NE1ONE
PROFILE | PREDICT | PREPARE

Network Emulation Data sheet

NETWORKcomputing
AWARDS 2016
★ WINNER ★
BENCH TESTED HARDWARE
PRODUCT OF THE YEAR
- HARDWARE CATEGORY

iTRINEGY

Rapid Recreation of Real-World Network Environments

NE-ONE Emulator is available in a choice of models to suit your needs

✓ **Intelligent Pictorial GUI**

✓ **Geolocation Network Latency Calculator**

✓ **Database of more than 53 impairments pre-installed**

✓ **Network Scenario Builder & Player with pre-installed examples**

The NE-ONE Emulator has been designed with ease-of-use in mind. Whether you are an Application Developer, Software Tester, Network Engineer or a Systems Architect, it will enable you to quickly and easily recreate a wide range of realistic networks (LAN, WAN, Internet (cloud), Wi-Fi, (A)DSL, Mobile, Satellite, etc.) in order to verify application performance.

INTUITIVE & INTELLIGENT PICTORIAL WEB GUI

At the heart of NE-ONE's ease-of-use is its intelligent user interface which is designed to make setting up and running a real-world test network achievable in a few minutes. It eliminates the need to spend hours learning complex tools with cumbersome tabular interfaces and scripting. Instead, use your preferred browser (no plug-in required) and select the required values using pre-populated network parameters from drop-down menus.

AUTO-CONFIGURATION—REMOVING THE GUESS WORK

NE-ONE has a range of Auto-Configuration capabilities to save you time and remove the guess work or need to be a network specialist when setting up your emulation:

Geolocation Network Latency Calculator

Imagine you need to emulate a link from New York to London but you're unsure of what latency to use. NE-ONE comes with a catalogue of over 42,000 locations, so simply choose the required start and end point locations and NE-ONE will calculate and insert the base latency for you.
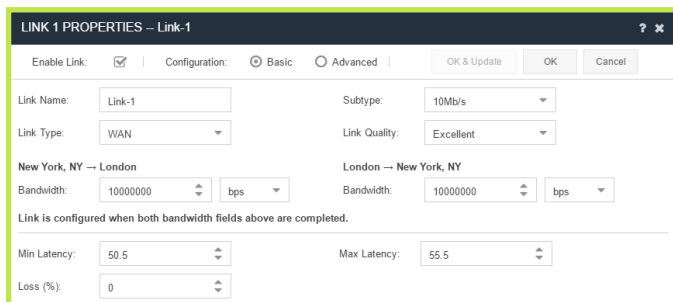
Predefined Link Types & Associated Properties

You know that you need to test using a 4G network, a VSAT link or some other type of network but how do you go about creating a range of real-world network experiences?

Drawing on our expertise, we have populated the NE-ONE with representative latency, loss, bandwidth, etc. values reflecting Excellent, Good, Average and Poor link qualities experienced in real networks.

However, for more experienced users or where specific conditions need to be configured, NE-ONE has comprehensive impairment options available.

NETWORK SCENARIO BUILDER & PLAYER

The drag & drop Network Scenario Builder & Player lets you easily create time-based network scenarios to test how applications handle variations in network quality and availability.

It allows you to rapidly create a chronological network experience by combining emulations and/or other scenarios together to be run over time.
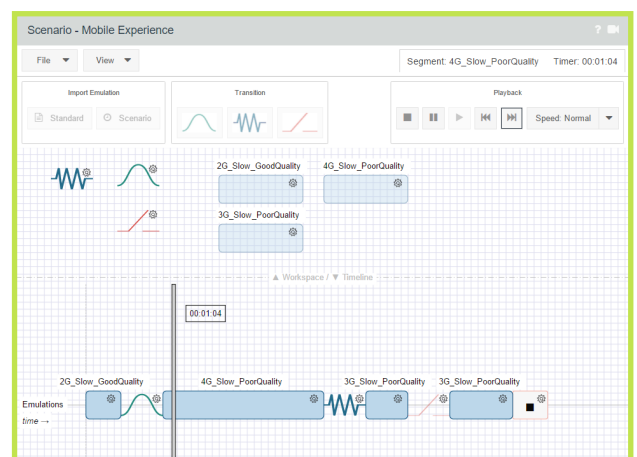
The realism of the network experience can be further enhanced by adding intelligent transitions between each element. Transitions define how NE-ONE will handle the changes, for example a variable transition from a 3G to 4G network or perhaps an momentary outage between the change.

NE-ONE's Scenario Builder comes with a number of example network scenarios including office, coffee shop, underground station, car journey, cruise ship and train. Each scenario provides a realistic representation of what can happen to the network conditions when a user's location changes and application performance is affected.

