nGeniusPULSE

Synthetic Testing for Availability and Performance of SaaS Business Services

Product Overview
nGenius® PULSE is a highly-scalable, synthetic or “active test” solution. Active testing automatically and routinely simulates real user actions accessing SaaS applications – even if no active users of the application are on the system, in order to proactively alert for issues or outages. The nGeniusPULSE solution is deployed in a data center on a virtual server. Agents, called “Pulses” can be placed anywhere to run active tests 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 functions. nGeniusPULSE includes direct technical support from NETSCOUT’s best-in-class support teams with 24x7 support services.

Product Capabilities
- Test up to 50 different business services on a single virtual server
- Measure service levels from anywhere users are located
- Create your own custom tests
- Simple to set up and easy to use – start testing in minutes!

Pulse Deployment Options Provide Flexibility to Test from Anywhere
nGeniusPULSE has two Pulse deployment options – hardware & software, to conduct active tests. Each Pulse tests from the location where it’s deployed. An organization can deploy either type of Pulse, or both, depending on testing requirements and environment.

The hardware NETSCOUT Pulse 2000 is a micro-appliance device that can simply be plugged into PoE (Power over Ethernet) anywhere – providing 24x7 continuous testing from that location, automatically. Common uses are in warehouses, individual floors in a building, server closets, or other remote locations. The NETSCOUT Pulse 2000 can be deployed when users don’t have access or rights to download Pulse agents to a laptop, desktop or server, or when they have machines that might be shut down at the end of the day, thereby stopping 24x7 monitoring.
The software Pulse, called a Virtual Pulse, is a small (12MB) software based agent that can be downloaded to Windows or Linux machines. It is very useful when the requirement is to monitor from a specific PC or server, especially in remote offices or locations. Virtual Pulses can be simply emailed to a user or location to begin monitoring and troubleshooting within a matter of minutes.

Test any SaaS Application
nGeniusPULSE can test for the availability and performance of any SaaS application. Test set up is simple with configuration options to test only for specific results (e.g., HTTP Response Code - 200), setting test frequency (from every 1-minute to once-an-hour), setting thresholds for alerts based on performance metrics, and running the test from specific Pulses or from all deployed Pulses. nGeniusPULSE performs HTTP and HTTPS tests to measure service availability and delay. Delay is broken down into application, DNS, SSL, client, network and server. nGeniusPULSE’s Test Now feature allows users to run ad-hoc or on-demand tests for more detailed analysis; including test details and trace routes from the Pulse to the web service’s location.

The drilldown capability from the dashboards exposes individual test results and performance over various lengths of time i.e. current, the last 8 hours, last 7 days, etc. Results are shown in easy-to-read graphs with an option to drilldown even further to see detailed results from each test.

### SPECIFICATIONS

**nGeniusPULSE Server**

VMware vSphere® version 5.5 or later is required

For operating up to 250 Pulses, a virtual server with:

- 6-Core CPU
- 20 GB RAM
- 600 GB Disk

For operating up to 1500 Pulses, a virtual server with:

- 12-Core CPU
- 96 GB RAM
- 1.2 TB Disk

**NETSCOUT Pulse 2000**

**Dimensions**

- 4.36 in (11.1 mm) Height
- 1.6 in (40.6 mm) Width
- 1.28 in (32.5 mm) Depth

**Weight: Model 1000/2000 (with Batteries)**

0.250 lbs (0.116 kg)

**Battery**

2 AA Alkaline

**Power over Internet (POE)**

48VDC range 44V - 57VDC class 0 device

**Operating Temperature**

32°F to 122°F (0°C to 50°C)

**Operating Altitude**

13,123 ft. (4,000 m)

**Storage Temperature**

-4°F to 140°F (-20°C to 60°C)

**Storage Altitude**

39,370 ft. (12,000 m)

**Relative Humidity**

5% - 90% (non-condensing)

**Shock and Vibration**

Random 2g, 5Hz – 500 Hz (class 2), 1 m drop

**Safety**

CAN/CSA-C22.2 No. 61010-1-12, UL Std. No. 61010-1 (3rd Edition), IEC61010-1:2010, Pollution degree 2s

**EMC**

EN 61326-1:2006

**Certifications and Compliance**

Conforms to relevant European Union directives

Conforms to relevant Australian standards

Listed by the Canadian Standards Association

Conforms to relevant FCC standards

**Virtual Pulse**

**Available for:**

- Windows® 7, 8, 8.1, 10
- Windows Server® 2008 R2
- Windows Server 2012 R2
- Red Hat® Enterprise
- Ubuntu
Create Custom Tests
There are many other metrics that Network Operations teams may want to test. For convenience, Ping and Port open tests are pre-configured in nGeniusPULSE. Custom tests can be created by writing scripts that can be imported of active testing and the results are then displayed on dashboards. nGeniusPULSE allows the creation of custom tests by writing test scripts that can be imported into nGeniusPULSE for active testing and the results are then displayed on dashboards. Once written, custom tests run routinely and automatically at desired intervals from each desired Pulse location; and just as with all other tests in nGeniusPULSE, results are available on dashboards with graphs and drilldown capability for detailed analysis.

Compliment Real User Measurement Testing and Packet Analysis in NETSCOUT’s nGeniusONE
Combined with nGeniusONE®, the synthetic testing performed by nGeniusPULSE delivers total visibility of the enterprise by routinely and automatically monitoring applications and services for performance and availability – even when no one else is using them. Furthermore, this synthetic traffic can route through nGeniusONE – just like any other traffic, for deep-dive analysis when needed.