leading support out-of-the-box for more than 1,000 data, voice, and video, and micro-services applications, the nGeniusONE platform is designed for use in both physical and virtual environments in the world’s largest and most demanding enterprise, government, and service provider networks. With the addition of vSCOUT, IT organizations now have platform-agnostic smart data instrumentation for comprehensive visibility driven by smart data that reveals critical insights for service assurance of virtualized applications.

With vSCOUT and the extended nGeniusONE solution, IT organizations can:

- Gain holistic end-to-end view of application session details throughout the physical and virtualized environments
- Discover service dependencies across application, compute, and network workloads
- Ensure the delivery of applications and services with high-quality experiences
- Quickly triage root cause and repair service issues with in-depth analysis and actionable insights from Service Monitors for HTTP, Micro-services, and more
- Establish cost-effective, pervasive application visibility across multi-cloud and hybrid environments
- Optimize service performance and minimize costs

Benefits of vSCOUT for Application Service Assurance

- Holistic End-to-End Application Service Assurance – Triaging issues faster decreases Mean-Time-to-Repair (MTTR) with proven workflows useful for end-to-end, comprehensive service assurance across the application ecosystem, regardless of how the application is deployed in physical servers in data centers or virtualized servers in hybrid cloud environments
- Seamless, Affordable Application Visibility – vSCOUT is efficiently priced to make pervasive instrumentation feasible. vSCOUT can be deployed everywhere and enabled as needed for application service visibility.
- Minimize Tool Complexity and Optimize Investment – vSCOUT is an integral part of achieving a holistic service assurance strategy. vSCOUT, like vSTREAM and InfiniStreamNG™ appliances, is an ASI-based data source. Operating in concert, all these NETSCOUT® data sources are supported by the same nGeniusONE workflows for a complete network and application service assurance solution.
- Reduces Time-to-Value – The quick, plug-and-play deployment of vSCOUT harnesses the full power of IP intelligence, recognizing thousands of common protocols and applications including voice, video, data and micro-services applications.

Performance of virtualized applications. Yet it is able to provide full packet capture on demand when necessary for security tools or other purposes when packets are required. vSCOUT is:

- A micro-service that runs on the same Guest OS as the target application service
- Deployed in AWS Linux, Windows Server, RHEL/CentOS, and/or Ubuntu operating systems
- Resides alongside the application in a virtual machine or container, monitoring application and servers in motion

As used in conjunction with the nGeniusONE™ Service Assurance platform and/or Virtual nGeniusONE platform, vSCOUT:

- Reports critical key performance indicators (KPIs)
- Supports Service Dependency mapping
- Provides Service Dashboard rollups
- Performs Service Monitor and Traffic Monitor analysis and views of monitored traffic
- Delivers continuous reporting on application behavior, regardless of virtual machine / container location or movement

vSCOUT helps identify application service health and performance issues and can also be configured to forward copies of the server’s packets to a vSTREAM™ for full ASI functionality.