MULTIPLE CONCURRENT LINKS (PATHS)

NE-ONE's multi-link feature can simultaneously emulate up to 20 different network links (paths) between the end points, each link with its own characteristics, helping to save valuable testing time. For example, you can set up three links for 2G, 3G, 4G mobile networks and concurrently compare their application performance. NE-ONE's Link Qualification Criteria enables you to define what IP Addresses, Applications or VLANs use which link.
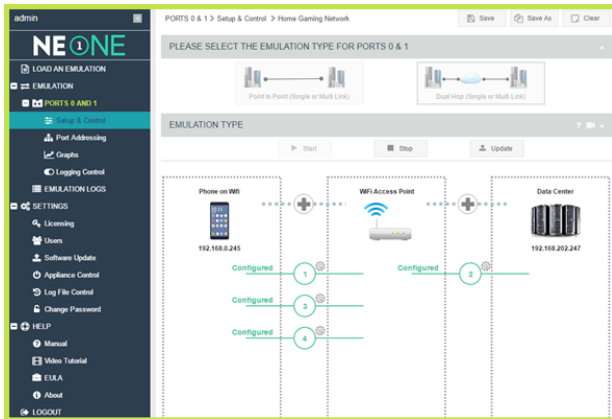
DUAL HOP/LAST MILE EMULATION

Frequently real networks comprise more than a single segment i.e. Dual Hop. There is often another significant portion of the network chain, including a "last mile" hop.

For example a datacenter to a branch office could include a WAN and Wi-Fi in the data path. NE-ONE's Dual Hop feature allows you to pictorially configure these hops quickly and easily to provide an overall experience to test with.

REAL-WORLD CONDITIONS

When used in Advanced Mode, NE-ONE provides access to more than 50 network impairments that provide accurate, realistic, repeatable and controllable network conditions. Each of these are further customizable to enhance the realism of your test setup. Please refer to the *"NE-ONE Emulator Impairment Data Sheet"* for more information.

GRAPHS AND STATISTICS

NE-ONE's built-in graphing feature allows you to view key network performance metrics in the GUI. You can also export these statistics for use in other analytical tools enabling you to visualize and understand how the applications are being affected by changes in the network.

COMMAND LINE INTERFACE (CLI) &API

Easily integrate testing over real-world network conditions into your existing test cycle by using NE-ONE's CLI or API to automate changing network conditions from your functional and/or performance test tools or test scripts. This significantly enhances test processes to identify network deployment risk with minimal impact on test time and resources.

MULTI-USER / MULTI-TENANCY

Multiple simultaneous users can access the NE-ONE enabling effective collaboration on configurations, graphs and test results.

Furthermore, multi-tenancy also allows two groups of users* to simultaneously configure and operate their own individual emulations with independent log-ins at the same time using the same appliance. This negates the need to run and maintain two separate emulators.

LCD CONTROL PANEL

The appliance LCD provides rapid initial configuration. Additionally, emulations can be selected, run and managed through this LCD panel. This is particularly useful when working in labs and comms rooms where it isn't always convenient to connect a device with a web browser.

PROFILER READY

All NE-ONE models come pre-installed with a sophisticated Network Profiling capability. This feature switches your appliance into a powerful network application performance monitoring & measurement solution.

In addition, the NE-ONE Profiler can analyze (and profile) application performance on existing networks. These profiles can be imported directly into the NE-ONE Emulator so that you can test application performance based on your actual network conditions.

Please refer to the *"NE-ONE Profiler Data Sheet"* for more information.

FUTURE PROOFED INVESTMENT

The NE-ONE appliance is a three model range designed to meet your testing requirements and budgets. Please see the *"NE-ONE Product Comparison Sheet"* for model specifications.

All appliance models share the same hardware platform, so should your requirements change, you can easily upgrade or add profiling by purchasing a new licence key.

OPTIONAL CARRY CASE

As a portable network emulator, the NE-ONE appliance is ideal for sharing between department and locations. To ensure your NE-ONE is protected we offer the a military-grade ruggedized carry case option.

LOOKING FOR A VIRTUAL SOLUTION?

Recognizing the growing trend towards testing in virtual environments, iTrinegy also offers the NE-ONE as virtual appliances.

Certified by VMware as VMware-Ready, you can find details of the NE-ONE Virtual (Flex) products on the iTrinegy web site (www.itrinegy.com).

BOOK A DEMONSTRATION OR REQUEST A FREE TRIAL

We would be happy to provide you with an online demonstration or a free trial (Flex version) of the NE-ONE Network Emulator.

Just contact us via the contact options below or via the iTrinegy Web Site — www.itrinegy.com

* Model dependent