RAPID RECREATION OF REAL-WORLD NETWORKS

NE-ONE Emulator is available in a variety of models and platforms to suit your needs

- Network Scenario Builder & Player with pre-installed examples
- Intelligent Pictorial GUI
- Geolocation Network Latency Calculator
- Database of more than 53 impairments pre-installed

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 test 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. NE-ONE 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 test network:

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, allowing you to have complete control over the network conditions.

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 a 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 allows you to 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, separate links for 2G, 3G, 4G mobile networks and concurrently compare the experience over each network. NE-ONE’s Link Qualification Criteria allow you to specify which packets traverse across each link by filtering on IP Address, Application, VLANs or any other packet property.

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, STATISTICS & PACKET CAPTURE

NE-ONE’s built-in graphing feature allows you to view key network performance metrics in the GUI. Statistics can be exported for use in analytical tools enabling you to visualize and understand how the applications are being affected by changes in the network. Packet Capture (PCAP) can be recorded for each port or link, before or after impairment, and downloaded for use in Wireshark® or other tools.
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

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

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

LCD CONTROL PANEL

(Desktop Appliance Only)

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.

APPLIANCE OPTIONS

The NE-ONE Network Emulator Range is available on Hardware and Software appliances and has a wide variety of model options.

<table>
<thead>
<tr>
<th>Desktop Appliance</th>
<th>Half-Rack Appliance</th>
<th>Virtual Appliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 1 Gbps</td>
<td>Up to 10 Gbps</td>
<td>Up to 10 Gbps</td>
</tr>
</tbody>
</table>

To find out more about the NE-ONE Emulator Model options, please see “NE-ONE Emulator Comparison Sheet”

DESKTOP APPLIANCE

The NE-ONE Desktop appliance is a three model range designed to meet your testing requirements and budgets. Please review the “NE-ONE Product Comparison Sheet” for model specifications.

All Desktop Appliance models share the same hardware platform, so should your requirements change, you can easily upgrade by simply purchasing a new licence key.

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

The NE-ONE X-Series Network Emulators are designed to give you higher 10Gbps performance, delivered with the ease-of-use of the NE-ONE Emulator interface.

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 of the NE-ONE Flex Network Emulator.

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

IMPORTANT:
Some features listed in this document are model dependent. To learn more about the NE-ONE Emulator Model Options and their features, please see “NE-ONE Emulator Comparison Sheet”.

www.itrinegy.com - T: (USA): +1 888 448 4366 - T: (UK): +44 (0)1799 252 200 - E: info@itrinegy.com