Visibility for Service Assurance of Cloud Services

The NETSCOUT Approach
Extending your service assurance methodologies and workflows into your cloud environment is easy and predictable with NETSCOUT®, your trusted and committed partner for Cloud Migration and server farm application assurance. The NETSCOUT approach to service assurance is built on a foundation of visibility for smart data and superior analytics. Based on packet data, NETSCOUT patented Adaptive Service Intelligence (ASI) technology provides the most robust data source available to monitor and analyze service delivery of applications throughout the modern IT landscape. NETSCOUT vSTREAM virtual appliance provides a seamless extension of your nGenius® architecture into your Cloud environment, and at new lower cost of ownership enhancing and ensuring the success of your cloud migration initiatives.

Dramatically accelerate your Migration and Technology initiatives in the Cloud while maintaining your business continuity and corporate leadership

Challenges
According to EMA’s Research Summary: Network Engineering and Operations in the Multi-Cloud Era, as many as 84% of respondents are using more than one cloud provider. Most of the respondents were using two or three providers, however, 7% were leveraging over six providers. Multi-cloud can be considered common-place, and that creates its own set of challenges and complexity in assuring quality performance with several environments involved.

Many enterprises identify several reasons for migrating to the cloud including more agility, retirement of legacy systems, capital cost savings, and as a way to deliver powerful solutions for their businesses and customers.

The increased dependence on multi-cloud technologies and the risk that these initiatives may slow down or fail is an obvious concern. Rapid resolution of problems impacting services running through the cloud is a high priority for any enterprise or government agency. The large, complex, hybrid IT systems, consisting of legacy, private cloud and public cloud infrastructure, present significant challenges for IT teams tasked with discovering the root cause of a slowdown or degradation. Specific challenges include:

- Lack of credible information on all service dependencies to ensure a complete move.
- Lack of packet data service assurance solutions that work in public cloud environments.
- Inefficiencies with backhauling copies of packets from the public cloud to on-premises tools that consume excessive network resources and may be cost prohibitive.
- Business concerns related to moving services to the public cloud due to fear of extended performance degradations, outages and costly mistakes in cloud resource allocation, exacerbated by the gap in protection of packet-based visibility and service assurance analysis.
- Hurdles in gaining visibility to the wire-data in virtualized environments.

NETSCOUT is a visionary and committed partner, who has the experience and resources to dramatically accelerate these migrations and technology initiatives to help maintain business continuity and leadership.

Top Cloud outages of last several years have impacted CRM, e-mail, revenue, and DNS services for minutes to hours. Impact $$$$$!
Figure 1: NETSCOUT extends the power of wire data and ASI directly into the heart of an enterprise’s mission-critical applications – on- or off-premises; on bare metal, in private or public cloud.

Our Solution
The nGeniusONE® Service Assurance platform provides unrivaled visibility into IP-based business services, along with contextual workflows to speed problem resolution, making the solution both easy for a Level 1 responder to use and powerful for an expert to operate. Rather than looking at individual elements in isolation, nGeniusONE provides an overarching view into the performance characteristics of the components, micro services, and / or containers associated with service delivery of applications. In conjunction with the NETSCOUT proven nGeniusONE platform, vSTREAM virtual appliance software makes all of this possible by extending the power of packet data and ASI directly into the heart of an enterprise's mission critical applications, whether they are on-premises or off-premises; on bare metal, in a private cloud or in a public cloud. This view exposes underlying service dependencies that help IT teams to more effectively manage health, availability, and user experience issues.

Only NETSCOUT nGeniusONE with vSTREAM empowers enterprises to confidently migrate applications and services to both public and private clouds. Leveraging packet-based data, vSTREAM creates smart data using ASI technology that provides rich information related to the application service and networked traffic. This makes vSTREAM ideal for monitoring hybrid cloud deployments and for managing the migration of applications into the public cloud.

Delivering Value to Enterprises Migrating to and Using the Cloud
IT must support the hybrid environment of public and private cloud along with the legacy environment to deliver services. NETSCOUT Service Assurance solutions help enterprises ensure successful rollouts and ongoing service performance for Public Cloud, Private Cloud and Legacy Infrastructure. NetOps and AppOps alike can collaboratively use ASI-based wire data to provide a complete view of application flows for service triage, proactive monitoring and deployment readiness before, during and after migrating to the cloud. This offers significant benefits enabling enterprises to:

- Meet business objectives and migrate to the cloud with confidence, using smart data and analytics from nGeniusONE and vSTREAM.
- Solve problems rapidly and economically with more complete visibility into East-West as well as North-South traffic by using vSTREAM to monitor packets flowing into and out of the application servers, including those in a micro-services architecture application.
- Greater IT productivity and vendor collaboration with visibility across all platforms for single pane of glass views and analysis for voice, data, virtualized environments, and private / public cloud.
- Reduce MTTR with true visibility into the health of application components, their interdependencies and interactions with the broader IT infrastructure.
- Achieve comprehensive coverage of application services and vulnerabilities, on- or off-premises; on bare metal, in private or public cloud, today and into the future.

Only NETSCOUT extends the power of packet data and ASI directly into the heart of an enterprise’s mission critical applications – on- or off-premises; on bare metal, in private or public cloud.