nGeniusPULSE

Visibility to the Edge of the Network
Monitor Availability and Performance of Enterprise Business Services

Product Overview
As part of the nGenius Service Assurance portfolio providing end-to-end network visibility, nGeniusPULSE is an always-on and automated solution for cloud, hybrid, and virtual environments that helps customers manage the user experience and isolate issues between assets they own and the multitude of service providers they use. nGeniusPULSE also correlates service delivery with health of the supporting infrastructure, ensuring that the most critical elements of the business eco-system are connected and working.

With automatic and continuous active (synthetic) testing of business services availability and performance, nGeniusPULSE provides 24x7 monitoring of critical applications and services from anywhere in the enterprise; in the DataCenter, at remote branches, with remote workers, for IoT devices and more.

The nGeniusPULSE solution is centrally-managed and deployed in a data center on a hardware or virtual server appliance. Sensors, called nPoints, are deployed anywhere throughout the organization to run active tests – over wired or Wi-Fi connections, and send results to the nGeniusPULSE Server. From the Server, results are displayed in an intuitive interface that includes dashboards, drilldowns, and alerts, as well as easy-to-use configuration and administration and an API for data extraction or configuration. nGeniusPULSE includes direct technical support from NETSCOUT’s best-in-class support teams with 24x7 support services.

nGeniusPULSE also extends the service-oriented approach of nGeniusONE and Adaptive Service Intelligence™ (ASI) to infrastructure monitoring. When an issue is identified by nGeniusONE and isolated as a potential infrastructure problem, IT can drill-down directly from the nGeniusONE console to the underlying and specific infrastructure element in question within nGeniusPULSE.

Product Capabilities
• Enterprise Business Application Availability Monitoring
• Compare Business Service Performance via Wired and/or Wi-Fi Connections
• Business Transaction Testing (BTT) - Customer-Defined Testing from Web Application Login-to-Logout
• VoIP Call Testing
• Network Performance Testing
• VPN Availability
• HTTP, HTTPS, DNS, FTP, and Other Network Service Tests
• Network Path Monitoring
• Wi-Fi Infrastructure Health and Availability Monitoring
• Network Device Health and Availability Monitoring
• Server Health and Availability Monitoring
• Advanced Custom Test Script Platform
• Hardware and Software Monitoring Agents
• Web-based User Interface
• Up/Down and Performance-based Alerting
nGeniusPULSE supports monitoring wireless network infrastructures that use these controllers:
- Cisco hardware controllers (2500, 5500, 8500 series)
- Aruba hardware controllers (7000 and 7200 series)
- Aruba Instant Access Points (IAP) when Virtual Controller IP is enabled
- Ruckus Virtual SmartZone v3.6 and higher

nPoint Deployment Options
nGeniusPULSE has deployment options to fit multiple scenarios and conduct active tests from anywhere users are located. nPoints provide continuous and automatic testing from locations such as warehouses, branch offices, laptops of users working from home, individual floors in a building, server closets - or even on “things” such as trains, ambulances, forklifts, or ships. An organization can deploy one or multiple types of nPoints, in any combination, depending on testing requirements and environment.

- **nPoint 3000** – Conduct service tests via Wi-Fi and wired connections to compare results. The hardware nPoint 3000 is a small purpose-built device with a built-in Wi-Fi radio allowing you to monitor service delivery – including SaaS, data center apps, VoIP, and network performance tests over wired and/or Wi-Fi connections from any location. The nPoint 3000 can also perform Business Transaction Tests from anywhere it is deployed.
- **nPoint 2000** – Conduct service tests over Ethernet connection. The nPoint 2000 is a small, purpose-built hardware device that runs on Power-over-Ethernet (PoE) and can easily be deployed anywhere to perform business service tests. If PoE is not present, a simple PoE injector can be used.
- **Virtual nPoint** – The nPoint 3000 and nPoint 2000 can be deployed as a software-based agent on Windows or Linux machines such as laptops, servers, or VMs – or emailed to a remote home-based user who is having issues to help diagnose the problem. This is especially useful when troubleshooting a problem at a remote location where you do not already have instrumentation.
## SPECIFICATIONS

### Hardware Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>nPoint 3000</th>
<th>nPoint 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wi-Fi</td>
<td>802.11ac 2x2 radio</td>
<td>None</td>
</tr>
<tr>
<td>Power</td>
<td>PoE 802.3af/at, USB-C</td>
<td>PoE 802.3af/at</td>
</tr>
<tr>
<td>Ethernet</td>
<td>1 Gbps</td>
<td>1 Gbps</td>
</tr>
<tr>
<td>Mounting</td>
<td>Mounting holes, Kensington lock</td>
<td>none</td>
</tr>
<tr>
<td>Size</td>
<td>5.25 x 5.25 x 1 inches 133 x 133 x 25 mm</td>
<td>4.4 x 1.6 x 1.3 inches 111 x 41 x 33 mm</td>
</tr>
</tbody>
</table>

### Virtual Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>nPoint 3000</th>
<th>nPoint 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Platform Requirements</td>
<td>CPU: 2-Core, RAM: 4 GB, Storage: 2 GB</td>
<td>CPU: 2-Core, RAM: 2 GB, Storage: 1 GB</td>
</tr>
</tbody>
</table>

### Testing Capabilities

<table>
<thead>
<tr>
<th>Feature</th>
<th>nPoint 3000</th>
<th>nPoint 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Network Performance</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>VoIP</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Business Transaction</td>
<td>✓</td>
<td>–</td>
</tr>
<tr>
<td>Wi-Fi</td>
<td>✓ (NP3000-H)</td>
<td>–</td>
</tr>
</tbody>
</table>
### Hardware Specifications

| Platform         | Dell R740 R2  
|------------------|----------------|
| CPU              | 2 Intel Xeon Silver 4110  
| RAM              | 96 GB  
| Storage          | 10x1 TB, 2x600 GB  
| Power            | Dual, Hot-Plug, Redundant Power Supply (1+1), 750W  

| Platform         | Super-micro: 800-1248 V4 1U  
|------------------|----------------|
| CPU              | 8-Core Dual Broadwell 2.1 Ghz  
| RAM              | 64 GB  
| Storage          | 16 TB  
| Power            |  

### Virtual Specifications

| Production Requirements |  
|-------------------------|----------------|
| CPU                     | 16-Core  
| RAM                     | 64 GB  
| Storage                 | 4 TB  

| Minimum Requirements |  
|----------------------|----------------|
| CPU                  | 4-core  
| RAM                  | 16 GB  

| Standby Server        | Available in both hardware and virtual models  
|-----------------------|-----------------------------------------------|
| Storage               | 50 GB  

### System Capacity

| nPoints               |  
|-----------------------|----------------|
| nGeniusPULSE Server   | supports up to 5,000 nPoints*  

*Total number varies based on type and frequency of tests being run

| Monitored Elements (MEs) |  
|--------------------------|----------------|
| nGeniusPULSE Server      | with built-in Collector supports up to 25,000 MEs  
| nGeniusPULSE Collector   | (external) supports up to 50,000 MEs  

### 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.

---

**nGeniusPULSE**

**nGeniusPULSE Collector**

**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.