Service Assurance in State Government

Many State Government Information Technology (IT) teams today are balancing two high-profile missions: implementing digital transformation initiatives that include Cloud computing and citizen engagement projects, while simultaneously addressing daily demands tied to their role as “service provider” to dozens of essential State agencies. Further exacerbating those challenges, these IT teams face budget fluctuations, greying workforces, and aging technology environments, as well as State-critical network platform migration and expansion plans. Other key challenges include keeping pace with in-place Governmental IT Strategic Planning Initiatives and providing more efficiently delivered services to State residents at a lower cost.

State residents are adversely impacted if, and when digital initiatives falter or agency services experience performance issues. For that reason, State IT teams benefit from Service Assurance technology solutions providing end-to-end views into, and always-on monitoring of, their disparate multi-vendor network, application, and Unified Communications & Collaboration (UC&C) environments.

Our Approach

With industry-leading service assurance products, NETSCOUT® solutions are designed for mission-critical State, Local, and Federal Government multi-agency network, application, and UC&C environments.

The NETSCOUT nGeniusONE® Service Assurance platform provides State Government IT teams with the end-to-end network visibility and always-on monitoring necessary for assuring valuable business applications for State agencies, employees, and constituents. Further, as high-profile deployments for State-level digital transformation projects are rolled out, nGeniusONE provides visibility throughout the initiative, from pilot phase, to subsequent transitions involving initial production and ongoing agency operations.

The patented Adaptive Service Intelligence™ (ASI) technology is an intrinsic element of NETSCOUT’s Service Assurance solution, providing a common data source for nGeniusONE performance analytics by transforming high-value wired/wireless traffic into “smart data.” NETSCOUT’s smart data also factors NetFlow and other flow data, with those data elements converted to ASI metadata for Service Assurance analytics.

Our Solutions

The nGeniusONE platform addresses the top priorities articulated by today’s State Chief Information Officers (CIOs), equipping IT teams with a Service Assurance solution that provides a services-oriented approach toward ensuring critical State services – reliant on network, voice, video, email, mobile, virtual, and Cloud platforms – are available and performing at high levels.

NETSCOUT’s Service Assurance solution helps unite the performance analytics used by State Network, Application, and UC&C teams and IT business owners, with nGeniusONE providing one vendor-agnostic technology platform. State agencies are using NETSCOUT to tackle the IT challenges detailed in the subsections that follow.

Broadband & Connectivity Support

Many IT teams continue their efforts to provide available, reliable, and cost-efficient Internet access to residents and schools, especially in those States with rural populations.

The nGeniusONE platform and ASI technology provide critical insights regarding how new broadband services are performing before problems become customer complaints. nGeniusONE with ASI provides detailed IP-level insight and holistic visibility into network and service domains, providing State IT teams, and their third-party WAN providers, with actionable intelligence to reduce mean-time-to-repair (MTTR). This may also aid in preventive measures for the IT team and/or agency, as the ongoing historical analysis and reporting will illustrate trends that may lead to adding or reducing bandwidth prior to a user-impacting bottleneck, or to avoid over-subscription and cost overrides.

Cloud Migration Support

In response to many State CIO priorities, State IT teams are migrating to Cloud-based platforms and Infrastructure-as-a-Service (IaaS) solutions to maximize staff efficiency and service delivery, while reducing OPEX.

With NETSCOUT’s “Cloud Smarter” approach, the nGeniusONE platform allows State IT organizations to achieve full visibility...
into applications and services, helping them to seamlessly migrate to the Cloud. nGeniusONE provides visibility across the entire stack, including interdependencies for the application and service delivery infrastructure. NETSCOUT’s Cloud Smarter solution also leverages NETSCOUT’s pervasive instrumentation for Cloud environments with software-based vSCOUT™ and vSTREAM™ solutions. vSCOUT and vSTREAM help achieve cost-effective monitoring to assure Cloud projects, using ASI smart data to assess performance before, during, and after migration, regardless of the private, public, or hybrid Cloud strategy or vendor technology (e.g., AWS, Azure, or Google Cloud) utilized.

Cybersecurity Support

With many States prioritizing cybersecurity safeguards, government agencies must have real-time, accurate insights into their IT security postures to enable swift and effective responses to cyberthreats. The nGeniusONE solution provides visibility into potential service performance problems, enabling IT teams to proactively triage outages or degradations before they impact users, accelerate through security forensics, and rapidly respond to problems.

In addition, Arbor Networks, The Security Division of NETSCOUT, has developed Spectrum™, which when combined with NETSCOUT InfiniStreamNG™ technology provides a high-performance network threat analytics platform that helps IT reduce their “time to know” critical threats are already inside the organization. Arbor Spectrum’s real-time, high-performance traffic archive is now integrated with NETSCOUT’s InfiniStreamNG and ASI technology.

Network Visibility Support

As State IT networks are growing and evolving to accommodate new digital platforms and additional users, so, too, are associated performance monitoring infrastructures. The challenges are especially acute as States upgrade their networks to 40G and 100G.

NETSCOUT nGenius® Packet Flow Systems (PFS) optimize the flow of traffic from the network to security systems and the nGeniusONE platform, providing traffic aggregation, traffic distribution & load balancing, and interface/speed conversion. State IT teams benefit from the NETSCOUT PFS solution’s ability to optimize and scale nGeniusONE and cybersecurity deployments, so that they can spend less time adding, testing, and managing their tools.

Shared Services Support

In implementing shared services (e.g., data center and Cloud resources) for multiple State- and Municipal-level government services, many IT teams are addressing budget challenges by realizing associated IT cost reductions and operational efficiencies. However, such shared services are often accompanied by Service Level Agreements (SLAs) that require the need to assure network, application, UC&C, Cloud, and virtual performance elements. For those reasons, State IT teams operating multi-tier service delivery architectures for shared services initiatives benefit from nGeniusONE’s ability to leverage key data points from the network, application, server, database, and devices to provide service-oriented analysis. In this manner, nGeniusONE with ASI creates a system with visibility across the entire service delivery fabric, enabling all branches of IT to ensure high performance delivery.

In addition, the NETSCOUT nGeniusPULSE application (which integrates with nGeniusONE) provides infrastructure health monitoring, testing, and SLA Management for private, public and/or hybrid Cloud-based applications, equipping State IT with a crucial tool to validate the service performance of their technology vendors.

Web-based Services Support

State agency Web-based services support citizen and business access to numerous government resources, including housing, automotive registration, unemployment, property, and tax functions. For Web-based applications, nGeniusONE with ASI provides a comprehensive view of service performance across complex multi-tier, multi-vendor, and multi-location environments. ASI leverages wired and wireless data for extracting key performance metrics across all service domains. In providing State agencies with a single platform with which to assure delivery of Web-based services, nGeniusONE provides real-time analysis for visibility of all HTTP and HTTPS traffic flows, removing the need to rely on server agents or vendor-specific tools.

Complementary NETSCOUT Solutions

In complementing the nGeniusONE platform, State Government IT teams benefit from the flexibility of the NETSCOUT OptiView® XG Network Analysis tablet, which supports full WLAN lifecycle management and network infrastructure analysis troubleshooting. The OptiView XG tablet enables local technicians to performance Wi-Fi and wired network infrastructure troubleshooting at a variety of State-owned buildings.

For wireless network projects, the AirMagnet® Enterprise monitoring platform provides an independent view into the security and performance status of the wireless access point infrastructure (controller- and Cloud-based).

Our Value to State Government

NETSCOUT Service Assurance solutions enable State Government IT organizations to:

- Reduce MTTR to pinpoint the source of slow-downs in State services that impact employee productivity and/or residents’ ability to access benefits
- Successfully pilot and implement digital initiatives and migrate associated platforms with confidence, including monitoring before, during, and after deployment to assess network, application, and UC&C technology performance impacts
- Vendor-agnostically visualize wide-ranging third-party and custom applications operating across large-scale State networks and in the Cloud
- Establish proactive, cost-effective bandwidth management plans with baselines of service utilization and response times of new and existing services
- Achieve high-quality service delivery end-to-end across the enterprise, on premise, or in the Cloud
- Reduce mean-time-to-knowledge (MTTK) with rapid service triage
- Save time by eliminating finger pointing between State IT project stakeholders and vendors

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